# Usenet Newsgroup Archive: rec.radio.amateur.homebrew

## 1997-06 - 1997-12

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Date span: 1997-06-01 through 1997-12-31

Source text: rec.radio.amateur.homebrew.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,717

Message records with no readable body available in the source text: 1

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

## 1. CDR rotors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: joewalsh <joewalsh@shore.intercom.net>
Message-ID: <01bc6e2a$289b9d20$0d6a09d0@ICNet.intercom.net>
Source record: 93560

Is this company still in business. Anybody know where I can find parts for
a Ham-M control box. I think I need a power transformer. I'd also
appreciate talking to anyone with experience troubleshooting/repairing
these rotors.
Thanks
Joe

## 2. Re: Tri Band J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: Ray Brown <r_brown@getonthe.net>
Message-ID: <01bc6e41$c65637c0$b9af32cf@r_brown.getonthe.net>
Source record: 93561

Craig <eliminate@spam.com> wrote in article
<33888fce.4795561@nntp.a001.sprintmail.com>...
> I am looking for plans for a tri band j-pole.
> Preferably for 6m, 2m, 440.
> If anyone has plans, please send them to
> craigv"at"sprintmail.com

Me, too... although not much interest on my part for 440, but definitely interested in a plan that talks about both a 6m and 2m J-pole.

I've thought about just trying to build a 6m J-pole and trying a second set of input coax to see what it'll do on 2m. I know it won't be great, but it might be worth a shot. Comments, anyone?

_Ray_ KB0STN

## 3. Re: surface mount

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: johnoz@indy.net
Message-ID: <3390f601.14356086@news>
Source record: 93562

On 31 May 1997 16:43:54 GMT, "Carl R. Stevenson" <wa6vse@fast.net>
wrotd:

>Try Digikey ... they're a mail-order distributor and they have a website
>at http://www.digikey.com ...
>
>Carl - wa6vse
>wa6vse@fast.net
>
>
>Watts <watts@rgv.net> wrote in article <338FBCB1.681A@rgv.net>...
>> Does anyone have a source for surface mount capacitors in the pf range.
>>
>> Gary Watts K5XZ watts@rgv.net
>>
Halted Specialties Co. (www.halted.com) sell surface mount resistors
and capacitors. Minimum quantity for each value is 10 pieces. Cost for
pF range is $0.08 each . Capacitors are available in 0805 and 1206
case sizes. "Availability of different values may vary".
They publish a catalog which can be requested from their URL.

JohnO. KB9MIE.

## 4. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580000106970003320001@news.primenet.com>
Source record: 93563

In article <5mnk2u$gib$1@news.inconnect.com>, toms@inconnect.inconnect.com (Thomas Schaefer) wrote:

:I sent email to FAR recently, but no reply. I called a phone number, but
:no reply. The phone number I have is 836-9148. I tried many different area
:codes. Does anyone have this information?
:

Sounds like FAR needs some marketing help. Would hate to see another small ham business go down the tubes like the 1000 or more before it.

## 5. Re: Help with Transistor Identification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580000106970005450001@news.primenet.com>
Source record: 93564

In article <5misd3$nv8@news.asu.edu>, georgie@aztec.asu.edu (GEORGE R. COONEY) wrote:

:I have a transistor I need to replace. It is about the same size
:and case as a 2N3053.It has RCA on the top. Below the RCA is, what
:I imagine is, a date code: HY 7901. Above the RCA is a number
:60352. I imagine this is the identifying number but I can't find
:it in my catalog. Can anyone help? Please Email. Thank you.
:
:73 George, KQ7C
:
:--

Sounds like an OEM part number. You may never find out what the number means unless you can find their customer.

## 6. Re: Who can help me with a Simple stepper controler ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: Jim N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <33916EC8.6A18@worldnet.att.net>
Source record: 93565

```
Madjid VE2GMI wrote:
>
> erwin cremers wrote:
> >
> > Can any one help me to a site on the net that has a simple stepper
> > controler on display including the parts i need to buy.
> >
> > I want to build a remote antenna controler and would like to use some
> > stepper motors from a old printer to rotate the C's and windings.
> >
> > So if you know any thing that could help me please send me a reply .
>
> Check the Uof Aloberta cookbook
>
> at ftp://nyquist.ee.ualberta.ca/pub/cookbook/comp/parallel/
>
> you have two or three files for steppers like the 3axis file
>
> -------------------
> Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
> NEC4WIN Windows Antenna Simulation Software

Try "Ramsey Eletronics" they sell a stepper motor control kit. I dont
have their web address, oops I found it!
```

## 7. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: Victor <victor@vicmck.demon.co.uk>
Message-ID: <L3oEzCAFiWkzEw3G@vicmck.demon.co.uk>
Source record: 93566
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

You are quite right it is NOT the same old scam.
Its a NEW one !
Please go elsewhere as scam merchants are not welcome here.
--
Victor

## 8. looking for dials for hammarlund

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: Dana Yeomans <dana@randomc.Com>
Message-ID: <Pine.GSO.3.96.970601142911.9482A-100000@randomc.com>
Source record: 93567

hi all looking for an old junker hammarlund hq120 to get the dials out of. someone wrote me and said that they didn't make an hq120, but have one her here that is working fine, may just to have to make some dials for this. this radio was in a radio station fire in the early 60's. i am located in griffin georgia. take care from n4pge in griffin.

## 9. Re: Help! - Kenwood 4 pin plug pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: wdmilner@|atcon.com
Message-ID: <5mslg2$tvi$3@thor.atcon.com>
Source record: 93568

n9ssg@pobox.COM (Dave Yanke) wrote:

>Does anyone have the pinouts for a Kenwood four pin plug? I need to
>either wire an MC50 or build an adapter to go to a Kenwood 8 pin
>plug (TS940).

4 pin plug ----------
2 3
1 . 4
---------

Pin 1 - Audio
Pin 2- PTT
Pin 3 - ground
Pin 4 - audio sheild

You can buy 4-8 pin adapters from Kenwood too.

Cheers!

---
Dean, VE1CBF VE1CBF@qsl.net
10-X 31826 FN96VC

- - ... ... - -

! remove antispam | from domain name above

## 10. Re: Plessey PLL Eprom Generator for Win95(10k !)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <33901740.303112315@netnews.worldnet.att.net>
Source record: 93569

Great idea !

On Fri, 30 May 1997 19:31:43 -0600, Keith McQueen <keithm@enol.com>
wrote:

>the@primenet.com wrote:
>>
>> Is there any interest in starting a rec.radio.amateur.binaries group?

< snip >
Ron ( N1ZHI )
roncook@worldnet.att.net
cook@amsa.com

## 11. Equipment Without Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: aa1hb@juno.COM
Message-ID: <19970601.164320.6695.1.aa1hb@juno.com>
Source record: 93570

Recently Gary wrote
>I recently purchased the Alinco DM-1350 power supply. Alinco will not
>give out a schematic nor will they sell one.

Unfortunately, there are a number of manufacturers who are misguided in this respect. I wrote to MFJ for a schematic for my SWR Analyzer and got the same story: not available, you cannot even buy one.

Exactly what they think they are accomplishing by this policy escapes me. MFJ specifically states that a user who tries to repair a defective piece of equipment does NOT void the warranty, so they aren't trying to discourage us from fixing our own gear. That's good.

If they think they are inhibiting competition, please give me a break.Take the case of the SWR analyzer. Any potential competitor with $220 to spend can buy one of these boxes and reverse engineer it in about a day. I'm not a hardware engineer, but I don't think it would take me more than a week to design the same box from scratch: VFO, SWR bridge, frequency counter, none of this is exactly high tech and all the required circuits are readily available in the literature.

Why didn't I build my own in the first place? Because I felt the unit represented good value for the money; i.e., that MFJ deserves to make a profit building this unit so I can spend my time doing design projects that are more interesting to me. Maybe their concern is that a schematic would show that building one of these units is so simple that it becomes a weekend project with a FAR Circuits board and a few highly integrated components readily available from DigiKey.

>From my vantage point, this policy of refusing to supply schematics is just a nuisance for the end user. Anyone have another point of view?

Charlie AA1HB

## 12. Re: 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: la8ak@onnline.no
Message-ID: <3391fd77.6433804@news.online.no>
Source record: 93571

On Tue, 20 May 1997 20:34:31 GMT, W8JItom@worldnet.att.net (Tom Rauch) wrote:

>The G2DAF system has NEVER been popular with amateurs, and never used
>in a commercial PA. There are no benefits to offset the increase in
>distortion.
>
>73 Tom

believe it has been used by many amateurs in this part of the world,
but when you mention that it has never been popular with amateurs
you should say "US amateurs" because the main problem is that you
stick to yourself. Extremely seldom is a technical article from any
"outside USA " magazin referred to by QST, while most worldwide
magazines collect technical notes from all over the world..... so
don't blame us that you don't read any foreign magazines
I have just been reading through a half ton of worldwide magazines,
and I found some interesting notes in even the Japanese magazines,
but I cannot translate it, so I have to try to make up some text.
Apart from the scandinavian magazines I read QST, Radcom, Electron
(Dutch), CQ-DL, Radio-REF (French). I write a column for our national
magazine.

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 13. FS: Tektronix 465's!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: sales@emodus.com
Message-ID: <33923b24.0@news.cyberannex.com>
Source record: 93572

Hello!
We have a couple of specials this month:

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned and
calibrated, 120 day warranty shipping free in the USA, $465.00 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin miniature
made by Philips in the USA 1986, NOS, individual boxes, 8000 available,
$0.10 each, shipping in the USA: 1 - 199 $3.00, 200 or more shipping free!

For more ELECTRON TUBES (both new and/or used), various ANTIQUE RADIO
COMPONENTS or ELECTRONIC TEST EQUIPMENT, please E-mail

sales@emodus.com

For a complete list.

Thank you!

## 14. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: wx <wxyz@concentric.net>
Message-ID: <33926948.6D84@concentric.net>
Source record: 93573

Richard Karlquist wrote:
>
> >dumbed-down. (The ARRL matches
> >the level of material to their target audience; that is how they stay in
> >the publishing business).
> > Don, W6JL
>
> I'm glad someone has finally agreed with me that the ARRL is
> basically a publishing business, rather than a service
> organization that happens to do some publishing.
>
> Rick Karlquist, N6RK
> rick@area.com

Did he say "basically"? This is a mighty stretch of fact, eh?

## 15. Re: Who can help me with a Simple stepper controler ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEB5sA9.2HL@netcom.com>
Source record: 93574

In article <5mej5i$95t$1@news.Kijfhoek.NL.net>,
erwin cremers <erwin.cremers@ingram.nl> wrote:
>
>Can any one help me to a site on the net that has a simple stepper
>controler on display including the parts i need to buy.

Try http://www.cs.uiowa.edu/~jones/step/

The author (Doug Jones) is the sci.electronics.* groups stepper motor
guru.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 16. WTB:Motorola MRF648

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-01 00:00:00 UTC
From: Ken Yu <ak165@lafn.org>
Message-ID: <33924F35.B3@lafn.org>
Source record: 93575

I'm looking for a few Motorola MRF648 transistor. Please let me know if
you have it for sale. thanks

## 17. Re: 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <339217af.38672070@netnews.worldnet.att.net>
Source record: 93576

> W8JItom@worldnet.att.net (Tom Rauch) wrote:
>>The G2DAF system has NEVER been popular with amateurs...
>>There are no benefits to offset the increase in distortion.

And On Sun, 01 Jun 1997 23:10:38 GMT, la8ak@onnline.no (J M Noeding)
wrote:
>when you mention that it has never been popular with amateurs
>you should say "US amateurs" because the main problem is that you
>stick to yourself.

So, Jan, you think it's ethnocentricity (or xenophobia) instead of distortion that causes American amateurs to reject foreign designs. Perhaps, just to show that your argument is without flaw, you should publish here your measurements of the distortion characteristics of the G2DAF system so we can know--without any reservation--that your analysis is correct. The timer is running. You can start now.

Fred
jfriley@airmail.net

## 18. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5mt9oo$f3t@hpscit.sc.hp.com>
Source record: 93577

>dumbed-down. (The ARRL matches
>the level of material to their target audience; that is how they stay in
>the publishing business).
> Don, W6JL

I'm glad someone has finally agreed with me that the ARRL is
basically a publishing business, rather than a service
organization that happens to do some publishing.

Rick Karlquist, N6RK
rick@area.com

## 19. Re: Signal Strength Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: jlundgre@delta1.deltanet.com
Message-ID: <5mtdv6$9ht$2@news01.deltanet.com>
Source record: 93578
Cross-posted to: alt.radio.pirate,sci.electronics.design,sci.electronics.basics,rec.radio.amateur.homebrew

Chris Williams (cwilli@thegrid.net) wrote:
: I am looking for a schematic for a signal strength meter for the 88-108
: Mhz band. I am hoping to have the output in millivolts. Can anyone help
: me?

: Chris Williams
: cwilli@thegrid.net

The ARRL Radio Amateur's Handbook had some circuits like that. Check
your local library for an older handbook. The circuit hasn't changed over
the years.

Now why would you foolishly post this to alt.engineering.electrical?
--
#=====================================================================#
| John Lundgren - Elec Tech - Info Tech Svcs. | lundgrej@mail. |
| Rancho Santiago Community College District | rancho.cc.ca.us |
| 17th St at Bristol \ Santa Ana, CA 92706 | http://www.rancho|
| My opinions are my own, and not my employer's. | .cc.ca.us |
! Unsolicited Email is THEFT of Service and Harassment! STOP! !
#======P=G=P==k=e=y==a=v=a=i=l=a=b=l=e==u=p=o=n==r=e=q=u=e=s=t======#

## 20. Re: Equipment Without Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33928142.23A7@kfa-juelich.de>
Source record: 93579

Charles M Cheney wrote:
>
> Recently Gary wrote
> >I recently purchased the Alinco DM-1350 power supply. Alinco will not
> >give out a schematic nor will they sell one.
>
> Unfortunately, there are a number of manufacturers who are misguided in
> this respect. I wrote to MFJ for a schematic for my SWR Analyzer and got
> the same story: not available, you cannot even buy one.
>
> Exactly what they think they are accomplishing by this policy escapes me.
> MFJ specifically states that a user who tries to repair a defective piece
> of equipment does NOT void the warranty, so they aren't trying to
> discourage us from fixing our own gear. That's good.
>
> If they think they are inhibiting competition, please give me a
> break.Take the case of the SWR analyzer. Any potential competitor with
> $220 to spend can buy one of these boxes and reverse engineer it in about
> a day. I'm not a hardware engineer, but I don't think it would take me
> more than a week to design the same box from scratch: VFO, SWR bridge,
> frequency counter, none of this is exactly high tech and all the
> required circuits are readily available in the literature.
>
> Why didn't I build my own in the first place? Because I felt the unit
> represented good value for the money; i.e., that MFJ deserves to make a
> profit building this unit so I can spend my time doing design projects
> that are more interesting to me. Maybe their concern is that a schematic
> would show that building one of these units is so simple that it becomes
> a weekend project with a FAR Circuits board and a few highly integrated
> components readily available from DigiKey.
>
> >From my vantage point, this policy of refusing to supply schematics is
> just a nuisance for the end user. Anyone have another point of view?
>
> Charlie AA1HB
It isn't very effective but I have been trying to ask BEFORE I buy,
whether a schematic comes with the device or can at least be obtained
later (and I try to hold it in my hot little hands and not just depend
upon "Oh yes, naturally we supply a schematic on demand. I burned my
fingers on that one already!) If you have a reasonable alternative
product which does offer customer support, like schematics and other
service literature, buy the supported brand!
In my opinion supplying service literature at a reasonable price
ought to be a legal requirement, for the sake of the environment, if for

no other reason. I would hate to guess how many pieces of electronics go to the scrap heap prematurely on account of lacking information. Up to a certain level of complexity the schematic ought to be included as part of the delivery of the product.
I have a monitor from a leading manufacturer who will remain nameless. It has a problem which could be solved far more easily if there were service literature for it. I have attempted to purchase schematics in three countries (and the company is well represented in each of these) and got nothing. In one case I ordered what the company's literature supply department found in a list and which sounded like the right thing, but for a lot of money I received nothing of value beyond some information which one could expect from the owners manual or sales literature. In fairness, the company took it back and the folks in all three countries have always been very pleasant about it all.
After a lot of this frustration I telephoned a service branch for the firm and was told THEY have no service information. They are not allowed to open the monitors but just send them to a central station for repair. Furthermore, I was informed that I could not send in the monitor for repair unless it was still under warranty or if I had a service contract with the company!!! If you don't pay your annual pound of flesh, scrap it if it goes bad!
If one does send the monitor for repair a replacement is received. It may be a repaired monitor from the central location but almost certainly not yours. If yours had 100 hours on the CRT and the replacement has 2000 hours, well, that's the system. It passed the tests!

## 21. SB1000 circuit diagram

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: "Dr. Duncan Clark" <duncan@genesys.demon.co.uk>
Message-ID: <0qLFbCARIqkzEww4@genesys.demon.co.uk>
Source record: 93580
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi Folks,

Does anyone have a copy of the circuit for the Heathkit SB1000 single 3-500 linear. My instruction manual is missing page 70-72 and I want to modify it as I put the kit together to cover 6m in place of 160m.

I'll pay etc

Many thanks

Duncan
G4ELJ
--
The problem with being on the cutting edge is that you occasionally get sliced from time to time....

Duncan Clark
DNAmp Ltd.
TEl/FAX 01252376288
http://www.dnamp.com
http://www.genesys.demon.co.uk

## 22. Re: Equipment Without Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Marvin Moss <mmoss@gelac.mar.lmco.com>
Message-ID: <3392B7A3.1DC4@gelac.mar.lmco.com>
Source record: 93581

I could not agree more. However the problem I am having now is:

1) CCS has monitor schematics but at $40 each. This precludes me from trying to fix a monitor because most old used monitors are hardly worth more than $100 nowadays.

2) The throwaway phenomena is prevalent everywhere. I have two microwave ovens that need control panel repairs and I have had to spend countless hours making up my own schematics. The microwave people say that these are not repairable but they use discrete components and can, in fact, be repaired. I've done it but without a schematic it is certainly not cost effective.

3) A lot of IC's are numbered with house numbers rather than standard numbers. This is done because the part is the same as the good parts but with some minor spec reduced from the more expensive part. It is then renumbered for the manufacturer of the circuit board and is sold to him very cheap. It makes a nightmare to try to figure out what the part is.

4) I have several pieces of equipment where the manufacturer has sanded the part numbers off the top of the IC so I can not figure out the part number. Of course the guy is no longer in business so once again I have a piece of equipment that I can't even reverse engineer.

This is just a few instances of my frustration that perhaps you can identify with.

Marv

## 23. Need Blank Slug for Bird 43

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: "R.E. Dodson WB5APD/4" <rdodson@worldnet.att.net>
Message-ID: <3392BC8A.388@worldnet.att.net>
Source record: 93582

Need a blank slug for my Bird 43. If you can help me out in this let me know.

Thnx
bob

## 24. Re: Equipment Without Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: alchazz*@ix.netcom.com
Message-ID: <3392CBA8.1BA6@ix.netcom.com>
Source record: 93583

Charles M Cheney wrote:
>
> Recently Gary wrote
> >I recently purchased the Alinco DM-1350 power supply. Alinco will not
> >give out a schematic nor will they sell one.
>
> Unfortunately, there are a number of manufacturers who are misguided in
> this respect. I wrote to MFJ for a schematic for my SWR Analyzer and got
> the same story: not available, you cannot even buy one.
>
> Exactly what they think they are accomplishing by this policy escapes me.
> MFJ specifically states that a user who tries to repair a defective piece
> of equipment does NOT void the warranty, so they aren't trying to
> discourage us from fixing our own gear. That's good.
>
> If they think they are inhibiting competition, please give me a
> break.Take the case of the SWR analyzer. Any potential competitor with
> $220 to spend can buy one of these boxes and reverse engineer it in about
> a day. I'm not a hardware engineer, but I don't think it would take me
> more than a week to design the same box from scratch: VFO, SWR bridge,
> frequency counter, none of this is exactly high tech and all the
> required circuits are readily available in the literature.
>
> Why didn't I build my own in the first place? Because I felt the unit
> represented good value for the money; i.e., that MFJ deserves to make a
> profit building this unit so I can spend my time doing design projects
> that are more interesting to me. Maybe their concern is that a schematic
> would show that building one of these units is so simple that it becomes
> a weekend project with a FAR Circuits board and a few highly integrated
> components readily available from DigiKey.
>
> >From my vantage point, this policy of refusing to supply schematics is
> just a nuisance for the end user. Anyone have another point of view?
>
> Charlie AA1HB

I recently purchased a surplus power supply at a company surplus store. It was unused, but with no literature. I am now trying to get applications literature on it from the manufacturer and have been unable to do so. Why, because I bought it for only $5, new and unused. I suppose their pride is on line. Or they are trying to discourage the surplus market? Maybae I was gave away too much info when I talked to their home office. Needless to say, I will never recommend their supplies to any client I have. Their boneheadedness is going to cost them $$$.

Why do I need literature to use a PS? This one can be used either as a constant current source or a constant voltage source or else its current or voltage output can be controlled by a variable input voltage. Some of the terminals have functions which are unknown to me.

Al
--
Remove the * from the address to reply.

## 25. Re: 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3392c7af.3061277@netnews.worldnet.att.net>
Source record: 93584

On Sun, 01 Jun 1997 23:10:38 GMT, la8ak@onnline.no (J M Noeding)
wrote:

>believe it has been used by many amateurs in this part of the world,
>but when you mention that it has never been popular with amateurs
>you should say "US amateurs" because the main problem is that you
>stick to yourself.

Sorry, but that is incorrect. The G2DAF circuit was published here in
the early 70's. When it was published, I tried it in an HF amplifier
and the distortions was enough that I was firmly told to keep it off
the air.

When I made three tone distortion tests on the PA, IMD was terrible.

> Extremely seldom is a technical article from any
>"outside USA " magazin referred to by QST, while most worldwide
> magazines collect technical notes from all over the world..... so
>don't blame us that you don't read any foreign magazines
>I have just been reading through a half ton of worldwide magazines,
>and I found some interesting notes in even the Japanese magazines,
>but I cannot translate it, so I have to try to make up some text.

As I said, it was published here.

Two years ago I was given a copy of the article by a PA manufacturer,
and asked to "check out" the circuit since the main limitation of
using cheap Russian tetrode was the expense of a good screen and bias
supply. When I re-did the tests, the results were the same.

If you have other data, taken with a stepped level two tone test or a
three tone test, I'd be happy to know about any successful details.

73, Tom

## 26. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <3392CE88.4D68@bnr.ca>
Source record: 93585

Thomas Schaefer wrote:
>
> I sent email to FAR recently, but no reply. I called a phone number, but
> no reply. The phone number I have is 836-9148. I tried many different area
> codes. Does anyone have this information?
>
> --
> Best Regards,
>
> Tom Schaefer
> Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I

I was at dayton this year and FAR circuits had two booths under the tent
in the outer area. I purchased 10 or so PCBs. Therefore I assume they
are still in business.

Cheers,
--
Gabe Nemeth (VE3SLJ) The binary information above, that may appear as
Northern Telecom Canada forms of text, graphics, etc, is not endorsed
by
522 University Ave. 14th Flr. Northern Telecom, NORTEL, BNR.
Toronto, M5G1W7
Ontario, CANADA

## 27. FS; ALINCO DR-150T

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: cheewug@aol.com
Message-ID: <19970602155200.LAA00482@ladder02.news.aol.com>
Source record: 93586

Hello I have a 10 month old and it is in MINT condition - ALINCO DR-150T
$230.00 ( I'll Ship/48 ) - $ 215.00 ( U-Ship )
I have the box , mic , power cord , mobile bracket.
I do not have the manual but the radio is easy enough to program.
100 memory channels , 440 & Aircraft RCV. Mars-Cap. PLUS !
If interested send reply for my phone # or send your phone #.

73 , Rich.

## 28. Re: Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <5murj6$4ro@canyon.sr.hp.com>
Source record: 93587
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

QST for February 1983 had an article "Be Switched" page 18 on making high power switches from junkbox parts. It might give you some ideas if you can't find something commercial at a reasonable price.

73 Don K6LTS
donrm@sr.hp.com

## 29. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc6faf$bec87760$0d90f5ce@wa6vse.fast.net>
Source record: 93588

wx <wxyz@concentric.net> wrote in article <33926948.6D84@concentric.net>...
> Richard Karlquist wrote:
> >
> > >dumbed-down. (The ARRL matches
> > >the level of material to their target audience; that is how they stay in
> > >the publishing business).
> > > Don, W6JL
> >
> > I'm glad someone has finally agreed with me that the ARRL is
> > basically a publishing business, rather than a service
> > organization that happens to do some publishing.
> >
> > Rick Karlquist, N6RK
> > rick@area.com
>
>
> Did he say "basically"? This is a mighty stretch of fact, eh?

I agree ... "half publishing business" would have been more accurate,
with "lobbying organization for backward policy and technical stagnation"
filling the other 50% ...

Carl - wa6vse
wa6vse@fast.net

## 30. FS:Drake R8A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Brian Berkes <bberkes@erols.com>
Message-ID: <3393A05C.1CCA@erols.com>
Source record: 93589

Mint condition Drake R8A with Vhf converter board. Radio is about one year old. Comes with original manuals, original box, Rs-232 interface, Vhf converter (Drake), Scan-cat gold for windows. This radio sells for $1056.00 with out the Vhf converter which costs another $220.00. On top that you get scan-cat gold for windows with the radio. The price is $900.00 FIRM! If interested please email me here or call. Or, if in the Delaware Valley area, stop in and try the radio out! If you like, I will sell it to you with out the VHF board for $790.00.... You just can't beat the price. I guarantee there is nothing wrong with this radio or I will give you your money back....

Don't Wait too long... This is a top rated Radio in all of the SWL and Ham radio review books and Magazines......

Brian Berkes
email or call
(609)-482-6976 Home
#

## 31. Re: Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Daniel Nelson <djn@goodnet.com>
Message-ID: <33938240.7329@goodnet.com>
Source record: 93590
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Anonymous wrote:
>
> I am sending this message anonymously, since I don't want the owner to get
> pissed at me if he ultimately doesn't want internet business. I've been
> trying to get him to get on the net, talking about all the internet demand
> for tubes. But its hard to teach an old dog new tricks. :) Maybe a
> couple hundred calls will convince him. If he goes out of business, then
> where am I going to buy all that cheap surplus stuff incl. tubes???
>
> Normally, I can buy almost any types (minus the real expensive transmitting
> tubes) of tubes for $1 or $2 locally. The company is R5D3 Surplus. Phone:
> (503)774-6560
>
> I know he deals in large lots of tubes via mailorder, so you may be much
> more likely to get him to ship you an entire box of... for example sweep
> tubes, than to have him just send 1 tube. Or offer him $4 per tube via
> mailorder. I don't know what will happen.
>
> I do know that he gives great deals on test equipment and everything else,
> unlike alot of dealers who treat their stock like its some kind of
> electronics museum where an old 514D Tek scope would sell for $200 :) Bob,
> would sell it for $10.
>
> Just tell him Mr. 6080 sent you.
>
> Thanks,
>
> Mr. 6080

I have delt with them in the past and they are good folks...
--
Daniel Nelson
djn@goodnet.com
<:)

## 32. Re: Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Daniel Nelson <djn@goodnet.com>
Message-ID: <33938215.331A@goodnet.com>
Source record: 93591
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Anonymous wrote:
>
> I am sending this message anonymously, since I don't want the owner to get
> pissed at me if he ultimately doesn't want internet business. I've been
> trying to get him to get on the net, talking about all the internet demand
> for tubes. But its hard to teach an old dog new tricks. :) Maybe a
> couple hundred calls will convince him. If he goes out of business, then
> where am I going to buy all that cheap surplus stuff incl. tubes???
>
> Normally, I can buy almost any types (minus the real expensive transmitting
> tubes) of tubes for $1 or $2 locally. The company is R5D3 Surplus. Phone:
> (503)774-6560
>
> I know he deals in large lots of tubes via mailorder, so you may be much
> more likely to get him to ship you an entire box of... for example sweep
> tubes, than to have him just send 1 tube. Or offer him $4 per tube via
> mailorder. I don't know what will happen.
>
> I do know that he gives great deals on test equipment and everything else,
> unlike alot of dealers who treat their stock like its some kind of
> electronics museum where an old 514D Tek scope would sell for $200 :) Bob,
> would sell it for $10.
>
> Just tell him Mr. 6080 sent you.
>
> Thanks,
>
> Mr. 6080

R is for Robert
--
Daniel Nelson
djn@goodnet.com
<:)

## 33. Re: Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Daniel Nelson <djn@goodnet.com>
Message-ID: <33938123.42E4@goodnet.com>
Source record: 93592
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Anonymous wrote:
>
> I am sending this message anonymously, since I don't want the owner to get
> pissed at me if he ultimately doesn't want internet business. I've been
> trying to get him to get on the net, talking about all the internet demand
> for tubes. But its hard to teach an old dog new tricks. :) Maybe a
> couple hundred calls will convince him. If he goes out of business, then
> where am I going to buy all that cheap surplus stuff incl. tubes???
>
> Normally, I can buy almost any types (minus the real expensive transmitting
> tubes) of tubes for $1 or $2 locally. The company is R5D3 Surplus. Phone:
> (503)774-6560
>
> I know he deals in large lots of tubes via mailorder, so you may be much
> more likely to get him to ship you an entire box of... for example sweep
> tubes, than to have him just send 1 tube. Or offer him $4 per tube via
> mailorder. I don't know what will happen.
>
> I do know that he gives great deals on test equipment and everything else,
> unlike alot of dealers who treat their stock like its some kind of
> electronics museum where an old 514D Tek scope would sell for $200 :) Bob,
> would sell it for $10.
>
> Just tell him Mr. 6080 sent you.
>
> Thanks,
>
> Mr. 6080

By the way, D is for Dorothy...
--
Daniel Nelson
djn@goodnet.com
<:)

## 34. Expanded Range VM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Jeff Hutchinson <w4pbc@digital.net>
Message-ID: <33938F97.504C@digital.net>
Source record: 93593

Does anybody out there have info on how to expand the range of a d.c. voltmeter? I would like to use a 0-1ma/fs meter to read 10-to-15 vdc, for monitoring lead-acid storage batteries during charge and discharge cycles. The first thought is to use a 10v zener, but is there a better way? Thanks es 73,
Jeff N4JT

## 35. Re: Homebrew Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <3393B294.31B3@aade.com>
Source record: 93594

Adam Liette, KB8YDX wrote:
>
> Hi all. Anyone know of a website with schematics for some simple
> homebrew (preferably tube) projects? Been to AF4K's website. looking
> for others too.
>
> Adam KB8YDX
> Ansonia, Ohio EN70qf
Check 'My Favorite Links' at my URL below
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

## 36. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <3393B253.175F@aade.com>
Source record: 93595

Fred is at:

http://www.cl.ais.net/farcir/

--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

## 37. Re: Help with Transistor Identification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: Bob Hutson <bhutson@wchat.on.ca>
Message-ID: <339347F1.5E8A@wchat.on.ca>
Source record: 93596

Could also be the Military #.
We use 38501/###### 's all the time
the last digits indicate what it really is.
Unfortunately I'm laid off right now (can't get to the books).
But be advised, the last 5 or 6 digits in that series could
be anything from a diode to an IC.
The military in their infinite wisdom just used the next number
in sequence for the next electronic part they came across.
Good Luck
Bob

## 38. Re: Equipment Without Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580000206971358260001@news.primenet.com>
Source record: 93597

```
:
: I have one (and only one) piece of MFJ gear, a CW keyer that my XYL
:bought for me for Christmas.
:I called MFJ and told them they forgot to include a schematic. They
:said there was none. I said,
:do you think I am stupid? You made a PC board without a schematic?
:Send me one or it goes
:back to HRO.
:
: Three days later, I received a complete schematic in the mail from
:MFJ.
:
:
Good for you! This schematic stuff is just part of the continuing
"dumbing-down" of the amateur community, tacitly encouraged by the ARRL,
who profit from new equipment sales in the form of ad revenue. No wonder
the QST big-wigs get all defensive when people talk about buying surplus
and used equipment. Especially when you start talking about how good those
old tube rigs are!

Sample QST Review: "...oh its a wonderful rig. Incredible features! The
best sample of Japanese technology. Praise the Lord! for this chance to
put Americans out of work! etc etc etc" But what they don't tell you is
that you could build a rig yourself, esp receivers with better basic
performance for $200, minus the Pentium uP inside that controls the LCD
display :)

Rob.
```

## 39. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: toms@inconnect.inconnect.com
Message-ID: <5mvcn2$1gr$1@news.inconnect.com>
Source record: 93598

Yes they are. I got an email reply today. He was out of
town... Thanks for all the input.

Best Regards,

Tom Schaefer
Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I

## 40. Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-02 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <5mvdil$3ne@basement.replay.com>
Source record: 93599
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I am sending this message anonymously, since I don't want the owner to get pissed at me if he ultimately doesn't want internet business. I've been trying to get him to get on the net, talking about all the internet demand for tubes. But its hard to teach an old dog new tricks. :) Maybe a couple hundred calls will convince him. If he goes out of business, then where am I going to buy all that cheap surplus stuff incl. tubes???

Normally, I can buy almost any types (minus the real expensive transmitting tubes) of tubes for $1 or $2 locally. The company is R5D3 Surplus. Phone: (503)774-6560

I know he deals in large lots of tubes via mailorder, so you may be much more likely to get him to ship you an entire box of... for example sweep tubes, than to have him just send 1 tube. Or offer him $4 per tube via mailorder. I don't know what will happen.

I do know that he gives great deals on test equipment and everything else, unlike alot of dealers who treat their stock like its some kind of electronics museum where an old 514D Tek scope would sell for $200 :) Bob, would sell it for $10.

Just tell him Mr. 6080 sent you.

Thanks,

Mr. 6080

## 41. Re: Tri Band J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Karl Jan Skontorp <skontorp@tonsberg-maritime.vgs.no>
Message-ID: <3393CA58.1BE6@tonsberg-maritime.vgs.no>
Source record: 93507

Ray Brown wrote:
>
> Craig <eliminate@spam.com> wrote in article
> <33888fce.4795561@nntp.a001.sprintmail.com>...
> > I am looking for plans for a tri band j-pole.
> > Preferably for 6m, 2m, 440.
> > If anyone has plans, please send them to
> > craigv"at"sprintmail.com
>
> Me, too... although not much interest on my part for 440, but definitely
> interested in a plan that talks about both a 6m and 2m J-pole.
>
> I've thought about just trying to build a 6m J-pole and trying a second
> set of input coax to see what it'll do on 2m. I know it won't be great, but
> it might be worth a shot. Comments, anyone?
>
> _Ray_ KB0STN
Some time ago I found a description for a J-pole for 2m and 70cm on the
net. I dn't remember where, but it was 'published' under 'The cactus
antenna'
gl 73's de karl jan la3fy

## 42. Alinco DJ-180T

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Karl Jan Skontorp <skontorp@tonsberg-maritime.vgs.no>
Message-ID: <3393CB29.60E@tonsberg-maritime.vgs.no>
Source record: 93508

Tnx for reading this message!
I'm looking for mods for the Alinco Dj-180T to extend the frequency
range. The 'software mod' is the most interesting!!
73's de KArl Jan LA3FY

## 43. Re: RF amp pcb design.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Karl Jan Skontorp <skontorp@tonsberg-maritime.vgs.no>
Message-ID: <3393C90D.1984@tonsberg-maritime.vgs.no>
Source record: 93509

philip de cadenet wrote:
>
>
> .
> >I'd like help in designing a full legal, all band solid state HF mobile
>
> >amp using 16 X 2SC2879's.
> >Is there any software orientated towards RF amplifier design, and if so,
> >does anyone accept commissions?
> >I have put together a full list of design parameters if anyones
> >interested in taking this further.
> >
> >73 de G4ZOW.
>
> --
> philip de cadenet
Have you looked in some old Motorola documentation?? They have some
application reports and design examples. Much of the stuff were also
printed in a databook from M. I'm not sure, but I think it was about
RF-transistors (devices?)
73's gl de LA3FY Karl Jan

## 44. Azden AZ-61 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Barry Sherwood <kf5gc@hotmail.com>
Message-ID: <3393EB47.226F@hotmail.com>
Source record: 93510

Does anyone have any mods for the Azden AZ-61 handheld or where I can find them?

## 45. Re: Homebrew Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3393d440.0@cheese.pcug.org.au>
Source record: 93511

kb8ydx@geocities.com (Adam Liette, KB8YDX) wrote:
>
>Hi all. Anyone know of a website with schematics for some simple
>homebrew (preferably tube) projects? Been to AF4K's website. looking
>for others too.
>
> Adam KB8YDX
> Ansonia, Ohio EN70qf

SM0VPO's page is by far the best I've seen. You can find it via the
Australian QRP Home Page (Links section). URL below.

73,

Peter VK1PK

--


Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

## 46. Wanted:Circuit for 5-500A amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: henryt@perth.dialix.com.au
Message-ID: <5n0ous$mtt$1@perth.dialix.com.au>
Source record: 93512

Hi,
I am looking for a circuit for a linear using a 5-500A tube. Can anyone point me in the correct direction? Please e-mail if possible.
Best Wishes,
Henry
VK6HJT

## 47. scsi software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: "D.Arnold" <D.Arnold@primocomputers.com>
Message-ID: <33944D46.3CA0@primocomputers.com>
Source record: 93513
Body handling: Binary attachment payload not displayed: SCSI.DOC

[One or more binary attachments are retained only in the source text.]

## 48. 50.400AM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33943824.794B@pactitle.com>
Source record: 93514

I just updated my page 50.400AM page.

Sorry it took 2 weeks for me to add the calls from 5/23/97
What a nice opening it was!
Got in on it late but worked many stations up north.

I'll be on 50.400 today around 15:30(pdt)(22:30z) today for a few hours.
I'll call CQ every half hr. starting at 15:30 pdt.
Hope to catch some of you out there.

Go and check out the grids I worked on AM.
http://www.geocities.com/Hollywood/5860/50am.html

I'll keep adding to the list every week.

Dave Booth kc6wfs dm04rk
booth@pactitle.com
ic-726 marage a1015 arx-6
http://www.geocities.com/Hollywood/5860/

## 49. Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc6fbd$16706ce0$74229bcf@kn6dv.qnet.com>
Source record: 93515

For those who are interested in the VHF Parasitics Debate, an archive is
still available at:
http://www.av.qnet.com/~kn6dv

This archive is in 14 parts and is uncensored

Thanks 73 Will, KN6DV

kn6dv@contesting.com

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for atractive vices, he will fail.
(Walter Lippmann)

## 50. Wtd IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Brian Marshall <brian.marshall@zetnet.co.uk>
Message-ID: <19970603184101704 69@zetnet.co.uk>
Source record: 93516

I am looking for a TCM3105 IC for a baycom packet modem or the name
of a dealer who has one

## 51. Coax Trap Information Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: dsnowden@ncdc.noaa.gov
Message-ID: <865360218.30272@dejanews.com>
Source record: 93517

A few years ago I read an article about building coax traps.
This was in QST I'm sure. I'd like a copy of it. I'll gladly
reimburse for copy/postage. I also remember (good memory for an ole fart)
that there was a VE that had a disk of software to aid in design
of these traps. I'd also like the callsign/address or a diskette
from one of you that no longer needs it (payment offered of course).
The story is that I moved to the mountains of MC from the
wide open spaces of FLA and need to compromise on antennas.
Besides it is fun to experiment.

73 Doug N4IJ
dsnowden@ncdc.noaa.gov
N4IJ@aol.com

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 52. Re: Wtd IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <gzhcKFAUyGlzEw6v@lfheller.demon.co.uk>
Source record: 93518

In article <19970603184101704 69@zetnet.co.uk>, Brian Marshall
<brian.marshall@zetnet.co.uk> writes
>I am looking for a TCM3105 IC for a baycom packet modem or the name
>of a dealer who has one

They are in the Farnell catalogue.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

## 53. Re: Heathkit SB-220

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Jim Conn <jconn@gte.net>
Message-ID: <5n1qte$l34$1@news2.gte.net>
Source record: 93519

nomad wrote:
>
> I am looking for a manual for the Heathkit SB-220 Amplifier. If you have
> one, or know of where I can find one, please let me know.
>
> 73's
> John
> nomad@toolcity.net

Heathkit still sells them.

## 54. Re: Heathkit SB-220

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <33947214.6CE6@HP.com>
Source record: 93520

Hnomad wrote:
>
> I am looking for a manual for the Heathkit SB-220 Amplifier. If you have
> one, or know of where I can find one, please let me know.
>
> 73's
> John
> nomad@toolcity.net

Hi John OM,

Contact HI-MANUALS. They are advertised in QST and perhaps CQ mags.

73,
Don, W6JL

## 55. CIRCUITS GALORE !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5n1rf5$48m$1@kalle.tninet.se>
Source record: 93521

Yep, I have loads of circuits on my homepage:

http://user.tninet.se/~acz732k/

This page will be updated weekly (about) with new projects and data. There are about 50 projects at the moment (excluding the other brewing) and there are plenty more that I have to find the time to 'digitize'.

I have had several requests for sending my project files over mail, but this takes an eternity as some projects have several files. I have therefore included a 'DOWNLOAD' section where you can download them all in a single 300K ZIP file. If you want to use them for your club magazine, projects etc. then please be my guest - download them all. I only ask that the info is given freely and without cost.

Hope you enjoy the homepage, and have fun with QRP although my page is not 100% dedicated to QRP.

73s de Harry

## 56. Re: Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Marvin Moss <mmoss@gelac.mar.lmco.com>
Message-ID: <339403CE.6270@gelac.mar.lmco.com>
Source record: 93522
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Daniel Nelson wrote:
>
> Anonymous wrote:
> >
> > I am sending this message anonymously, since I don't want the owner to get
> > pissed at me if he ultimately doesn't want internet business. I've been
> > trying to get him to get on the net, talking about all the internet demand
> > for tubes. But its hard to teach an old dog new tricks. :) Maybe a
> > couple hundred calls will convince him. If he goes out of business, then
> > where am I going to buy all that cheap surplus stuff incl. tubes???
> >
> > Normally, I can buy almost any types (minus the real expensive transmitting
> > tubes) of tubes for $1 or $2 locally. The company is R5D3 Surplus. Phone:
> > (503)774-6560
> >
> > I know he deals in large lots of tubes via mailorder, so you may be much
> > more likely to get him to ship you an entire box of... for example sweep
> > tubes, than to have him just send 1 tube. Or offer him $4 per tube via
> > mailorder. I don't know what will happen.
> >
> > I do know that he gives great deals on test equipment and everything else,
> > unlike alot of dealers who treat their stock like its some kind of
> > electronics museum where an old 514D Tek scope would sell for $200 :) Bob,
> > would sell it for $10.
> >
> > Just tell him Mr. 6080 sent you.
> >
> > Thanks,
> >
> > Mr. 6080
>
> I have delt with them in the past and they are good folks...
> --
> Daniel Nelson
> djn@goodnet.com
> <:)

But do they have a website??

## 57. johnson fleetcom II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: hacker@flash.net
Message-ID: <33939491.5691483@news.flash.net>
Source record: 93523

does anyone have any info on this radio???
I need the operating specs including...:
frequency possiblities
microphone wiring
power output
mode of operation <am/fm or whatever?
thanks in advance for any/all info

## 58. Re: SWL'ers Looking for Pirates!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: sig@file.com
Message-ID: <3394AE01.7FF2@file.com>
Source record: 93524
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

T.L.Bryant wrote:
>
> :> Whata weekend for pirate radio loggings. Logged over 10 so far on
> :> 6.955mhz. Supposed to be alot of activity on memorial day so tune in
> :> your recievers and get some pirates in your logbooks.
> :
> :> Have fun
> :
> :Why?
> :
> :Doug - W2DR

Yea, it's too bad we couldn't have a Volunteer organization like the
VEC's to confiscate equipment from pirates/outof banders/ jammers and
the like.

We could get lots of ham stations started in high schools with all the
nifty equipment we would be picking up.

KA8DDZ - hynde@flash.net
Equipment NorCal 40A, NorCal 38 Special, Dipoles

## 59. FS Homebrew 3-500Z Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Jerry Booth <jerryjtb@csrlink.net>
Message-ID: <3394A503.2398@csrlink.net>
Source record: 93525

Sell homebrew 3-500Z (pair) grounded grid amp. Vacuum plate tuning, tuned input, three meters, Plate I & E and grid I, vacuum T/R relay, dynamic bias to reduce heat and power waste. Blower inside of cabinet to reduce noise. RF deck approximately 17' X 17" x 14". Full output pair Eimac 3-500Z tubes with matching Eimac chimneys. Power supply 4000+VDC in bridge setup with 32 Ufd of filter. Not your hamfest junk. First calss construction and parts. Asking $850.00 2 Kw out on 20 with 100 watts drive.

Jerry W0ZD

## 60. FS Home Brew 4-1000A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: Jerry Booth <jerryjtb@csrlink.net>
Message-ID: <3394A390.4187@csrlink.net>
Source record: 93526

Sell homebrew 4-1000A grounded grid amp. Vacuum plate tuning, BW850A tank, full output 4-1000A and SK506 chimney. Tuned input with three wideview meters, Plate "I", "Volts" and Grid "I", Approximately 17"x 17" x 17" with internal blower. Plate XFMR has 4 each 500 volt 2 Amp windings setup for 4000VDC+. Two 32 Ufd 4 KVDC filter caps in series. All power into goes thru feed thur caps, This is not your hamfest junk, First class construction and parts. Asking $900.00.

## 61. Re: Heathkit SB-220

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5n0j1t$2ec$1@news.nts-online.net>
Source record: 93527

Local guy here in town sells them for $17 if you want to order
one from them.

Manual Mall
5135A-69th St
Lubbock, Texas 79424

He has TONS of manuals.

Hope this will help

Bryan W5KFT

"nomad" <nomad@toolcity.net> wrote:

>I am looking for a manual for the Heathkit SB-220 Amplifier. If you have
>one, or know of where I can find one, please let me know.

>73's
>John
>nomad@toolcity.net

## 62. WTB: Filament xfmr for 866 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: k9two@sprintmail.com
Message-ID: <865385911.21174@dejanews.com>
Source record: 93528

I am looking for a filament transformer for a pair of
866 tubes in a homebrew 3000 volt power supply.

Thanks much,

Don Ferrill K9TWO 317-788-7810 k9two@sprintmail.com

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 63. repeater controleur

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: lecourss <lecourss@total.net>
Message-ID: <3394BB35.7AC@total.net>
Source record: 93529

I'm search plan for repeater controleur with 2 input and 2 output for
e repeater and 1 link .Send me email
--
Stephane Lecours
VE2JTX
Quebec contest group
http://www.riq.qc.ca/users/mcaron/qcg

## 64. What's the best 2m amp plans?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: kc4srn@aol.com
Message-ID: <19970603025700.WAA02365@ladder02.news.aol.com>
Source record: 93600

I'm looking for book names, for recomended 2m transceivers and especially
2m amps. 50W or more from 5W or less.

## 65. Re: Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: subbustr@whidbey.net
Message-ID: <5n03bk$jvj@news.whidbey.com>
Source record: 93601
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have these FS?? dave

RCA
-------
6SL7GT (3)
1A7GT (2)
6J5 (2)
117Z3 (1)
6SC7 (1)
67N (2)
OB2 (1)
6C5 (1)
12AX4GTB (1)
1G3GT/1B3GT (1)
6X5GT (1)
6AN8A (1)
6BZ7 (1)
6AH6 (1)
6SA7 (1)
6W4GT (1)
*** 6SJ7GT (7)
*** JRC-6H6 (3)

GENERAL ELECTRIC
----------
6W4GT (3)
6SN7GTB (3)
1B3GT (2)
6V6GTA (2)
6679/12AT7 (2)
1B3GT (1)
6V6GT (1)
6BL7GT (2)
12AX7 (1)
6X5GT (1)
3Q5GT (1)
6BA6 (1)
6BK7 (1)
6SQ7 (1)

JAN -CKR (KEN-RAD)
----------
*** 6H6 (same as RCA above?) (2)
*** 6SJ7 (1)

UNKNOWN
---
6SK7 (2)

MISC
---
Missner Coil 16-6658 Plastic IF 456kc (1)

$1.25ea (5 minimum order plse) or ALL (58) for $75.00 shipping included CONUS
*** Denotes - NOT in org. box. ALL others have org. box.

Oak Harbor,WA
98277
subbustr@whidbey.net
de VE7-LFA/W7

## 66. Rodio Comm Rx Review/AOR AR-7030/Reviews in general/Anyone care what's in the box?/(Long)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <33939610.7BBE56CD@tri.net>
Source record: 93602

Technical Topics in the May 97 RadCom reprinted an updated list of receiver measurements as done by Sherwood Engineering. Those of you new to this hobby might not know that Sherwood and company have made many successful mods to the Drake R-4C, perhaps more than the Israel airforce to the F-4 Phantom, and still manages to keep the specs competetive. I have one of their XTAL filters for a homebrew rig and the Gaussian top to 12 dB gives an interesting flavor to CW. Hawker in TT has kept a string of comments on the Sherwood efforts running for over a decade and the latest rendition continues to add info with a mix of typically British commentary ("G3MOB writes:.....The Collins R390A is a superb example of mechanical engineering but is dreadful to tune and many professional engineers consider its AGC poor, indeed that Collins never got its AGC right in any of their receivers, whatever their merits elsewhere.") Similar pithy comments continue, but on with the subject:

With the caveat that newer RX like the IC-756 were not yet included, here is the top of the list as ranked by their 2 KHz results:

Dynamic Range at 20 KHz sp at 2 KHz sp

Drake R-4C/SF-600/6 (filter) suprise! 85 85

AOR AR-7030 100 82

Atlas 350-XL 81 81
*
Collins R-390A 81 79
*
*
*
WJ HF-1000 99 74
*

*
Drake R-4C stock 85 58

Obviously I left out many of interest, but what really caught my eye was that the top receivers as measured at 2 KHz all were in the 80s and 90s at 20 KHz except the AOR one. As a builder/dreamer/at least vouyer (sp?) of RX design, a look at published reviews was at hand.

Now if I were to look at an automobile review I would expect some comments as: 4 on the floor (yes that dates me), overhead cams, ported whatevers, turbo whatevers, fuel injected, etc.

June 97 QST, "AOR AR7030 Communications Receiver", p. 68...

"But in this case, with so much crammed into one small box-and the use of hex-head screws--it was a challenge I couldn't resist. And inside it is beautiful! A mixture of DIPs and surface-mount components sat on a shiny board with readable component labels. Looking for test point TP4? The label is fully visible, and not under a nearby component. Even the thickness of the metal case was impressive."

p. 70 "There's a block diagram,....but no schematic." Where's the diagram?

A three page review and nothing about the guts other than that it "is beautiful!"

Luckily the July RadCom arrived with a review by Hart:

p.45 "The receiver is a double superhet with IFs of 45 MHz and 455 KHz. ... A large signal bipolar RF amplifier is used with quad DMOS FET first mixer, dual FET first IF amplifier and high dynamic range IC second mixer." Fig.1 is the effective selectivity curve on USB which shows the osc sideband noise and IF filter response where it is easy to see where the 20 KHz characteristics develop.

This wasn't intended to be QST bashing, but a comment on the state of demand for technical info on the gear most of us use. The argument of course is that no one builds anymore...no parts, etc.

Strange that now as Beasley has the AF filters written for the PC and a standard sound card and Karn of TAPR points out that we don't need a dedicated DSP box when the newer PCs can have more firepower/horsepower for the buck (because of mass marketing) than we can afford DSP, we can/if we desire/ devote building to the RF interface and software is (nearly) free as W3IWI is wont to say, and the ability to see what the big boys do is fading away.

I picked up at Dayton several years ago, the SoftWave version of a DSP RX which is full of features and short on front end (and out of business!). Also there is/was the Comer RX/TX available with a similar weakness and less software (and cheaper).

The point of all of this (besides getting some frustration off my chest) is that I hope some of the members of the ham-homebrew list will occasionally encourage your national societies to keep the tech stuff in a bit. And if you haven't kept up with the TAPR DSP stuff, take a look at their WEB site to see what some are doing.

Sorry about the bandwidth, I feel better now!

N0UU

## 67. F.S. - Tubes, radios, books...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970603042200.AAA11517@ladder02.news.aol.com>
Source record: 93603

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #528-T. - Approx. 100 new publication titles just added to the list.

## 68. Heathkit SB-220

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: nomad <nomad@toolcity.net>
Message-ID: <01bc6fde$28595fe0$67bc00d0@default>
Source record: 93604

I am looking for a manual for the Heathkit SB-220 Amplifier. If you have one, or know of where I can find one, please let me know.

73's
John
nomad@toolcity.net

## 69. WTB: UA78GKC Regulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-03 00:00:00 UTC
From: k1el@aol.com
Message-ID: <19970603111400.HAA01298@ladder02.news.aol.com>
Source record: 93605

I am trying to find an odd ball voltage regulator IC that I believe is out
of
production. Anyone have a source for a UA78GKC voltage regulator ?
It is a four leaded device in a metal TO3 style case.

Thanks, Steve K1EL

## 70. Rig microphone connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: ums@nconnect.net
Message-ID: <3394f097.3029474@news.nconnect.net>
Source record: 93530

Can anyone tell me who manufactures those 8 pin microphone plugs and jacks used on Kenwood/Yaseu/Icom rigs? Any suggestions for mail order or other distributers for small-moderate quantities (10-50)?

Thanks & 73 - Gary W9XT
ppvvpp@mixcom.com

## 71. Re: 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: bry@ix.netcom.com
Message-ID: <33953b80.7148214@news.mnsinc.com>
Source record: 93531

On Sun, 01 Jun 1997 23:10:38 GMT, la8ak@onnline.no (J M Noeding)
wrote:

>On Tue, 20 May 1997 20:34:31 GMT, W8JItom@worldnet.att.net (Tom Rauch)
>wrote:
>
>
>
>>The G2DAF system has NEVER been popular with amateurs, and never used
>>in a commercial PA. There are no benefits to offset the increase in
>>distortion.
>>
>>73 Tom
>
>believe it has been used by many amateurs in this part of the world,
>but when you mention that it has never been popular with amateurs
>you should say "US amateurs" because the main problem is that you
>stick to yourself. Extremely seldom is a technical article from any
>"outside USA " magazin referred to by QST, while most worldwide
> magazines collect technical notes from all over the world..... so
>don't blame us that you don't read any foreign magazines
>I have just been reading through a half ton of worldwide magazines,
>and I found some interesting notes in even the Japanese magazines,
>but I cannot translate it, so I have to try to make up some text.
>Apart from the scandinavian magazines I read QST, Radcom, Electron
>(Dutch), CQ-DL, Radio-REF (French). I write a column for our national
>magazine.
>
>Jan-Martin N�ding,

You are right Jan, and that is a shame! We could benefit greatly by
the contributions of articles and ideas from overseas ham magazines
like yours. A pity they are so hard to get in the U.S. and that QST
almost NEVER refers to them (for obvious reasons!)

However, I note that EEB in Vienna, Virginia DOES sell a FEW imported
ham radio magazines in limited numbers.

The Japanese magazine "CQ HAM RADIO" used to be a HUGE THICK
publication almost as big as "COMPUTER SHOPPER!!"

Like you, I couldn't read most of the texts in it but LOVED The
magazine!

Bry, AF4K / G3XLQ

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

## 72. AZDEN PCS-2000 HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: bry@ix.netcom.com
Message-ID: <33953a61.6861066@news.mnsinc.com>
Source record: 93532

Does anyone know how to turn up the deviation/mic gain in an Azden PCS-2000?

I just got one, and the transmit audio is rather weak (like 25% of what it should be)

If anyone has a schematic or know sthis rig please reply in this newsgroup or e-mail me (DO NOT HIT REPLY) - use:
bry@mnsinc "DOT" com
and put a real dot instead of "DOT"

Thanks & 73 - Bry

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

## 73. Happy Harry's Homebrew Page!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: bry@ix.netcom.com
Message-ID: <339544b8.9508011@news.mnsinc.com>
Source record: 93533

Something is wrong at the SM0VPO Homebrew page!

Everything gives "Document Contains No Data!"

Please fix! Sorry I would have used e-mail but my system locked up
after all that!

There are some missing graphics too.

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

## 74. Re: Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: bry@ix.netcom.com
Message-ID: <339549a2.10765684@news.mnsinc.com>
Source record: 93534
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Are they new or used? You didn't say! Boxes? Tested?

On 3 Jun 1997 03:34:12 GMT, subbustr@whidbey.net (Dave Schertzer)
wrote:

>I have these FS?? dave
>
>RCA
>-------
>6SL7GT (3)
>1A7GT (2)
>6J5 (2)
>117Z3 (1)
>6SC7 (1)
>67N (2)
>OB2 (1)
>6C5 (1)
>12AX4GTB (1)
>1G3GT/1B3GT (1)
>6X5GT (1)
>6AN8A (1)
>6BZ7 (1)
>6AH6 (1)
>6SA7 (1)
>6W4GT (1)
>*** 6SJ7GT (7)
>*** JRC-6H6 (3)
>
>GENERAL ELECTRIC
>----------------------------
>6W4GT (3)
>6SN7GTB (3)
>1B3GT (2)
>6V6GTA (2)
>6679/12AT7 (2)
>1B3GT (1)
>6V6GT (1)
>6BL7GT (2)
>12AX7 (1)
>6X5GT (1)
>3Q5GT (1)
>6BA6 (1)
>6BK7 (1)
>6SQ7 (1)

>
>JAN -CKR (KEN-RAD)
>------------------------------
>*** 6H6 (same as RCA above?) (2)
>*** 6SJ7 (1)
>
>UNKNOWN
>----------------
>6SK7 (2)
>
>MISC
>----------
>Missner Coil 16-6658 Plastic IF 456kc (1)
>
>$1.25ea (5 minimum order plse) or ALL (58) for $75.00 shipping included CONUS
> *** Denotes - NOT in org. box. ALL others have org. box.
>
>Oak Harbor,WA
>98277
>subbustr@whidbey.net
>de VE7-LFA/W7
>

## 75. 8295 A or 8877

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: "Dr. Hartmut Waldner" <waldner@uni-bonn.de>
Message-ID: <3395520E.5BEFF20F@uni-bonn.de>
Source record: 93535

Hi,

I am looking for cheap 8295A power tubes by Eimac or Penta Labs, perhaps "pull outs". Also looking for used 8877 as alternative tube. Any source?

73's Hartmut, DF6PW
waldner@uni-bonn.de

## 76. WANTED: VACUUM C's (Surplus)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: "Dr. Hartmut Waldner" <waldner@uni-bonn.de>
Message-ID: <33955813.BA27BF48@uni-bonn.de>
Source record: 93536

Looking for cheap surplus Vacuum C's for my homebrew amplifier. Write to waldner@uni-bonn.de.

Vy best 73's Hartmut
(DF6PW)

## 77. WANTED: 572B tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: "Dr. Hartmut Waldner" <waldner@uni-bonn.de>
Message-ID: <3395586F.B5F286B9@uni-bonn.de>
Source record: 93537

WANTED: New 572 B tubes. Mailto: waldner@uni-bonn.de

73's Hartmut (DF6PW)

## 78. FS: Standard C-508a - $225

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <339659cf.4125032@news.icanect.net>
Source record: 93538
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi All,

I have a mini dual band wide band receive HT FS. I am asking $225. Works and looks like new (no scratches), Mars/Cap mod done.Includes box, strap, original 3" duck.
The specs are:

The Standard C508A

(a) 280 mW transmit power
(b) 60 memories; stores frequency, offset and CTCSS tones
(c) RX 100-180, 340-400 & 400-480 MHz
(d) TX Amateur bands 2M-70cm
(e) Store 2 M & 70 cm frequency in one memory
(f) Operates from 3 volts "2-AA" - Lasts weeks!
(g) Unsurpassed 0.158 micro volts sensitivity
(h) CTCSS Encode & Decode
(i) Scan 1 MHz, full range, memory, block, CTCSS
(j) Scan priority memory channels
(k) Scan pause, busy, hold
(l) One call channel
(m) Dual watch
(n) PTT lock
(o) One touch squelch-off button
(p) Battery save mode
(q) Automatic power off
(r) Rotary channel selection
(s) Keyboard lock
(t) Unsurpassed intermod rejection
(u) 1750 tone burst
(v) Dimensions: 3.35" (H) x 2.28" (W) x 0.98" (D)
(w) Weight with battery 5.65 oz

.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'

## 79. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: delawsej@esalp1.es.dupont.com
Message-ID: <5n3kab$222@topgun.es.dupont.com>
Source record: 93539
Cross-posted to: alt.binaries.pictures.teen-idols,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.

dir

In article <338F2664.1011@pacifier.com>, Brad Gulleff <bgulleff@pacifier.com> writes:
>Flipper Boy wrote:
>>
>> Make money selling stupid stuff on the Net (Great for Teenagers)
>>
>> Hey there are ways to do it, In my 5 page book, ill give you all the
>> locations on the net to sell stuff that costs you nothing. Ill give you all
>> the address's to online auction house's, Newsgroups to post to, and all the
>> rules in the game. Hey you wont make a million bucks, but you sure as hell
>> can increase your income by about 200-500 dollars a week, Spending only 5-6
>> hr. a week at the computer. And who wouldn't mind that.
>>
>> For "How to make cash on the Net"
>>
>> Send $5.00 cash and an empty SASE to:
>>
>> Make Cash
>> PO Box 26
>> Edge water MD 21037-0026
>>
>> Not responsible for lost or misguided orders. Please allow 2 weeks for
>> delivery, Rush orders add $3.00 for priority mail. No Checks accepted, Cah
>> only. Make Money, Relax!
>You are posting on the wrong news group. Hams are to smart for a scam!

ccc

dir

## 80. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: avitko@harris.com
Message-ID: <865361597.31623@dejanews.com>
Source record: 93540

In article <01bc6faf$bec87760$0d90f5ce@wa6vse.fast.net>,
"Carl R. Stevenson" <wa6vse@fast.net> wrote:
>
> wx <wxyz@concentric.net> wrote in article <33926948.6D84@concentric.net>...
> > Richard Karlquist wrote:
> > >
> > > >dumbed-down. (The ARRL matches
> > > >the level of material to their target audience; that is how they stay in
> > > >the publishing business).
> > > > Don, W6JL
> > >
> > > I'm glad someone has finally agreed with me that the ARRL is
> > > basically a publishing business, rather than a service
> > > organization that happens to do some publishing.
> > >
> > > Rick Karlquist, N6RK
> > > rick@area.com
> >
> >
> > Did he say "basically"? This is a mighty stretch of fact, eh?
>
> I agree ... "half publishing business" would have been more accurate,
> with "lobbying organization for backward policy and technical stagnation"
> filling the other 50% ...

The problem is that the handbook is following the inevitable trend in amateur radio: "less home-brew and more appliance operating". In the 50's, most (but not all) hams built a good portion of their equipment. There were a lot of cheap surplus parts on the market making it easy to construct receivers and transmitters of quality comparable to that which was commercially available. The handbook was extremely valuable for circuit ideas and "rule of thumb" design. The same applies to antennas and feedlines, etc.

In the 70's, with advances in technology everything changed. "Appliance" operating became the standard, 50 Ohm connectors, coax, and antennas that were purchased and put on the air in an afternoon. The emphasis shifted away from home construction, band-hogging AM, and rack cabinets. Too bad in a way, but technology marches on.

The handbook reflects this trend. Its not really "dumbing down"; its a reaction to becoming obsolete. Overall, Hams aren't as smart as they once were because the hobby now attracts people who are more interested in talking than in tinkering. Why take the trouble and build when you can buy? The ARRL has pandered to this notion to keep its membership alive.

The ARRL handbook always is useful, though there have been many times I felt it was too "cut and try".

By the way, teenagers in the 50's were not any smarter than today's teens. They were forced to meet higher standards, both intellectual and moral, however.

Al

>
>
>
>

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 81. CB FM to 10M FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: Walter Crauwels ON4BCB <Walter_crauwels@qmserver.vtm.be>
Message-ID: <33956E15.492A@qmserver.vtm.be>
Source record: 93541

Hello All,

I was wondering if someone already changed a CB FM rig to 10M FM
As we have a 10M Repeater now,we are looking for lowcost rig
to work over the repeater.

Freq: 29.560 Mhz input and 29.660 Mhz output

Any information is welcome

73

## 82. Another neat RX and some questions about gain distribution and tracking (tube project)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <339525CC.305D@atl.org>
Source record: 93542

No I didn't build it but am very happily working on someone elses
HBR-16. The Home Brew Receiver 16 tubes article from the Oct '59 QST
appears to have gotten someone so fired up that he had it built before
the Dec QST and the 5763 product detector mod.

If the Mosley CM-1 description bored you, stop reading now.

The Mosley had 5 tubes (actually 10 as there was a triode and pentode
in every one of them).

This HBR-16 has 16 tubes (actually 17 if you count the one 12AU7, 2 x
triode as two).

I don't know about RX design so I'm gonna ask some questions and
hopefully some will be kind enough to post what they know so I can get
this thing running in top form.

Circuit starts with a 6BJ6 Pentode as RF amp. Plug in coils for each
band. Antenna link coupled to grid coil which is tuned by one of three
sections of the 5-23mmf/section VFO cap. RF gain via cathode bias pot.

Mosley manual said triode amp is better on high bands owing to
noise considerations. Real feature or just making what they
used look good?

Output of the RF amp is coupled the same way (link to tuned grid) of
the first mixer 6CB5. Plug in coils are used here too with tuning by
another section of the VFO cap.

Any suggestions as to least aggrevating approach to making
sure all these plug in coil based tuned circuits track well?

The VFO, a 6BH6 is tuned by the third section of the VFO cap and also
uses a plug in coil. VFO feeds 1st mixer via same grid as RF amp.

How to determine best VFO injection level?

Output of first mixer is 1600kc and makes it's way to the second mixer
6BC5 via a link coupled, double tuned, transformer wound on a pill
bottle.

Here I'm curious as to how to determine whether ot not the
amount of coupling I have is right, too much, or not enough.
Would a 1600kc xtal (there is one in the junk box) be too
tight as a filter or attenuate the signal too much at this stage
of the RX?

The second mixer gets its' LO from a 1700KC 6C4 xtal osc. and is sampled through a 100kc double tuned IF transformer (Miller 612-M1) by the 6BJ6 first IF amp. Mixer gain via cathode bias pot.

Again, how to decide what injection level for 1700Kc signal is best.

Deja-vu, the second IF amp which is followed by the third of the triplet of transformers. The newly shaped IF signal is then routed to either a 6BE6 product detector or 1/2 of a 12AU7 double triode as envelope detector. Both IF gains are via one cathode bias pot.

As an operator, what is a good way to tell how much IF gain is enough.

BFO comes from a 6BH6 with Miller 012-M5 BFO coil and running as electron coupled osc.

Injection level question again.

The other half of that 12AU7 samples the output of the IF string and controls gain of the two 2nd IF stages for AVC and also drives the 6CB6 'S' meter amp.

Audio from either of the two detectors is amplified by a 6C4 driving headphones of a 6AQ5.

Hey, that's only 15 tubes! Well there is also a 6BH6 xtal osc running all by it's lonesome to provide a cal. signal.

So there. A bunch of gain distribution and injection level questions about a 37 year old radio. I'm all ears.

-bob

## 83. Re: CB FM to 10M FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: Larin <larin@blueriver.net>
Message-ID: <01bc70c1$d7ea8040$39fe35ce@larin>
Source record: 93543

CBC International sells a kit (Super Expo Crystal Oscillator and Mixer) that will allow you to convert many CB radios to 10 meter use. It also allows for tx and rx splits. You can contact CBC International and get a catalog by sending $2 US to CBC International, PO Box 31500, Phoenix Arizona 85046, USA.

Larin

Walter Crauwels ON4BCB <Walter_crauwels@qmserver.vtm.be> wrote in article <33956E15.492A@qmserver.vtm.be>...
> I was wondering if someone already changed a CB FM rig to 10M FM
> As we have a 10M Repeater now,we are looking for lowcost rig
> to work over the repeater.
>
> Freq: 29.560 Mhz input and 29.660 Mhz output

## 84. Re: CB FM to 10M FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: Jim Valdes <jvaldes@whoi.edu>
Message-ID: <33957688.98FB7E9C@whoi.edu>
Source record: 93544

Larin wrote:
>
> CBC International sells a kit (Super Expo Crystal Oscillator and
> Mixer)
> that will allow you to convert many CB radios to 10 meter use. It also
> allows for tx and rx splits. You can contact CBC International and get
> a
> catalog by sending $2 US to CBC International, PO Box 31500, Phoenix
> Arizona 85046, USA.
>
> Larin
>
> Walter Crauwels ON4BCB <Walter_crauwels@qmserver.vtm.be> wrote in
> article
> <33956E15.492A@qmserver.vtm.be>...
> > I was wondering if someone already changed a CB FM rig to 10M FM
> > As we have a 10M Repeater now,we are looking for lowcost rig
> > to work over the repeater.
> >
> > Freq: 29.560 Mhz input and 29.660 Mhz output
Take a look at the late '70, early 80's 73 magazines, there were several
articles concerning CB to 10 and FM conversions.

## 85. Bendix/King AN/PRC-127 LPH VHF RADIO 14 CHANNEL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: hhmercer@airmail.net
Message-ID: <865432827.13245@dejanews.com>
Source record: 93545
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.misc,sci.electronics.equipment,sci.electronics.repair

We are a small Police Department in Texas. We have 20+ Bendix/King AN/PRC-127 hand units. These units were procured from the military for use by tactical officers.

Bendix/King is unwilling to talk about these radios other than the fact that they acknowlege they exist. It is very frusterating - makes one want to think about a boycot.

We have no real budget at the department and these radios have filled a void that otherwise could never have been accomplished.

I have heard of several modifications that can be performed on these units. I am seeking information on any and all modifications that can and have been done to these radios. Such as installation of the high/low power switch, installation of the scan switch, etc. . .

Also seeking anyone that has accessories that they would be willing to sell or donate (for tax write off) for these units.

Anyone with information on these units please e-mail me at hhmercer@airmail.net

Thank You

Sgt. Lindsay Hodgdon
Lone Oak Police Department
Lone Oak, TX

Anyone with any information of the AN/PRC-127, I am interested in visiting with you. Anyone with information about the AN/PRC-127 (A), Please let me know what the revision (A) is . . .

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 86. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: Steve Stuart <w8an@earthling.net>
Message-ID: <3395A848.75FE@earthling.net>
Source record: 93546
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael wrote:
>
> Can you give a pointer to a good distribution of Linux for hams?
> Which distribution and where is it available.
> I would really like something that is available on CD rom, has all the
> ham and electronic goodies and doesn't require me to become a total
> UNIX guru to get working.
>
> Am I asking for too much?
>
> michael N6CHV

I have found just about any hamfest that has somebody selling CDROMs has a couple of choices. I recently bought the "InfoMagic LINUX Developer's Resource" for $12. It contains RedHat 4.0, Slackware 3.1, and Debian 1.2 kernals. Plus X-Windows, and an enormous amount of software and on-line documentation (6 CDs). Installation was simple by making a boot disk from a dos machine. (I prefer the RedHat as it needs only a single boot/install diskette). I now have a cool X-Windows interface, AX.25 on packet radio, Web Server, FTP server, Telnet server, and much much more. Hard to beat that price for all the neat stuff!

http://www.infomagic.com
http://www.redhat.com

--
Steve Stuart internet: w8an@earthling.net
Toledo, OH http://www.glasscity.net/users/w8an
AmPRNet: w8an@w8an.ampr.org [44.70.161.132]
PBBS: w8an@w8hhf.#tol.oh.usa.noam

## 87. Ten Tec 6m Transverter 1208

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: kb8ydx@geocities.com
Message-ID: <3395c5dd.457791@news.bright.net>
Source record: 93547

Hi. Having lots of trouble with this. Bought as a kit and got to one of the very last phases and when it comes time to set a pot, I can't get the required voltage at the test points. Anyone else had trouble with this kit?

Any help appreciated.

Adam, KB8YDX

## 88. List Of Stamp Applications [970604]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: cjNOSPAM@hth.com
Message-ID: <3395c7ea.24830426@news.buller.se>
Source record: 93548
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
Since the L.O.S.A is getting bigger I only post the index of
applications to the Usenet groups and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 Whats is L.O.S.A all about ?
--------------------------------

I started to compile L.O.S.A because I know there are lots of great
ideas and many problems that are solved with the BASIC Stamp and the
main purpose of this list is to get an idea of what other people are
using their BASIC Stamps for and maybe get some inspiration or hints.

1.1 How can I contribute to this list ?
---------------------------------------

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
-------------------------

> = Indicates a new or updated application since last time.

# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
# 004 Scrolling LED Sign
# 005 Tone Decoder
# 006 Pager
# 007 HexWalker Mobile Robot
# 008 Robo Bug
# 009 EXPBOT Robot controlled by Stamp
```

# 010 Andrews Ever Evolving Lego Robot
# 011 Factory Monitoring System
# 012 Wave to the Cats/Desk Temperature
# 013 Gamer's Die Roller
# 014 Stamp II Serial I/O
# 015 Voice and CW Fox Hunt Transmitter IDer
# 016 Lift (elevator) Controller
# 017 Paging with the Stamp
# 018 Switching Sytem
# 019 Door Entry Card Reader
# 020 Telephone Card Reader
# 021 DTMF Decoder
# 022 Ion chamber radiation monitor
# 023 Barn Monitor
# 024 Dallas one-wire interface
# 025 Sculpture control
# 026 Commercial clothes dryer controler
# 027 Morse Code Keyer
# 028 Traffic Light Controller
# 029 Automotive Lamp Control
# 030 Single Switch Scanning Device for Disabled
# 031 Bell timer for school bell control
# 032 RIMS controller for beer making
# 033 Stamp 1 and ISD 25XX Sound Chip Application
# 034 Camera Wireless Controller
# 035 Simple Battery Check using the BS2-IC
# 036 Photocell MIDI Controller
# 037 DCF-Clock
# 038 Radio-controlled Digital Clock
>
# 039 Weather Station I
# 040 Private Aid To Navigation
# 041 Stamp II in Space
# 042 MAT32 long integer math routines
# 043 Distinctive Ring Detector
# 044 Extended Stamp Memory
# 045 Debate Stoplite
# 046 Digital nametag
# 047 ST506 Disk Seeking Demo Controller
# 048 Robot: Multi-Stamps Communicate via Shared Memory
# 049 NiMH Battery Charger/Conditioner
# 050 555 Timer as A/D Converter
# 051 Bits of Light
# 052 Process Control
# 053 Near Space Capsule
# 054 PIC Debugger
# 055 DS1820 Temp Sensor
# 056 Air muscle hexapod robot
# 057 Lights
# 058 Caller-ID Interface
# 059 Wind speed and wind direction measurement device

# 060 Calibrated Dust Feeder for Air Cleaner Tests
# 061 Use of a Serial EEPROM as a Lookup Table
# 062 Displaying Quantities on a 200 mV Panel Meter
# 063 Programmable Proportional Air Valve
# 064 Basic Stamp machine control application
# 065 Compass Interface for Navigation
# 066 Truck + ? identification
>#  067 Meteoreological Station
# 068 Stamp Controls Electronic Tester for flex circuits
# 069 Game Timer
# 070 Photoghrapic light meter
# 071 Data System Remote Control on unmanned aircraft
# 072 Speaking Instructor
# 073 Small Moblie Robot
# 074 R/C helicopter altitude control unit
# 075 Automobile Rally Odometer Interface to Laptop
# 076 LCD drivers
# 077 Stamp I / PC Interface Demo
# 078 Stamp Photo Meter
# 079 Stiquito(TM) 97 HexaPod Robot
# 080 XRaCS DTMF Radio X10 Control with Voice Response
# 081 Interfacing the Basic Stamp 2 with I2C Devices
>#  082 Weather Station
>#  083 Maxxum 7000 Remote Release Widget
>#  084 Xs And Os games for college project
>#  085 Stamp II Mouse Emulator (Version 6)
>#  086 Basic Alarm System
>#  087 Interfacing with a Printer

Regards,

/Christer

[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
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## 89. Re: FS - Rohn - HBX-48 - Tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: Chuck <chuckk@kerrlake.com>
Message-ID: <3395F49F.5BA@kerrlake.com>
Source record: 93549

What shape is the tower in as far as rust and where in nj are you.

## 90. WTB: Bird 43 2500H slug

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: "R.E. Dodson WB5APD/4" <rdodson@worldnet.att.net>
Message-ID: <33960734.6A04@worldnet.att.net>
Source record: 93550

E-mail price shipped to Alabama if you have one for sale.

Thnx
bob

## 91. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EB9ILE.Auo@world.std.com>
Source record: 93551

In article <339072E0.383F@ibm.net>, <hudog@ibm.net> wrote:
> Thomas Schaefer wrote:

> > I sent email to FAR recently, but no reply....
> http://www.cl.ais.net/farcir/
> their web page (847)836-9148. Email is farcir@ais.net

I have received replies from this email addr, in the recent past.
(not since Dayton, but this year)

Give him time.
73 de N1VUX BPL with Tech-No-Code
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

## 92. What voltage to float deep-cycle RV batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: swithrow@nyx.cs.du.edu
Message-ID: <5n5ce5$nlp@nyx.cs.du.edu>
Source record: 93552

What is the correct voltage to float the deep-cycle RV or marine
batteries that you get at Sears or WalMart? I am using them as
emergency batteries on a radio system such that they are used only
when the power goes away (rarely), the rest of the time they are
trickle charged.

Any good references on this subject would also be appreciated.

73,
Skip Withrow - WB0BBE
ah441@freenet.uchsc.edu or swithrow@nyx.net

## 93. FS: Yaesu FT-747GX - $500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-04 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <33975ba9.4598809@news.icanect.net>
Source record: 93553
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi All,

I have a Yaesu FT-747GX to sell. Covers .5-30 mz, all-mode AM,CW,SSB, and FM with optional accessory. Its "as new" in the box not a single mark on it. I would like to get $500.

BTW- I just got a old issue of CQ (1992) and there is a remote mounting mobile kit one can get for the FT-747GX.

.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'

## 94. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5n5dvv$dpm@apple.telalink.net>
Source record: 93407
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sid Boyce <szb50@juts.ccc.amdahl.com> wrote:
> Like you I do everything on a linux machine, work and play. The
>dosemu(lator) and Wabi and Wine allows me to handle the EXCEL, Word6 and
>PowerPoint stuff I get thrown at me. All this with no rebooting, all my
>other stuff like X3270 via ppp into our Corporate mainframe and pdf docs
>work fine.
>Regards

I don't suppose anyone knows of a program/kernel/etc. that will
connect to a Netware 2.12 server? (I know about ncpfs but it appears
to only support NW3 and greater)

Is Wine now reliable? I've got a copy on a Yggdrasil CD set I bought
at Dayton last year but it warns in many places of instabilities in
Wine. Right now, I'm planning on simply setting aside 25% of my hard
drive for a DOS/Win3.11 partition. "lodlin" works great, allowing
easy switching between OSs, especially with the DOS partition mounted
on the Linux side too.

73 Doug

## 95. Kenwood PC-10 Phone Patch to Yaesu FT-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc716e$442751a0$481a10d1@dale>
Source record: 93408

I have a need to hook up a friends Kenwood PC-10 Phone Patch to our club's FT-1000.

Can someone tell me what the pin-outs of the jack and plug on the phone patch are?
I am certain they are the microphone connectors, allowing the mic to be connected to
the patch, then the cable connected to the radio mic input.

The microphone connectors on the phone patch (jack on the pp cabinet; male on the
cable (to the radio). They are both 4-pin connectors.

The purpose, in case you want to know, is an astronaut has met some U.S. Fish
and Wildlife biologists on a couple of small islands (reefs?) between Midway and
Hawaii, called French Frigate Shoals. They have a small, low power, solar powered
crystal controlled transceiver and a vertical antenna. The astronaut has told them
he would see about getting our club station (W5RRR - Johnson Space Center ARC)
set up to be able to provide them phone patches home (they'd be using their calling
card numbers from JSC to their homes). It's an iffy proposition, but worth a try at least...
these folks are living in tents on the islands and won't be getting off for months yet.
The astronaut (a ham) has acquired a MARS callsign for the club and a MARS
callsign has been assigned to the USF&W folks on the island.

I have been tasked with interfacing the Kenwood phone patch with the Yaesu FT-1000.

Any help would be appreciated.

Thanks and 73,

--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

## 96. Digital PL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Phil Fostini <pfostini@connix.com>
Message-ID: <339664E5.ED473C05@connix.com>
Source record: 93409

Does anyone have plans or information on were to buy or build a digital
PL unit ? Even an explanation on how it works might due?

## 97. Re: LINUX for hams??? Where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: poseidon@ziplink.net
Message-ID: <33964d3f.17339456@news.ziplink.net>
Source record: 93410
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 5 Jun 1997 00:46:46 GMT, Sid Boyce <szb50@juts.ccc.amdahl.com>
wrote:

>Steve Stuart wrote:
>>
>> Michael wrote:
>> >
>> > Can you give a pointer to a good distribution of Linux for hams?

The only thing I know of that would refer to what you're asking for is
MiniLinux by sp2ong.
It can be downloaded from ftp.li.ncu.edu.pl from the directory
/pub/hamradio or something.
It works out of the box and gets installed on a msdos partition.

Benedict
kb2qzv
---------- be well and prosper -----------------
poseidon@ziplink.net
---------------------------------------------

## 98. FS: Anderson Powerpole Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: wd6esz@shell.quick.net
Message-ID: <5n69fa$ql7@news.quick.net>
Source record: 93411

For Sale: Anderson Powerpole DC Connectors 52 for $20 includes silver plated 30 amp contacts and all roll pins. Shipping additional $3
send to:
Richard Heryford
2796 Harbor Blvd, Apt #210
Costa Mesa, CA 92626
(714)851-8176

email:
wd6esz@kaiwan.com

73

## 99. Re: What voltage to float deep-cycle RV batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: WE@hate.spam.com
Message-ID: <5n6add$ctr@mtinsc05.worldnet.att.net>
Source record: 93412

swithrow@nyx.cs.du.edu (Skip Withrow) wrote:

Amp.Hr. Capacity (in amp-hrs)/100 is standard trickle for lead-acid batteries.
A 1 Amp 12V wall-wart will probably do just fine. I used one of the Radio Shack Variety for several months during Desert Storm, as we had to improvise our power supplies.

For example: an 8D battery is 195 A-H. You can trickle it at

195/100=1.95 Amps without excessive gassing.

In practice, I would use maybe 1.0 - 1.5. Don't get any sparks near the vents though, or you'll soon find out why if you survive.

Battery manufacturers tend to exaggerate capacity, with all sorts of different "cranking amps" and meaningless stuff like that. Write to the manufacturer and ask for their "9 hour discharge curve" to get the real figures on how the battery will perform during actual emergencies. If they don't give it to you, don't buy it.

"True" standby batteries are expensive, and use Cadmium in the plates.

If you keep the batteries in the shack, I recommend keeping them in a fiberglass or other acid-resistant case.

Another important thing to do (which most people don't) is to periodically take the battery outside, and wash it well in a stream of running water, while brushing with a soft brush. This removes all traces of acid which have vaporized out of the vents and settled on the top of the battery. This always causes a current path between posts (you can actually measure this with a digital voltmeter). Keep the battery clean, dry, charged and "watered" and it should last for some years.

>What is the correct voltage to float the deep-cycle RV or marine
>batteries that you get at Sears or WalMart? I am using them as
>emergency batteries on a radio system such that they are used only
>when the power goes away (rarely), the rest of the time they are
>trickle charged.

## 100. GE transistor identification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <5n6ggt$jn5@news.asu.edu>
Source record: 93413

I'm tracing and drawing a schematic of a module to try and repair it. I have a transistor I can't identify. It is in a TO92 case and all it has on it is GE 1789. Can't find it in any of my reference books. I know it is a PNP and know which lead is the base but that is all. Can anyone tell me an ECG cross reference number and/or how to identify which lead is the emitter? Thanks for any help.

George, KQ7C

--

## 101. 74HCT40103 pin out please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <AbMvbUAm$rlzEwNM@two-way.demon.co.uk>
Source record: 93414

Can somebody help me with the pin out connections for the following
devider chip: 74HCT40103, I beleive this is a Harris number.
I'm trying to put together a economical synthesiser design!

Thanks

Phil G4ZOW/Xtreme mobile. Life's too short for QRP!

## 102. Help! Changing XTAL in Mitrek Channel Element

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Scott Sidener <sidener@umr.edu>
Message-ID: <5n6r22$i0o$2@news.cc.umr.edu>
Source record: 93415

Hi,

I am trying to tune up 3 motorola mitrek radios in the ham band.

I have bought crystals for the channel elements and know that if the freq. changes significantly then at least one cap and one inductor need to be changed in the channel element to get the crystal to oscillate.

I believe this is called "compensating"

Can anyone prescribe what to change in the channel elements to work?

Here is what I have:

Original New
Channel Freq.
Freq.

168MHz 145MHz Both Tx and RX kxn1088 and kxn1086
460MHz 440MHz Same as VHF
46MHz 50MHz Kxn1085 and 1087 I think.

Any help would be greatly appreciated.

Thanks,

Scott Sidener N0WFL

## 103. Re: Digital PL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <A1h0LdAXUwlzEwea@lfheller.demon.co.uk>
Source record: 93416

In article <339664E5.ED473C05@connix.com>, Phil Fostini
<pfostini@connix.com> writes
>Does anyone have plans or information on were to buy or build a digital
>PL unit ? Even an explanation on how it works might due?
>

The "Bible" - The Art of Electronics, by Horowitz and Hill - has a very
good section on PLL synthesiser design.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

## 104. Which QRP Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: cvoid@netcom.com
Message-ID: <cvoid-0506971119360001@axolotl.macromedia.com>
Source record: 93417

Greetings!

I've been looking around at various 40m QRP kits to build, and have narrowed
it down to three:

Oak Hills Research OHR-100
Wilderness Radio SST
Ten-Tec 40m

My questions is, does anyone have any recommendations? I know a lot of people
have built the OHR-100 and Ten-Tec kits, but what about the SST?

Any help would be appreciated, and thanks in advance!

--
Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
* PGP v2.3a Public Key Available Via Finger *
WWW: http://www.morphine.com/cvoid/

## 105. Freq of Gemini Rabbits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Greg Boren <symntlab@netxpress.com>
Message-ID: <33971D14.5B73@netxpress.com>
Source record: 93418

Got several Rabbit receivers I'd like to use for ATV and repeater remote receivers. Does anyone have schemeatics and or the operating freq of these things.

Thanks in advance

Greg/N5SKE

## 106. Re: What voltage to float deep-cycle RV batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5n7891$3mj@hpcvsnz.cv.hp.com>
Source record: 93419

Old Buzzard (WE@hate.spam.com) wrote:
: swithrow@nyx.cs.du.edu (Skip Withrow) wrote:

: >What is the correct voltage to float the deep-cycle RV or marine
: >batteries that you get at Sears or WalMart? I am using them as
: >emergency batteries on a radio system such that they are used only
: >when the power goes away (rarely), the rest of the time they are
: >trickle charged.

: Amp.Hr. Capacity (in amp-hrs)/100 is standard trickle for lead-acid
: batteries.
: A 1 Amp 12V wall-wart will probably do just fine. I used one of the
: Radio Shack Variety for several months during Desert Storm, as we had
: to improvise our power supplies.

..

I won't disagree with what "Old Buzzard" wrote...I think there's good advice there. But I'd add a couple points I've gotten from asking similar questions:

First, it's good to _occasionally_ charge the battery to the point of vigorous gassing, generally around 14.2 to 14.5 volts for a 6-cell "12V" wet cell battery.

Second, if you want to float-charge to a _voltage_, about 13.4 volts is good. The current should be very low, but, I am told, charge will be maintained. If you want to top the battery off just before use after being floated at a constant voltage, it doesn't take long at all, since it's pretty near full charge anyway. Gassing normally begins at about 13.7 volts, so you're below the point of any significant gassing at all at that lower voltage. -- You can determine a good float charge voltage by charging the battery to the point of vigorous gassing, then removing the charger and letting it "rest" an hour or so. Measure the voltage (no load but the volt meter), and that should be a good "float" voltage.

Finally, the voltage numbers are temperature sensitive...the numbers I gave assume you're within 10 or 20F of "room temperature", say 50F to 90F. You'd want to start adjusting them if you want to operate outside that range. The currents that Old Buzzard gave should be independent of temperature.

--
Cheers,
Tom
tomb@lsid.hp.com

## 107. Bird Model 43 plug-in's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: la8ak@onnline.no
Message-ID: <33974024.270615@news.online.no>
Source record: 93420

Has anyone ever made his own plug-in units for this powermeter?
They are extremely expensive over here, and purchase from USA was not too inexpensive after all. I have seen some cheap offers in UK some years ago, but they are not very much cheaper in UK now.
I have already 1W probe for 175MHz, 10W probes for 175 and 470MHz, 150W for 175MHz, 50W for 1000MHz. 250W for HF
I would need some possible probes for 2,3GHz (10W), but since my interest cover large frequency range I would be interested in any experience made. I also contribute to write a technical information column in our national amateur radio magazine, and send technical notes to G3VA and PA0SE for respective magazines
Hpe to hr fm u sn
Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 108. Re: Theory fpr Vackar Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: la8ak@onnline.no
Message-ID: <33974230.794380@news.online.no>
Source record: 93421
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 31 May 1997 12:15:10 +0100, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>Dear All,
>Does anybody know of a paper, article etc that gives the theory behind
>the vackar oscillator?.
>
>Cheers
>
>Robin
>Robin Birch robin@falstaf.demon.co.uk
>
>M1ASU Old computers and radios always welcome
hi
Believe you may want to see some original paper on the design?
in case you are not, see ART by G3VA which shows several constructions
of Vackar oscillators, this is often mixed up with the Seiler
oscillator, and even more with the Tezla oscillator. Either Vackar and
Tezla sound czechoslovacian(OK) to me. I believe the latter is also a
company name in OK. I believe I have read an article in CQ magazine in
the early 60's on this type of oscillator.

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 109. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: davidn3213@aol.com
Message-ID: <19970605235201.TAA29733@ladder02.news.aol.com>
Source record: 93422

MZenier@netcom.com wrote:

[deletions]

>It is a shame that they wimped out on the math.

[deletions]

As the handling editor for that 1995 ARRL *Handbook*'s oscillators chapter and the handling editor and coauthor for its mixers/modulators chapter, I disagree that that ARRL "wimped out" on the math, especially in the mixers chapter, a considerable portion of which I wrote. The ARRL Handbook at no time in its history has been a radio *engineering* handbook, and it did not, and was not intended to, become one with its 1995 update. Thus, it contains only the math deemed necessary for completeness, as opposed to exhaustiveness. And notice that even that relatively modest dollup of math--part of it equations that prove that the "carrier" does not vary in AM--has not dispelled the popular idea that the carrier does vary.

Why don't people believe the words--that the carrier doesn't vary? Because their nonengineering intuition, aided by the misleading and poorly explained oscillograms long carried in just about every ham technical handbook, tells them it does. Why doesn't promulgation of the math correct them? Because math is an abstract language that they don't speak, or don't speak well. Why don't they speak math? Because they are not engineers, and have no real need to speak it.

Amateur Radio is not, and has never been, a primarily technical hobby as practiced by most of its constituents. (Many readers of this newsgroup would like to believe it is or was it some time, but the evidence of history proves otherwise.) Merely building radio equipment guarantees the acquisition of radio engineering knowledge by its builders no more than constructing club sandwiches confers knowledge of nutrition. Radio amateurs are *hobbyists*; they are passing time by working and playing with radio. The ARRL *Handbook* is written to be accessible by as many hobbyists as possible, not just those who aspire to radio engineering, with or without a degree.

I wish the *Handbook*'s foreword included text that used to be there, text that characterized the book's intent to convey the latest practical radio advances "reduced to amateur practice." Perhaps this, from the foreward of the 1949 edition, can serve:

"This wide acceptance of the *Handbook* is founded on its practical utility, its treatment of radio communications problems in terms of how-to-do-it rather than by abstract discussion and abstruse formulas."

That said, I consider David Stockton's oscillators chapter to be an delight, and absolutely the best general treatment of oscillators in Amateur Radio publishing. And I consider the mixers/modulation chapter to a triumph in the sense that it conveys, for the first time in an Amateur Radio handbook, the concept that mixing, modulation and demodulation all depend on one phenomenon: multiplication (all right: or convolution :-D) due to nonlinear distortion. That had never been stated in an ARRL *Handbook*--and it was clearly overdue, as the response of one long-time ham and engineer to a related writing of mine on synchronous AM detection (I paraphrase): "What do you mean, 'the carrier heterodynes the sidebands back to audio'? I checked my Terman, and he said nothing about heterodyning--only that the mechanism is rectification!"

Regards,

David Newkirk, W9VES

## 110. Re: 74HCT40103 pin out please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <339752D3.CFE@imaxx.net>
Source record: 93423

philip de cadenet wrote:
>
> Can somebody help me with the pin out connections for the following
> devider chip: 74HCT40103, I beleive this is a Harris number.
> I'm trying to put together a economical synthesiser design!
>
> Thanks
>
> Phil G4ZOW/Xtreme mobile. Life's too short for QRP!

Try http://137.237.25.11/


---
Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net
---

## 111. Re: Theory for Vackar Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Bill Durspek WØBVR <BILLJD@mcleodusa.net>
Message-ID: <33976D68.5064@mcleodusa.net>
Source record: 93424

> On Sat, 31 May 1997 12:15:10 +0100, Robin Birch
> <robin@falstaf.demon.co.uk> wrote:
> =

> >Dear All,

> >Does anybody know of a paper, article etc that gives the theory behind=
the vackar oscillator?.

CQ of June 1994 pp 26 has an excellent article on the Vackar VFO and some theory. See also QST for Sep 1978, pp15 for an article "Meet the Remarkable but Little-Known Vackar VFO". This was also reprinted in QRP Classics, ARRL, 1990 pp 119. The original article by Jiri Vackar "LC Oscillators and Their Frequency Stability" was published in the Tesla Technical Reports(Czech) in Dec of 1949. These references are from the CQ article.
=

73, Bill W=D8BVR

## 112. Wanted: Tubes, RCA and other tube testers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Kevin@UPSCALEaudio.com
Message-ID: <5n85pt$djf@nntp02.primenet.com>
Source record: 93425

Seeking

RCA WT100A

Hickok 580A

Triplett 3444A

Tektronix 570 curve tracer

If you have any of these or tubes to sell, please let me know

Best Regards,

Kevin Deal High End, Home Theater,
UPSCALE Audio and Rare Vintage Tubes
1410 Lemonwood Dr West Voice (909) 931-9686
Upland, CA 91786 Fax(909) 985-6968

## 113. re: FS: Standard C-508a - $225 - SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <33970ea0.1282360@news.icanect.net>
Source record: 93426
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Thanks the HT has been sold.

```
.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF\_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'
```

## 114. FS: HT-202 - $95

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: panflute@wisenet.com
Message-ID: <33960d98.1017854@news.icanect.net>
Source record: 93554
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

```
For Sale Radio Shack HT-202 2 meter HT
w/ NiCD pack weak,
alkaline pack
all in good condition $95

Call Abe WD4HPI 954-771-7465, panflute@wisenet.com
```

## 115. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <33960C76.63C140B3@juts.ccc.amdahl.com>
Source record: 93555
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Steve Stuart wrote:
>
> Michael wrote:
> >
> > Can you give a pointer to a good distribution of Linux for hams?
> > Which distribution and where is it available.
> > I would really like something that is available on CD rom, has all the
> > ham and electronic goodies and doesn't require me to become a total
> > UNIX guru to get working.
> >
> > Am I asking for too much?
> >
> > michael N6CHV
>
> I have found just about any hamfest that has somebody selling CDROMs has
> a couple of choices. I recently bought the "InfoMagic LINUX Developer's
> Resource" for $12. It contains RedHat 4.0, Slackware 3.1, and Debian
> 1.2 kernals. Plus X-Windows, and an enormous amount of software and
> on-line documentation (6 CDs). Installation was simple by making a boot
> disk from a dos machine. (I prefer the RedHat as it needs only a single
> boot/install diskette). I now have a cool X-Windows interface, AX.25 on
> packet radio, Web Server, FTP server, Telnet server, and much much more.
> Hard to beat that price for all the neat stuff!
>
> http://www.infomagic.com
> http://www.redhat.com
>
> --
> Steve Stuart internet: w8an@earthling.net
> Toledo, OH http://www.glasscity.net/users/w8an
> AmPRNet: w8an@w8an.ampr.org [44.70.161.132]
> PBBS: w8an@w8hhf.#tol.oh.usa.noam
I started playing with linux since Linus first offered it for ftp and I
have been a devotee ever since, the way it has advanced still amazes me.
I couldn't see any other outfit putting AX25 into their Operating
System.
Like you I do everything on a linux machine, work and play. The
dosemu(lator) and Wabi and Wine allows me to handle the EXCEL, Word6 and
PowerPoint stuff I get thrown at me. All this with no rebooting, all my
other stuff like X3270 via ppp into our Corporate mainframe and pdf docs
work fine.
Regards
--

... Sid Boyce...Amdahl(UK)...44-121 422 0375
---
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

## 116. Re: 8295 A or 8877

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-05 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33959f74.11497750@netnews.worldnet.att.net>
Source record: 93556

On Wed, 04 Jun 1997 13:31:27 +0200, "Dr. Hartmut Waldner"
<waldner@uni-bonn.de> wrote:

>Hi,
>
>I am looking for cheap 8295A power tubes by Eimac or Penta Labs, perhaps
>"pull outs". Also looking for used 8877 as alternative tube. Any source?
>
>73's Hartmut, DF6PW
>waldner@uni-bonn.de
>

Penta Labs tubes were relabeled surplus Eimac's. Most were from a
batch made in the 80's, when Eimac was having heat dam problems in the
tube. Avoid ANY 8877 code dated in the 80's. Many runs were prone to
cathode-grid shorts and gold sputtering.

Because of the re-labeling of tubes (some were sold with Eimac's name)
Eimac had to start stamping their logo and name in the metal.

Beware of the bargin tubes, and avoid Penta.

## 117. 3-gang variable capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: "E.Swain/T.Boyd" <lizboy@io.com>
Message-ID: <5n7kal$ghc$2@nntp-2.io.com>
Source record: 93427

Looking for a 3-gang, 365 pf per section, variable capacitor, capacity incxreases *counter-clockwise*, fairly compact.

Have stuff to trade (including 3-gang, 365 pf per section, capacity increases clockwise!) or will purchase outright.

Thanks!

Tom Boyd
lizboy@io.com

## 118. MONEY FAST AND E ASY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: wasted187@aol.com
Message-ID: <19970606003000.UAA03860@ladder02.news.aol.com>
Source record: 93428

A while ago I was reading through a letter similar to this one
and thinking to myself yeah right. Making thousands of dollars
off
of a $5 investment, no way but after reading several I decided
to
give it a try and believe me I've never looked back. I figured
what have I to lose but a couple of stmaps and 5 bucks. Still
before anything I made sure it was
all legal as you may by calling the US POST OFFICE
(1800-725-2161)
It turns out the process is completely legal and very simple.
Withing a
week I began getting money and it didnt stop.... I was thrilled
to
have
recieved $30 after my first week abd even more so when after
the
second week I had brought in over $1000. I dont know about you
but I could definitely use the money. The process is very easy
and
has 3 simple steps:

STEP 1: Get 5 peoces of paper and write the following at the
top
of each
"PLEASE PUT ME ON YOUR MAILING LIST"
now get 5 one dollar bills and place ONE inside of each of
the
sheets of paper. Place the sheets of paper into five seperate
envelopes and seal them. You should have 5 envelops each with a
sheet of papaer and 1 dollar inside. Mail the envelopes to the
following 5 adresses:

1. Scott Hilterbran
222 W. Pleasant St
Hillsboro, OH 45133

2. Paul Mewes
5550 Fillmore St
Merrillville, IN 46410

3. Scott Brkovich
2251 Sandhurst Drive
Castle Rock, CO 80104

4. Abalou Bodjona
2706 Nueces, Apt 214
Austin, TX 78705

5. Marchello Ferrara
3412 Norton St
Hopewell, Va 23860

STEP 2: now take the # 1 name off the list and move the other
names up ( 2 becomes 1, 3 becomes 2, etc.) ADD YOUR NAME AS
NUMBER
5
ON THE LIST. Change anything you need but try to keep this
letter
as close to the original as possible. Now post your amended
article
to at least 200 news groups. There are close to 18,000 and you
only need to send to 200 so it wont be hard. REMEMBER YOU CAN
SEND MORE THAN 200 & THAT THE MORE YOU SEND THE MORE MONEY
YOU
WILL MAKE! Now here's how to post to newsgroups.

FOR NETSCAPE USERS:

1. click on any news group. then click on "to news" which is at
the top left corner of the news group page. this will bring up
a
message box.

2. Fill in the SUBJECT with a flashy title that will get people
to
read your post like this one.

3. Now go to the message part of the box and retype this
letter
exactly with the exception of adding your name and adress at
number 5.

4. When done SAVE YOUR ARTICLE! DONT SEND UNTIL YOU SAVE IT!

5.Now that your letters saves go ahead and send your first
copy!
(click
on the "send" button in the top left corner.

6. This is where you post all 200 or how ever many you plan
to
post.
YOU MUST POST AT LEAST 200 TO MAKE GOOD MONEY!!!!!!!!!!!!!!!!
Go to any news group article and click "to news". type in your
flashy subject name in the subject box and place your cursor in
the message
box, Now click on "attachment" click on attachment file and find
your letter where evere you saved it. Click on your file and

click
"open" amd then on "ok". You should see your name shaded in the
attachment box. NOW POST AWAY!!!!!!!!

FOR USING INTERNET EXPLORER:

Its just as easy. HIGHLIGHT THIS ENTIRE ARTICLE and press "CTRL"
and the "C" key at the same time to copy this article. Then
print
the article for your records. NEXT go to the news groups and
press
"post an article" type in your flashy subject and click the
large
window
below. Press "CTRL" and "V" and the article will appear in the
message window. **BE SURE TO ADD YOUR NAME AND ADRESS TO THE
COPIES YOU SEND**********
Now re-highlight and re-copy for each news group. It was tricky
for
me at first but after the first few you'll be sending post in
less than 30 seconds!

Thats it. YOU WILL BEGIN RECIEVING MONY FROM AROUND THE WORLD
WITHING DAYS SO MUCH THAT YOU MAY EVENTUALLY NEED A PO BOX TO
HOLD IT ALL.....
If you wish you can remain anonymous just be sure your adress
is
correct.
Once again this is all totally legal and a great way to make
money so give it a try, at worst you'll be out 5 bucks and a
few
stamps.....
BUT I PROMISE YOU WILL MAKE MORE, A LOT MORE, AND ONCE
THE MONEY COMES IN YOU WILL WONDER WHY YOU EVER WAITED
TO START DOING THIS!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Happy
money making.Think about all the honest people online every day,
getting a dollar from 5 percent of them would be a tremedous
sum
of money. But still the choice
is yours. I wish you the best and hope you will take this
opportunity to better yourself finacially and have fun doing
so...

## 119. The NorCal 38 Special/such a deal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5n7mdk$qqu$1@zinger.callamer.com>
Source record: 93429

Over 2500 38 Specials have went out so far.

This CW rig comes with some very intersting features.

300 to 350 Mw transmitter and great specs.

With just a few parts and simple mods you can add a 5 watt amp to the
already on board circuitry.

With just a couple of more parts you can add the TiCK 1 or 2 keyer
to the already on board circuitry. These can be seen at
http://www.vivanet.com/~gmdsr

Once you have the rig up an running you can mod the dickens out of it
which you look at off the NorCal Page: http://www.fix.net/norcal.html

Finally when your really ready to put the real finishing touch to your
new creation go to "Creative Enclosures" page and look at the
fantastic enclosure available from San Luis Machine:
http://www.fix.net/~slmachco

Enjoy,,,72,,,Jerry...WA6OWR...K

ps...yes the rig is convertable to 40 meters.....

## 120. Re: Which QRP Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5n7mqs$qqu$2@zinger.callamer.com>
Source record: 93430

For the size and specs you cant beat the SST not to mention the super
circuit board and step by step instructions.

Take a look at the SST off the wilderness page off the links page
which you will find on the NorCal Page.

http://www.fix.net/norcal.html

Enjoy,,,72,,,Jerry...WA6OWR...K

cvoid@netcom.com (Christian Void) wrote:

>Greetings!

>I've been looking around at various 40m QRP kits to build, and have narrowed
>it down to three:

>Oak Hills Research OHR-100
>Wilderness Radio SST
>Ten-Tec 40m

>My questions is, does anyone have any recommendations? I know a lot of people
>have built the OHR-100 and Ten-Tec kits, but what about the SST?

>Any help would be appreciated, and thanks in advance!

>--
>Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
>cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
>Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
> * PGP v2.3a Public Key Available Via Finger *
> WWW: http://www.morphine.com/cvoid/

## 121. Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: mds@lexis-nexis.com
Message-ID: <5n7q9g$c0@mailgate.lexis-nexis.com>
Source record: 93431

I have a question concerning waveguide construction that I hope someone in this group may have some knowledge. I want to do some experimenting with 10-Ghz microwave components. One limiting factor is the availability of waveguide components (at least in the ham's price range). Surplus components are available, but never when I need them! I began to look for ways to construct the components I need. These items may include waveguide to coax terminations, gunn oscillator housings, directional couplers, mixer housings, slotted waveguide measuring devices, antennas, etc. While 3/4" copper water pipe has been used for some of these items; I wanted to use rectangular waveguide materials. Attempting to locate rectangular metal tubing with the dimensions of WR-90 was not successful.

I then thought about making these items from sand mold castings. While this is a hot and dirty process, some very nice metal parts can be made this way. Various metals can be used. This brings me to my question. The problem I have observed with sand castings is surface roughness. How smooth must the inside of various waveguide components be? I would appreciate hearing from anyone who has any experience or thoughts in this area.

Mike Suhar
WB8GXB
michael.suhar@lexis-nexis.com

## 122. Re: Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@tricon.net>
Message-ID: <01bc7237$03a2cd20$237fb0cc@ornitz.tricon.net>
Source record: 93432

It is best if the inside surface is quite smooth. Have you thought about buying a length of waveguide tube and cutting pieces for your components? Five or ten foot sections are not expensive. You can add the flanges yourself.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

Mike Suhar <mds@lexis-nexis.com> wrote in article <5n7q9g$c0@mailgate.lexis-nexis.com>...
> I then thought about making these items from sand mold castings.
> While this is a hot and dirty process, some very nice metal parts can
> be made this way. Various metals can be used. This brings me to my
> question. The problem I have observed with sand castings is surface
> roughness. How smooth must the inside of various waveguide
> components be? I would appreciate hearing from anyone who has any
> experience or thoughts in this area.

## 123. Motorola Darcom 9000 info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3396ed5a.14671041@news.atl.bellsouth.net>
Source record: 93433
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

As the subject line says, we need info on the Darcom 9000. Specifically a copy of the service manual is needed, and programming information for the EPROM is required. Anyone have anything?

This is a 928 to 952 MHz duplex radio which we want to move down into the 902-928 MHz band. We already know the front end filters won't tune down into the range, but we have alternative filters available. We just don't know how to reprogram the frequencies.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 124. Re: Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5n8b9o$9rg$1@news.belwue.de>
Source record: 93434

In article <5n7q9g$c0@mailgate.lexis-nexis.com>,
Mike Suhar <mds@lexis-nexis.com> wrote:
>The problem I have observed with sand castings is surface
>roughness. How smooth must the inside of various waveguide
>components be?

Yes, the smoothnes of the inner surface is very critical.
While it may be a good idea to cast flanges, wave guide
must be properly extruded.

However, since wave guide components have by now become obsolete
even for most amateur applications, there must be many hams, who
would be happy to get rid of some wave guide components (like myself).

May be you want to place an ad in a magazine?

73, Moritz DL5UH

## 125. Need help with 3 piece "N" amp conn

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: ryan@inc.net
Message-ID: <3397ad44.2301084@news.inc.net>
Source record: 93435

Can anyone describe how to use the 3 piece male Amphenol 'N'
connector? This is the one with the rubber "gasket" and metal ring
that appears to go into the connector body before the screw-on end
cap.

I can't quite figure out how to use it correctly... I have a guess,
but would prefer an expert's advice... :-)

Thanks,

Ryan Brooks
ryan@inc.net
N9YBX

## 126. a way to reduce powerline interference buzzes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseEBCCxC.EC3@netcom.com>
Source record: 93436
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.shortwave

A possible solution to QRN, RFI from the powerline (that annoying buzz all over the band): I removed the switching power supply transformer from a dead video terminal (Wyse "VT100"'s). These transformers have a set of primary windings, a low voltage secondary, and a higher voltage secondary. Identify the primary (look at the circuit board you pulled it from), measure resistance, and look for a secondary with similar resistance. AND be sure the primary and secondary are NOT connected together! I wired a power cord to the two windings, one leg to the primary, other leg of the power cord to the secondary. And the outlet side connects to the other ends of the primary and secondary. And try it on your radio to see if it supresses the buzz or not. (If not, try reversing the connections on the secondary).
One way to see if this is worth attempting is to listen to the radio as you pull its plug from the powerline. If the buzz stops before the radio's power supply looses its charge in its filter caps (a weak radio station should suddenly have improved S/N), then the RFI is conducted mainly by the power cables. In which case the "insert a choke coil in the line" trick should help. It takes more than a few turns around a ferrite core, however. You need a few millihenries of inductance.

## 127. Zenith BC-221-T Frequency Meter as new

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Chris <cm@money.cm.net>
Message-ID: <5n8po9$9t1@argon.btinternet.com>
Source record: 93437

Zenith BC-221-T Frequency Meter circa.1945 in Brand New condition.
25Khz to 20Mhz complete with original charts and stabilised power supply (230v)

A chance to own a liitle bit of history!

Would prefer a buyer in UK but would ship anywhere at your cost.

US$ 100 or GBP 65

Please reply to: con.cordeXXX@usa.net (remove the three Xs first!)

Chris
G3VAC

## 128. Mailloop: How to do Bulk Maillings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: assd
Message-ID: <5n8mke$fr8@newsfep1.sprintmail.com>
Source record: 93438

Mailloop v3.0 is an industrial strength bulk mailer.

Mailloop v3.0 is a bulk mailing program for the internet. It can take a single message and broadcast it to either a listing of e-mail addresses or to a listing of newsgroups. Creates custom newsgroup lists by filtering NNTP servers. Creates custom e-mail lists by extracting them from newsgroups. Can also extract e-mail addresses or newsgroup names from other protocols. Built-in NNTP, SMTP, POP, FTP, HTTP, EXEC, CGI, WHOIS and FINGER clients. Anti-cancelbot feature. Automatically processes remove requests. Includes extensive on-line help.
The most powerful bulk mailer available. Requires Windows 95 or NT 3.51+ and internet access.

The "Program" Mailloop is only available in English.

For more info goto: http://205.199.4.219

http://205.199.4.219

Using it is easy:

1) Create a message ( http://205.199.4.219/editor.htm )
...by using the pull down menus or
...by using any editor

2) Create a newsgroups list ( http://205.199.4.219/news3.htm )
...by filtering an NNTP server or
...by importing from any text file or
...by manually creating with any editor or
...by extracting from any FTP file or
...by extracting from any HTTP file

3) Create an e-mail list ( http://205.199.4.219/em3.htm )
...by extracting from newsgroups or
...by importing from any text file or
...by manually creating with any editor or
...by extracting from a WHOIS response or
...by extracting from a fingering response or
...by extracting from a UNIX response or
...by extracting from any FTP file or
...by extracting from any HTTP file or

4) Broadcast the message
...to the e-mail list or ( http://205.199.4.219/embc.htm )
...to the newsgroup list ( http://205.199.4.219/ngbc.htm )

5) Then process the remove requests
...by using the mailbox processor ( http://205.199.4.219/pop.htm )

6) If you want you can use the Newsletter Sever
...The Newsletter Sever will allow you to have an topic-specific newsletter that other can subscribe
and unsubscribe to.
...Customizing this server response files ( http://205.199.4.219/response.htm )
...Creating a new newsletter ( http://205.199.4.219/create.htm )
...Creating and Updating a newsletter the actual newsletter ( http://205.199.4.219/update.htm )

For more info visit http://205.199.4.219

http://205.199.4.219

## 129. Re: Which QRP Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <3397F1B3.D96@staffnet.com>
Source record: 93439

Jerry Parker wrote:
> 
> For the size and specs you cant beat the SST not to mention the super
> circuit board and step by step instructions.
> 
> Take a look at the SST off the wilderness page off the links page
> which you will find on the NorCal Page.
> 
> http://www.fix.net/norcal.html
> 
> Enjoy,,,72,,,Jerry...WA6OWR...K
> 
> cvoid@netcom.com (Christian Void) wrote:
> 
> >Greetings!
> 
> >I've been looking around at various 40m QRP kits to build, and have narrowed
> >it down to three:
> 
> >Oak Hills Research OHR-100
> >Wilderness Radio SST
> >Ten-Tec 40m
> 
> >My questions is, does anyone have any recommendations? I know a lot of people
> >have built the OHR-100 and Ten-Tec kits, but what about the SST?
> 
> >Any help would be appreciated, and thanks in advance!
> 
> >--
> >Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
> >cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
> >Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
> > * PGP v2.3a Public Key Available Via Finger *
> > WWW: http://www.morphine.com/cvoid/

Also take a look at the S&S Engineering page at
http://www.xmetric.com/sseng/index.shtml They make synthesized 40
meter QRP rigs. Look at the ARK4 and TAC-1.

## 130. Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Robert Ganter 3269 <ganter*NOSPAM*@ens.ascom.ch>
Message-ID: <33980357.75C7@ens.ascom.ch>
Source record: 93440

Hello,

I have some questions about power tetrodes. I am building a (Svetlana) 4XC400A based VHF/UHF linear and don't know exactly, which parts of the tube have to be protected and in which kind.
Now: whats happening in the unpleasant case of arc?
Technically, the current flows from the plate to ground. Physically, the electrons flow from ground (cathode), through grid and screen to the plate.
Now, what potential/current do You see at grid and screen?
Are these grids robust enough to survive a current of 50A flowing though them?
The plate current is cut off in less than 30ms (milliseconds) in my design (or at least it is intended, that it does...)
Most protection circuits use a 25 to 50 Ohm resistor in the plate line (limiting the current to 50A in the case of a 4XC400 with 2.5kV plate potential). The screen is fed (in some designs) from a z-diode stabilized power supply with current limit (20mA with the 4CX400). To avoid destruction of the screen in case of reverse current (which seems to be 'normal' with tetrodes) a shunt resistor (100k to 220k) and sometimes a ZNR (surge voltage protector) to ground are used.
At a screen potential of 400V a 220k resistor would only limit this voltage up to 1.8mA (the 4CX400 has a forward screen current of 20mA, any ideas, how big the reverse screen current may be during normal operation?)
The surge protector does not limit the reverse screen current at all. Is this a problem? (screen dissipation with the 4CX400 is 8W)
Most designs I have seen only protect the grid with a rather high (>200Ohm) series resistor. For normal use, this is not a problem, because grid current is very low, but if the tube is arcing, what happens with negative bias (which cuts off the tube? Do I have to protect the grid to become positive e.g. with a diode shunted to ground?

Maybe I am to concerned about tube protection in case of an arc, but on the other hand I'd be interested about this point.
Any recommendations for books/appnotes/etc about RF power tubes?

Thanks for any information.

Regards and best 73

Robert (HB9NBY)

--
To send me email, remove the *NOSPAM* in the return address.
The email address is a "facsimile receiver" as defined by Title 47 USC!

## 131. Re: Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <33981DDA.38F4@arrl.org>
Source record: 93441

Mike Suhar wrote:
>
> I have a question concerning waveguide construction that I hope
> someone in this group may have some knowledge. I want to do some
> experimenting with 10-Ghz microwave components. One limiting factor
> is the availability of waveguide components (at least in the ham's
> price range). Surplus components are available, but never when I
> need them! I began to look for ways to construct the components I
> need. These items may include waveguide to coax terminations, gunn
> oscillator housings, directional couplers, mixer housings, slotted
> waveguide measuring devices, antennas, etc. While 3/4" copper water
> pipe has been used for some of these items; I wanted to use
> rectangular waveguide materials. Attempting to locate rectangular
> metal tubing with the dimensions of WR-90 was not successful.
>

The exact dimensions aren't critical, unless you need a
specific waveguide impedance. Tuning out a mismatch could
be as simple as adding a tuning screw or two. Thus, you
might look at the available rectangular sections and
calculate the useful ranges of what you can get. WA5VJB
found that the loss of bolting different types of 10 GHz
waveguide together was very low, even though it must have
looked awful.

Surface roughness increases the loss of the waveguide, which
may or may not be a problem for typical amateur applications.
For instance, according to my calculations solder in waveguide
isn't a big deal, since amateur power levels are low and the
length of guide involved is short (10s of watts at most and cm
of guide).

> I then thought about making these items from sand mold castings.
> While this is a hot and dirty process, some very nice metal parts can
> be made this way. Various metals can be used. This brings me to my
> question. The problem I have observed with sand castings is surface
> roughness. How smooth must the inside of various waveguide
> components be? I would appreciate hearing from anyone who has any
> experience or thoughts in this area.

I have a pair of cast waveguide bends, though I don't know
the particular casting technique. The surface is certainly
a lot rougher than a nice milled surface.

A technique I hope to try at higher frequencies is to mill
slots in aluminum or brass stock. I don't know yet whether

it makes more sense to mill mirror images or to just cover
the slot with a cover. This might be a good way of making
waveguide bends.

--Zack Lau W1VT (FN33kd Mt Equinox, VT in the June VHF contest)

>
> Mike Suhar
> WB8GXB
> michael.suhar@lexis-nexis.com

## 132. YAESU FT-51 stuff, MB/CPU Pentium

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: kc4srn@aol.com
Message-ID: <19970606155800.LAA04598@ladder02.news.aol.com>
Source record: 93442

If you prefer COD, add $20

YAESU EDC-12 Cigar adapter/noise filter/voltage regulator/fuse/batt clip/trickle charging/fits FT-11/41 & FT-51. New in box. $39 SHIPPING INCLUDED to US.

YASEU CSC-67 Soft case for FT-51, FNB-31 small battery. Has open flap at bottom for larger batt and for above EDC-12 connection (without removing this protective case). $20 SHIPPED US.

14.4KBPS internal modem $29 SHIPPED US.

INTEL PENTIUM 90mhz MB, CPU with PCI, FAN and Y-connector. Compleate INTEL manual $169 SHIPPED US.

PCI SVGA card $39 shipped

## 133. FS: HT-202 - $95 SOLD!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: panflute@wisenet.com
Message-ID: <339b3bd7.16624544@news.icanect.net>
Source record: 93443
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Thanks to everyone who responded the HT has been sold!
Abe

For Sale Radio Shack HT-202 2 meter HT
w/ NiCD pack weak,
alkaline pack
all in good condition $95

## 134. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <M$ugVJAoVDmzEwXp@ifwtech.demon.co.uk>
Source record: 93444

Robert Ganter 3269 wrote:
>Hello,
>
>I have some questions about power tetrodes. I am building a (Svetlana)
>4XC400A based VHF/UHF linear and don't know exactly, which parts of the
>tube have to be protected and in which kind.

>Now: whats happening in the unpleasant case of arc?
>Technically, the current flows from the plate to ground. Physically, the
>electrons flow from ground (cathode), through grid and screen to the
>plate.

The arc current flows from the anode (HV+) to the nearest low-potential
object. In the case of a tetrode this is usually the screen grid.
From there, the current finds a return path to the HV-minus rail, so it
can involve the screen supply, cathode and sometimes the control grid.

Arcs can occur both inside the tube and outside.

>Now, what potential/current do You see at grid and screen?
>Are these grids robust enough to survive a current of 50A flowing though
>them?

You can see potentials of a few hundred volts, and the internal
electrodes will not survive currents of 50A or more for very long.
Neither will the power supplies. Therefore you have to do two things:
1. limit the arc current; and 2. remove the HV as quickly as possible.

>The plate current is cut off in less than 30ms (milliseconds) in my
>design (or at least it is intended, that it does...)
>Most protection circuits use a 25 to 50 Ohm resistor in the plate line
>(limiting the current to 50A in the case of a 4XC400 with 2.5kV plate
>potential).

This resistor is ESSENTIAL! There will be almost 2kV across the resistor
for a few tens of milliseconds, so it must be a high-power (50-100W),
high-voltage type which will not arc internally.

Also essential is some method of detecting the arc and removing the main
supply to the HV transformer. A mains fuse is not fast enough.

>The screen is fed (in some designs) from a z-diode
>stabilized power supply with current limit (20mA with the 4CX400). To
>avoid destruction of the screen in case of reverse current (which seems
>to be 'normal' with tetrodes) a shunt resistor (100k to 220k) and
>sometimes a ZNR (surge voltage protector) to ground are used.
>At a screen potential of 400V a 220k resistor would only limit this

>voltage up to 1.8mA (the 4CX400 has a forward screen current of 20mA,
>any ideas, how big the reverse screen current may be during normal
>operation?)

You are confusing two different things here. One is the arc protection, which is the function of the surge voltage protector (spark gap or Metal Oxide Varistor). The other thing is the forward and reverse screen current in NORMAL operation. Let's finish talking about the arc before going on to normal operation.

A surge voltage protector between screen grid and ground is very good value for money. It prevents the screen from rising to a very high voltage and drawing destructive amounts of current, and it also protects the bypass cpacitors in the sockets (which can be more expensive than the tubes!).

>The surge protector does not limit the reverse screen current at all. Is
>this a problem?

The surge protetor is not intended to limit screen current in normal operation. The turn-on voltage must be about 50V above the normal screen voltage.

>(screen dissipation with the 4CX400 is 8W)
>Most designs I have seen only protect the grid with a rather high
>(>200Ohm) series resistor. For normal use, this is not a problem,

Yes, it is a problem! This so-called "protection" resistor means that when the screen begins to source reverse current (which is quite normal for tetrodes), the screen voltage will rise because of the voltage drop in the resistor. This will make the screen source even more reverse current, which will make the voltage rise even more, until - BANG!

The screen grid supply must be able to hold the voltage very constant under conditions of either positive or negative screen current. This usually means a shunt voltage regulator.

>because grid current is very low, but if the tube is arcing, what
>happens with negative bias (which cuts off the tube? Do I have to
>protect the grid to become positive e.g. with a diode shunted to ground?
>
Not in my experience. It is unusual for an arc in a tetrode of the 4CX250-400 size to damage either the control grid or its power supply.

>Maybe I am to concerned about tube protection in case of an arc, but on
>the other hand I'd be interested about this point.

You need to think about the whole problem much more carefully, and get some more information.

>Any recommendations for books/appnotes/etc about RF power tubes?
>
Chapters 6 and 11 of 'The VHF/UHF DX Book' contain a lot of information on this topic.

(I'm running a 2-4CX250BM amplifier right now, with 2.8kV off load. Because I've been cleaning the shack, there is an occasional arc as dust particles pass by the anode. Excess screen current trips a relay and removes the mains from the HV transformer. Because there is a HV limiting resistor and VDRs on the screens, the amplifier comes right back on-line when I press the Reset button. No damage, no drama.)

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

## 135. Pixies at upcoming hamfest?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Curtis Fast <fast@mprgate.mpr.ca>
Message-ID: <33983CA3.7CD8@mprgate.mpr.ca>
Source record: 93445

Anyone going to a California hamfest soon? I understand that the Halted company has previously sold Pixie kits for $5 at their nearby swap meets.

If you know of a Halted appearance at a swap meet soon, I'd like to arrange
to purchase a few pixie kits! (I originally tried to order direct from Halted, but they only ship UPS, which means I pay big $$$ in brokerage fees
at the Canadian border.)

Please email me if you know (or think) you may be encountering Halted at a
swap meet, and we can make arrangements. Besides having the satisfaction of
helping out a fellow ham, your efforts will be rewarded with a complimentary
Pixie kit (Retail value $8.99! Don't wait! Act now!)

Curtis VE7CQF
--
==========
Curtis Fast fast@mprextensys.com
MPR Extensys Inc. Phone: 604-293-5745
8999 Nelson Way, Burnaby, BC, Canada V5A 4B5 Fax: 604-293-5787
==========

## 136. Re: Need help with 3 piece "N" amp conn

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33985C33.3545@qsl.net>
Source record: 93446

My 1974 handbook has a full page on how to construct the
N connector. Also, I've built these and shimmed for
pin depth etc. (Yes I've used them....)

The part you speak of is compressed between a metal washer
and the threaded end cap. Unless you have a different
part than I do. Spec'd to 18 GHz, these usually run
about $17 to 25 dollars each.

-Ed
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#???/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 137. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc7297$895357e0$f6915cc1@dummy.forthnet.gr>
Source record: 93447

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO
31/October/97.
FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT
++30 81 761382.

## 138. Re: Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: ge@sr.hp.com
Message-ID: <5n9q4f$h8l@canyon.sr.hp.com>
Source record: 93448

Mike Suhar (mds@lexis-nexis.com) wrote:
: I have a question concerning waveguide construction that I hope
: someone in this group may have some knowledge. I want to do some
: experimenting with 10-Ghz microwave components. One limiting factor
: is the availability of waveguide components (at least in the ham's
: price range). Surplus components are available, but never when I
: need them! I began to look for ways to construct the components I
: need. These items may include waveguide to coax terminations, gunn
: oscillator housings, directional couplers, mixer housings, slotted
: waveguide measuring devices, antennas, etc. While 3/4" copper water
: pipe has been used for some of these items; I wanted to use
: rectangular waveguide materials. Attempting to locate rectangular
: metal tubing with the dimensions of WR-90 was not successful.

Mike,
I published a 10 GHz waveguide filter design in the July 1987 edition
of QEX. Pictures of the filter are on the cover. In addition to using
standard guide, I also tried fabricating one using double clad printed
circuit board soldered together to produce "home made" wavequide and
reported that on page 4. The resulting filter had more loss but was
still tolerable.

I just sheared some board material and soldered it together around a
rectangular form made to the dimensions of standard guide.

In addition to the guide itself, I have fabricated coax to guide transitions
from PC board. Dimensions and pictures of these are on page 37 of the
June 1988 edition of Ham Radio Magazine. This also worked very well,
I got better than a 20 dB match this way.

As Zack Lau indicates, guide is pretty forgiving for most purposes.
The concern about smoothness and precision mostly comes into play when
one is trying for very accurate matches and impedances, or to very
accurately hit a design center without tuning. For amateur use, some
pretty crude homebrew versions work just fine in a lot of situations.

As another poster suggested, lengths of guide seem to be fairly
available at modest price. However, don't be afraid of rolling your
own...

Glenn Elmore n6gn

amateur IP: glenn@SantaRosa.ampr.org
Internet: ge@sr.hp.com

|--------------- N6GN's Higher Speed Packet WWW Page -------------------|
| |

```
| http://www.tapr.org/~n6gn/index.html |
| |
|------------------------------------------------------------------------|
```

## 139. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5n9qlr$13a$1@newsserver.dircon.co.uk>
Source record: 93449

>Why don't people believe the words--that the carrier doesn't vary?

Perhaps a major part of the problem is the confusion between the
carrier and the envelope. When you look at a time domain graph
of a modulated carrier you see the amplitude of the envelope varying.
Indeed, the envelope, as the function plotted through the local maxima
of the waveform, does vary. However, the carrier according to the
well known math does not vary. Considering the carrier and sidebands
as signals that are close in frequency, the relative phase slowly
varies between constructive interference and destructive interference.
Thinking about it this way relates a concept that can be grasped
pictorially to a static carrier and sideband(s) and a varying envelope
(this is easier to imagine with only one sideband, i.e. single sideband,
unsuppressed carrier).

What about narrow band FM? That has a constant carrier plus sidebands
(a well known approximation of the math ignores the higher order sidebands,
leaving two sidebands, like AM, but with different phase, and a constant
carrier).
Then the envelope looks to have a constant amplitude but the apparent
frequency changes (e.g. as represented by zero crossing spacing).
Now that is harder to imagine with a constant carrier.
==========
Colin Seymour G4NNA
1Mb/s 2.45 GHz spread spectrum radio modems & digital video:
http://www.users.dircon.co.uk/~netking/spread.htm

## 140. Re: Pixies at upcoming hamfest?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5n9uoj$ncr@hpcvsnz.cv.hp.com>
Source record: 93450

Hi Curtis...

Curtis Fast (fast@mprgate.mpr.ca) wrote:
: Anyone going to a California hamfest soon? I understand that the Halted
: company has previously sold Pixie kits for $5 at their nearby swap
: meets.

OK, what the heck is a "Pixie" kit?? You make them sound so interesting
at only $5 that I just have to know!

--
Cheers,
Tom
tomb@lsid.hp.com

## 141. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3398A8C5.1D34@crpl.cedar-rapids.lib.ia.us>
Source record: 93451

Colin Seymour wrote:
>
>
> What about narrow band FM? That has a constant carrier plus sidebands
> (a well known approximation of the math ignores the higher order
> sidebands,

Not true. The power in the carrier decreases as the power in
the sidebands increases, in such a manner that the total *power* remains
constant.

Bill W0IYH

## 142. Re: Pixies at upcoming hamfest?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33989E91.1064@qsl.net>
Source record: 93452

```
See My homepage at http://www.qsl.net/we6w
for the complete pixie and links!
-------------------------------------

With permission, I have assembled various
pixie documentation. Sufficient to
make at home. Current prices at
'a major supplier' are $9.95+tax.

A fun project that makes a great
frequency spotter for calibrating
your other rigs. Enabling you to
verify rit and xmt offsets!

-Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#???/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w
```

## 143. Re: Pixies at upcoming hamfest?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33989FE2.7E46@qsl.net>
Source record: 93453

Ed Loranger wrote:
>
I left out some words :^)

A fun project, low power transceiver,
that makes a great frequency spotter for calibrating
your other rigs when not using the pixie for qso's.

sri fer the error... -Ed Loranger

> A fun project that makes a great
> frequency spotter for calibrating
> your other rigs. Enabling you to
> verify rit and xmt offsets!
>
> -Ed Loranger
> --
> 72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
> HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
> QRP-L#1068/Norcal#???/ARCI#????
> mailto:we6w@qsl.net http://www.qsl.net/we6w

--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#???/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 144. Re: pse help ID GE mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33980F85.7371@earthlink.net>
Source record: 93454
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap,rec.ham-radio

Ron, N7TAW wrote:
>
> I need help finding a schematic for two old GE mobiles (currently used
> as local repeaters), especially the wiring for the control head as the
> controllers are about to be replaced, and the wiring of the old ones us
> a mess.
>
> the numbers listed on the ID plaques are:
>
> RG56TFS66, or N.P. 243349
>
> and
>
> YG56KJJ66, or N.P. 243349

If memory serves, what you have are GE MSTR EXEC II series...one
standard
and the other is the IMTS version....Best to use one radio as the rptr.
They are 60 watt models (the 5 in 56) and are in the 150-174 range (the
66 at the end) but they do tune to 2mtrs...
I'll see what I have in my docs on those models...
Chris
WB5ITT

>
> They appear to be the same radios with different options.
>
> Thanks to all,
>
> Ron, N7TA

## 145. Re: Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <33989dcd.1486984@news.zippo.com>
Source record: 93455

On 6 Jun 1997 06:38:48 GMT, moritz@ipers1.e-technik.uni-stuttgart.de
() wrote:

>In article <5n7q9g$c0@mailgate.lexis-nexis.com>,
>Mike Suhar <mds@lexis-nexis.com> wrote:
>>The problem I have observed with sand castings is surface
>>roughness. How smooth must the inside of various waveguide
>>components be?
>
>Yes, the smoothnes of the inner surface is very critical.
>While it may be a good idea to cast flanges, wave guide
>must be properly extruded.
>
>However, since wave guide components have by now become obsolete
>even for most amateur applications, there must be many hams, who
>would be happy to get rid of some wave guide components (like myself).
>
>May be you want to place an ad in a magazine?
>
>
>
>73, Moritz DL5UH

While many advanced 10 gig buffs do not use wave guide
components for construction projects, waveguide components are very
useful for learning theory in class rooms. I now of at least one
company that markets a complete lab kit for education purposes on this
band. There is also quite a few companys that specialice or sell
waveguide components.
Steve Carlisle VE7AHL

## 146. *****Butternut HF6V coils info .Help req!**

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-06 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <3398507b.886423@news.interbusiness.it>
Source record: 93456
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Hi, friends! To homebrew this nice antenna, i need to know:
- the inner diam. number of turns and wire diam of the base impedance adapter/grounding copper coil, and
- internal diam and number of turns of the 30,40,80 mtrs aluminium coils.
I've already the other infos to start to built.
Could anyone owner of HF6V help me about?
TNX and 73 de Vanni, I8JJB
e-mail: grainone@caserta.peoples.it
--
Vanni R.
Caserta,Italy

## 147. Counter/Clock with Programmable Offsets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5nadnq$4um$1@zinger.callamer.com>
Source record: 93457

Blue Sky Engineering is now making a very very economical
Counter/Clock in kit form with some fantastic specs.

Would you believe only $29.95 plus s/h

Check the specs and pictures at:

http://www.fix.net/~jparker/blusky/ccd.htm

Enjoy,,,72,,,Jerry...WA6OWR...K

## 148. Re: Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: mds@lexis-nexis.com
Message-ID: <5nag53$pss@mailgate.lexis-nexis.com>
Source record: 93458

In article <01bc7237$03a2cd20$237fb0cc@ornitz.tricon.net>, ornitz@tricon.net says...
>
>It is best if the inside surface is quite smooth. Have you thought about
>buying a length of waveguide tube and cutting pieces for your components?
>Five or ten foot sections are not expensive. You can add the flanges
>yourself.
>
> 73, Barry L. Ornitz WA4VZQ ornitz@tricon.net
>
>Mike Suhar <mds@lexis-nexis.com> wrote in article
><5n7q9g$c0@mailgate.lexis-nexis.com>...
>> I then thought about making these items from sand mold castings.
>> While this is a hot and dirty process, some very nice metal parts can
>> be made this way. Various metals can be used. This brings me to my
>> question. The problem I have observed with sand castings is surface
>> roughness. How smooth must the inside of various waveguide
>> components be? I would appreciate hearing from anyone who has any
>> experience or thoughts in this area.
>
Berry,

Since my e-mail I sent to you earlier today I have located two waveguide tubing suppliers. I have not contacted them yet. I will try to do that next week. Their web sites are: www.atwall.com and www.pennengineering.com

My first thought when I started this was to get the tubing and go from there. My first search of the web turned up nothing. That is why I started to look at the possibility of casting. I must have messed up the search. When I tried again I got 97 hits on "rectangular + tubing + waveguide".

If anyone knows anything about these two companies, or any others, please respond.

Mike
WB8GXB
michael.suhar@lexis-nexis.com

## 149. Re: WTB: Amtor/Sitor Controllers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3398d0b7.138430846@news.atl.bellsouth.net>
Source record: 93459

On Mon, 02 Jun 1997 12:45:59 -0700, Don Huff <don_huff@HP.com> wrote:

> Thanks for the response. Your descriptions of the operation of the
>protocols themselves,
>I basically agree with, with the exception that Amtor does not run at
>45.5 baud, but at 100 baud
>(70 mSec per 7-bit character).

Mea Culpa.

> When one is interested primarily in keyboard-to-keyboard real time
>QSO's, higher thruput, even
>under good conditons, is of little use. How fast can the operators
>type? In thousands of QSO's,
>I have talked with very few who can keep up with the 60+ wpm of AMTOR
>full tilt.

But unless conditions are good, you don't get fult tilt performance. Then
the better properties of the other systems begin to shine even for the
keyboarder. I've had many pleasant Clover contacts under conditions
where those using AMTOR would have given up due to excessive retries.
(And that's saying something because AMTOR isn't that bad under poor
conditions either.)

> Clover requires that the transmitter use AFSK. This prevents, in many
>rigs (poor design in my opinion), the use of the 500Hz filter in receive, which
>is so important to use in these modes, including AMTOR.

Indeed, one needs to be sure that the rig used is suitable. Sometimes you
can *make it so*. For example, the IC-706 has a RTTY mode which allows
use of a 500 Hz filter, but doesn't let you use that filter in SSB mode. However,
there is a way to trick the radio into letting you do that. You tell it in the setup
menu that the filter installed is really the narrow SSB filter, and viola, it
lets you use it in SSB mode (the IF shift has enough range to let you position
it properly). It doesn't know you're lying to it, and you get what you need for
Clover operation.

>I have talked with a (very) few ops who have Clover equipment, and they
>are stuck with AFSK, even in the other modes. This is an operational disadvantage,
>which could be corrected.

Of course the HAL equipment doesn't require you to use AFSK for RTTY,
PACTOR, or AMTOR operation. You can still use them in the normal FSK
fashion. To switch back and forth, you have to enter the setup menus of the
P-38 program and of the radio to get them switched to FSK mode and using
the narrow filter as a RTTY filter again, but that only takes moments. It's
a little bit of a hassle compared to a rig which lets you use the narrow filter

without lying to the radio, but at least it works.

But note that given a narrow receive filter, and a reasonably clean SSB transmitter, there's no operational disadvantage to using AFSK for any of the digital modes. So you don't *have* to switch back and forth to be effective, even though you *can*.

>The cost-effectiveness
>(or lack thereof) of some of the proprietary modes like Clover is very
>questionable if one is primarily
>a ragchewer. Especially with so few stations having Clover equipment.

There are currently over 5,000 stations equipped with Clover capability. That may not seem like a lot, but it is more than the number who applied for, or upgraded, their DXCC status (any mode) last year, and there doesn't seem to be any lack of DX activity on the bands despite that. I'm rarely at a loss for a Clover contact. It is true that PACTOR activity is higher by a rather large margin, but I can do that, or RTTY, or AMTOR too, if necessary. As to cost, the P-38's price has dropped into the range of other multimode controllers.

I do see a second source problem with proprietary modes, but HAL has offered to license the protocol to other amateur manufacturers. I don't think the same is true for GTOR or PACTOR II (though I could be mistaken). And amateurs can homebrew their own units (one off) under fair use. There probably won't be much of that, but it is an option. (Clover can probably be implemented on a sound card equipped Pentium.)

My point is that there is no real disadvantage to having more powerful digital methods available, even if you don' t use them exclusively. And when you do use them, their advanages are quite apparent. Thus I expect a migration toward the newer more powerful techniques and away from the older methods such as AMTOR. I am already seeing evidence of that.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 150. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3398d501.24328986@netnews.worldnet.att.net>
Source record: 93460

On Fri, 06 Jun 1997 14:32:23 +0200, Robert Ganter 3269
<ganter*NOSPAM*@ens.ascom.ch> wrote:

>Hello,
>
>I have some questions about power tetrodes. I am building a (Svetlana)
>4XC400A based VHF/UHF linear and don't know exactly, which parts of the
>tube have to be protected and in which kind.
>Now: whats happening in the unpleasant case of arc?

Generally most of the current is in the anode-screen path. But if the
screen is not clamped, or if the tube is exceptionally gassed, the arc
will involve the other elements.

>Now, what potential/current do You see at grid and screen?
>Are these grids robust enough to survive a current of 50A flowing though
>them?

It depends where the arc occurs. Generally tubes are constructed so
the closest point is rather robust, and the arc usually occurs in that
area. For example, if you raise the voltage on a 3-500Z to arc point,
the flash is generally to the grid mounting cone or the upper end of
the grid.

I have no idea where the arc point would be in a 4CX400A, but the
grids are certainly more fragile. If the arc is to a grid wire, the
tube is virtually sure to experience damage.

Remember arcs cause heat, and damage is a function of TIME and HEAT.

By the way, if the arc is gas induced or from a conductive whisker, it
might occur at any point in the tube.

>The plate current is cut off in less than 30ms (milliseconds) in my
>design (or at least it is intended, that it does...)

How?

>potential). The screen is fed (in some designs) from a z-diode
>stabilized power supply with current limit (20mA with the 4CX400).

Zeners are OK, a transistor shunt regulator is better IF properly
designed. Add some extra clamping right at the socket to be safe, and
ALWAYS use a shunt regulator.

>avoid destruction of the screen in case of reverse current (which seems
>to be 'normal' with tetrodes) a shunt resistor (100k to 220k) and
>sometimes a ZNR (surge voltage protector) to ground are used.

That sounds sort of shakey. That resistance is too high, any surge device should be within 50 or 100 vots of rated screen voltage. A shunt regulator is the best idea.

>At a screen potential of 400V a 220k resistor would only limit this
>voltage up to 1.8mA (the 4CX400 has a forward screen current of 20mA,
>any ideas, how big the reverse screen current may be during normal
>operation?

I was told up to 20 mA in that tube, but 15 or less was more normal. You can see how silly the 220k resistor idea is !!!!

>Most designs I have seen only protect the grid with a rather high
>(>200Ohm) series resistor. For normal use, this is not a problem,
>because grid current is very low, but if the tube is arcing, what
>happens with negative bias (which cuts off the tube?

A 2000 ohms series resistor is dumb, if it is between the screen and the shunt regulator. The screen needs firmly clamped and protected by a varistor or other fast acting clamp device AT THE SOCKET.

>Do I have to
>protect the grid to become positive e.g. with a diode shunted to ground?

How would you do that? Or are you talking about the control grid? If the grids normal operating voltage is positive, the only way you can protect it with a diode is by connecting the dodes anode to the screen and the diodes cathode to a STIFF positive voltage slightly higher than the screens voltage. I've done that in 4CX5000's and larger, where other devices would be to expensive. For example, I tied a 4CX5000 grid (1250 volts) through a diode to a tap on an electrolytic string in the screen supply system that was at 1450 volts. But I added a low ESR energy storage cap near the socket (fed from a low value resistor from the 1450 volt supply tap), and put the diode at the socket also.

>Maybe I am to concerned about tube protection in case of an arc, but on
>the other hand I'd be interested about this point.
>Any recommendations for books/appnotes/etc about RF power tubes?

Eimac had some good data in the 60's. All the stuff lately has been less than good, often downplaying good or proper design to make things look easier.

Screen regulation and protection is VERY important, no matter what salesmen seem to like.

73 Tom

## 151. Re: Rig microphone connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970607041101.AAA09950@ladder02.news.aol.com>
Source record: 93461

In article <3394f097.3029474@news.nconnect.net>, ums@nconnect.net writes:

>Can anyone tell me who manufactures those 8 pin microphone plugs and
>jacks used on Kenwood/Yaseu/Icom rigs? Any suggestions for mail order
>or other distributers for small-moderate quantities (10-50)?

If you're in a hurry, Radio Shack sells them for about $3.50. Digikey for
one reliable supplier has them as do several other mail order companies
that I just can't recall right now. Try www.digikey.com if I remember
correctly, you can even download portions of their catalog as pdf
files to be viewed in an Acrobat reader.

AES also used to have them, although whether that was in the catalog
or not, I don't remember. I suspect HRO also has them. Now if only
some of the rarer power and accessory connectors were as easy to
find and get. Oh well! Good luck! I'm also sure that after I send this
off, I'll remember 4 or 5 other companies to get them from.
-art clemons-

## 152. FS ORIGINAL NEW PARTS R.C.A. G.E.(tubes & others)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: ACHILES <achiles@kom.forthnet.gr>
Message-ID: <01bc7244$d3790e80$LocalHost@achiles>
Source record: 93462

I got a big number of new parts for radio and teletypes
Original R.C.A.s parts for receivers as cores, coils,
capasitors,resistors,transformers, and receiving tubes R.C.A.'s , GENERAL
ELECTRIC's, SYLVANIA's,AMPEREX etc, all JAN.

TUBES
2,50 $
5749/6BA6, 6X4, 6Y6GA, 5U4, OC3, OD3, 6J7, 6H6, 6K6, 6SJ7

3,50 $
5V4GA, 5R4, 6005, 6C4, 5654W, 6SJ7,

5,00 $
12AX7WA/A, 6AS7G, 12AU7 , 6CL6, 6CL3, 6AQ5,

7,50 $
6688, 7788, E810F, 6BE6, 5750, 7721, 7722, 6SQ7, 6062/5763, 5961,
8233

15,00 $
6L6,
EYE TUBES: EM84, 6FG6,

20,00 $
EYE TUBES: 5A6

25,00 $
SPECIAL TUBES: EA53, 1EP1, NL78705, NL5991, Z32R73mini tube,
DR2120

35,00 $
5894 / 829B / QQV06-40 / QQV07-40 ,AMPEREX

200.000 parts for teletypes

R.C.A. SSB-R3 Receivers realy BIG 350 Kgr.ea

## 153. CATV Equipment For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: jfsmith@technologist.com
Message-ID: <339b6e30.166406665@news2.ee.net>
Source record: 93463

Pole Climbing Gear FOR SALE

I am no longer in the telecommunications industry,
The following is what I have for sale:

Everything is either new or very low mileage

Bashlin - D21 Climbing Belt
Klein Safety strap
Klein Climbers - complete with spike guards
Klein Safety Orange Tool Bag - Type 5180

All of this for $250.00

I also have:

2 LTC X-500 Coring tools for Trilogy MC2 cable
1 LTC T-500 Coring Tool for P3
These are still in the Box, $35.00 each or
$100.00 for all three

Mid State - SAM 1 Signal Analysis Meter
(Field Strength Meter) In good condition

$300.00

If you are interested, please send Email to:

jfsmith@technologist.com

Jerry Smith
762knifewerks@geocities.com

http://www.geocities.com/Yosemite/Trails/3708/

## 154. Re: YAESU FT-51 stuff, MB/CPU Pentium

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5nc06r$iv1@sjx-ixn6.ix.netcom.com>
Source record: 93464

In <19970606155800.LAA04598@ladder02.news.aol.com> kc4srn@aol.com (KC4SRN) writes:

BIG SNIP

Why don't you repost this "offering" when you:

A. Find the correct group=rec.radio.swap

B. Stop asking prices in excess of new retail.

Thank you

## 155. filament transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: g riccio <gfriccio@capecod.net>
Message-ID: <01bc7363$49a778c0$1e0ee6cd@default>
Source record: 93465

Im looking for filament xformer for pair of 3-500Z tubes. 5VOLTS@30 AMPS.
115ac primary. tnx, Glenn KE1EJ

## 156. INTEL PENTIUM 90 MB&CPU,SVGA,YASEU Accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: kc4srn@aol.com
Message-ID: <19970607190601.PAA05701@ladder02.news.aol.com>
Source record: 93466

INTEL PENTIUM 90mhz MB, CPU with PCI, FAN and Y-connector. Compleate INTEL manual $159 + 10 UPS 2ND DAY AIR Guaranted and insured.

PCI SVGA card $29 + 10 UPS 2ND DAY AIR Guaranted.

14.4KBPS internal modem $19 + 10 UPS 2ND DAY AIR Guaranted.

YAESU EDC-12 Cigar adapter/noise filter/voltage regulator/fuse/batt clip/trickle charging/fits FT-11/41 & FT-51. New in box. $29 + 10 UPS 2ND DAY AIR Guaranted.

YASEU CSC-67 Soft case for FT-51, FNB-31 small battery. Has open flap at bottom for larger batt and for above EDC-12 connection (without removing this protective case). $10 + 10 UPS 2ND DAY AIR Guaranted.

Add $30 instead of $10 if you prefer COD. Multiple item discount will apply. One shipping charge for multiple items. Save time and money plus tax by having it shipped to YOUR DOOR. Ham fest is coming so hurry.

## 157. Hewlett Packard RF TEE 11536A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970607223501.SAA24382@ladder02.news.aol.com>
Source record: 93467

Looking for a RF-Tee as above, (need 2), or a Telonic TSS-1. (Need 1).
Anybody?

W4ZCB

## 158. MONEY! Lots and Lots and Lots of FREE money!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: Lovey48@the-bridge.NET
Message-ID: <3399E53F.358D@the-bridge.net>
Source record: 93468

DO YOU WANT TO MAKE MONEY FAST!?!?!?!?

The other day, I recieved this email. Now, I am a college student, and I am not at all weathly. So, I decided to give this a whirl... Good luck to you:)

"A little while back, I was reading my junk E-Mail just like you are no, and came across an E-Mail similar to this that said you could make thousands of dollars within weeks with only an initial investment of $5.00! So, I thought, 'Yeah, right, this must be a scam!, like most of us, but I was curious, like most of us, so I kept reading. Anyway, it said that you send $1.00 to each of the 5 names listed in the article. You then place your own name and addresses in the bottom of the list at #5 and send an E-Mail to at least 200 news groups. (There are thousands). No catch, that was it. So, after thinking about it, and talking to a few people first, I thought about trying it. I figured what have I got to lose except 5 stamps and $5.00, right? Like most of us, I was a little skeptical and a little worried about the legal aspects of it all. So, I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Then, I invested the measly $5.00... Well, GUESS WHAT! With in 7 days, I started getting money in the mail. I was shocked! I still figured it would end soon, and didn't give it another thought. But, the money just continued coming in. In my first week, I made about $20-$30. By the end of the second week, I had made a total of over $1,000! In the third week, I had over $10,000 and it's still growing! This is now my fourth week, and I have made a total of just over $42,000!!!! And it's still coming in!!! It's certainly worth $5.00 and 5 stamps. I spent more that that on the lottery! Let me tell you how this works and most importantly, WHY IT WORKS. Also, make sure you print a copy of this article now, so you can get the info you need off of it as you need it. The process is very simple and consists of 3 easy steps:

STEP 1: Get 5 separate pieces of paper and write the following on each piece of paper: "PLEASE PUT ME ON YOUR MAILING LIST" Now get 5 $1.00 bills and place ONE inside of EACH of the 5 pieces of paper so the bill will not be seen through the envelope to prevent thievery. Next, place one paper in each of the 5 envelopes and seal them. You should now have 5 sealed envelopes, each with a piece of paper stating the above phrase and a $1.00 bill. What you are doing is creating a service by this. THIS IS PERFECTLY LEGAL! Mail the 5 envelopes to the following addresses:

1. Donald Foulk
216 N. Myers

Bryan, OH 43506

2. Scott Hilterbran
222 W. Pleasant St.
Hillsboro, OH 45133

3. Paul Mewes
5550 Fillmore St.
Merrillville, IN 46410

4. Scott Brkovich
2251 Sandhurst Dr.
Castle Rock, CO 80104

5. Anne E. Ryan
421 E. 32nd St.
Hibbing, MN 55746

Continue to STEP 2.

STEP 2: Now take the number 1 name off of the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...), and add YOUR name and address as number 5 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newssgroups. (I think there are close to 18,000) All you need is 200, but remember, the more you post, the more money you make! Don't know HOW to post in the news groups? Well, do exactly the following:

FOR NETSCAPE USERS:

1) Click on any news group, like normal. Then click on 'To News', which is in the top left corner of the news group page. This will bring up a message box.

2) Fill in the SUBJECT with a flashy title, like the one I used, something to catch the eye!

3) Now go to the message part of the box and retype this letter exactly as it is here, with the exception of your few changes. (Remember to add your name to number 5 and move the rest up)

4) When you're done typing in the WHOLE letter, click on 'FILE' above the send button. Then 'SAVE AS' DO NOT SEND YOUR ARTICLE UNTIL YOU SAVE IT!!!!!!!!! (So you don't have to retype this 200+ times!!:)

5) Now that you have saved the letter, go ahead and send your first cope! (Click the 'SEND' button in the top left corner)

6) This is where you post all 200! Ok, go to ANY news group article and click the 'TO NEWS' button again. Type in your flashy subject in the 'SUBJECT BOX', then go to the message and place your cursor here. Now, click on 'ATTACHMENT' which is right below the 'SUBJECT BOX'.

Click on attach file, then find your letter wherever you saved it. Click once on your file the click 'OPEN' then click 'OK'. If you did this right, you should see your filename in the 'ATTACHMENT BOX' and it will be shaded. NOW POST AWAY!!!!!

IF YOU ARE USING INTERNET EXPLORER:

It's just as easy, holding down the left mouse button, highlight this entire article, then press the 'CTRL' key and 'C' key at the same time to copy this article. Then, print the article for your records to have the names of those you will be sending $1.00 to.

NEXT: Go to the news groups and press 'POST AN ARTICLE', type in your flashy subject and click the large window below. Press 'CTRL' and 'V', and the article will appear in the message window.

BE SURE TO MAKE YOUR ADDRESS CHANGES TO THE 5 NAMES!!! Now, re-highlight the article and re-copy it so you have the changes.... Then, all you have to do for each news group is 'CTRL' and 'V' and press 'POST'. It's that easy! THAT'S IT! All you have to do is jump to different news groups and post away. After you get the hang of it, it will take about 30 seconds for each news group! REMEMBER, THE MORE NEWS GROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE! BUT YOU HAVE TO POST A MINIMUM OF 200!!!!!!!!!!!

That's it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O. Box due to the large amount of mail you receive. If you wish to stay anonymous, you can invent a name to us, as long as the postman will deliver it.

**JUST MAKE SURE ALL OF THE ADDRESSES ARE CORRECT!!!!!!!!!**

Now the WHY part: Out of 200 postings, say I receive only 5 replies (a very low example). So, then I made $5.00 with my name at #5 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #4, and only 5 people respond to each of the orginal 5. That is another $25.00 for me, now those 25 each make 200 minimum posts with my name at #3, and only 5 replies each, I will bring in an additional $626!! Ok, now here is the fun part. Each of those 625 people post a MINIMUM 200 letters with my name at #1, and they each only receive 5 replies, that just make me $3,125!!! With an original investment of only $5.00!!! AMAZING!! And as I said, 5 responses is actually VERY LOW! Average is probable 20-30 letters! So, let's put those figures at just 15 respones per person. Here is what you will make: At #5: $15, at #4: $225, at #3: $3,375, at #2: $50,625, at #1: $759,375!!!!!!
When your name is no longer on the list, you just take the latest posting in the news groups, and send out another $5.00 to names on the list, putting you at #5. And start posting! The thing to remember is, do you realize that thousands of people over the world are joining the internet and reading these articles everyday, JUST LIKE YOU ARE NOW! So can you afford $5.00 and see if it really works? I think so... People

have said, 'What if the plan is played out and happening when there are tons of new honest users and new honest people who are joining the internet and news groups everyday and are willing to give it a try?' Estimates are at 20,000-50,000 new users every day, with thousands of those joining the actual internet. Remember, play FAIRLY AND HONESTLY and this will work. You just have to be honest. Make sure you print this article out RIGHT NOW also. Try to keep a list of everyone that sends you money, and always keep an eye on the news groups to make sure everyone is playing fairly. Remember, HONESTY IS THE BEST POLICY!!! You don't need to cheat the basic idea to make the money! GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of EXTRA CASH.
**BY THE WAY: If you try to deceive people by posting the messages with your name in the list and not sending the money to the rest of the people already on the list, you will NOT get as much. Someone I talked to knew someone who did that, and he only made about $150 and that's after 7 or 8 weeks! Then he sent the 5 $1.00 bills, people added them to their lists, and in 4-5 weeks, he had over $10k. This is the fairest and most honest way I have ever seen to share the wealth of the world without costing anything but our time! You also may want to buy mailing and e-mail lists for future dollars. PLEASE REMEMBER TO DECLARE YOUR EXTRA INCOME!!!!!!**"

## 159. Please help - valve bases

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5ncovg$fgn$1@zingo.tninet.se>
Source record: 93469

Hi all,

I am trying to get hold of Qty 10 valve (tube) bases
type B9D, sometines known as 'Magnoval'. Does anyone
have any spare that I could buy or do you know of a
retail outlet that may have them?

These bases are 9-pin, but are NOT the same as are used
for 12AT7 or similar valves, they are a little bigger.
The bases are used for the PL500, PL509 and PL519 tubes.

Many thanks for taking the time to read this.

73s de Harry (SM0VPO)

PS my homepage is well worth a visit:

http://user.tninet.se/~acz732k/

## 160. Re: Please help - valve bases

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: Daniel Nelson <djn@goodnet.com>
Message-ID: <3399FDCD.5A2F@goodnet.com>
Source record: 93470

Harry Lythall (SM0VPO) wrote:
> 
> Hi all,
> 
> I am trying to get hold of Qty 10 valve (tube) bases
> type B9D, sometines known as 'Magnoval'. Does anyone
> have any spare that I could buy or do you know of a
> retail outlet that may have them?
> 
> These bases are 9-pin, but are NOT the same as are used
> for 12AT7 or similar valves, they are a little bigger.
> The bases are used for the PL500, PL509 and PL519 tubes.
> 
> Many thanks for taking the time to read this.
> 
> 73s de Harry (SM0VPO)
> 
> PS my homepage is well worth a visit:
> 
> http://user.tninet.se/~acz732k/

Antique Electronic Supply in Tempe, AZ offers them for sale in their
catalog for under $3.00 ea. They have both the small pins for such as
6JE6 and the larger such as PL-509's. (602) 820-5411
--
Daniel Nelson
djn@goodnet.com
<:)

## 161. Re: Authors Wanted -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-07 00:00:00 UTC
From: samsonow@mailgw.facilities.med.umich.EDU
Message-ID: <s39918b8.037@mailgw.facilities.med.umich.edu>
Source record: 93471

I will be out of town from 6/6/97-6/10/97. If you have an emergency, please contact either Jeff Dhaenens or Ron McCarty at 6-5056. Thanks, cb

## 162. Re: What voltage to float deep-cycle RV batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5nd8p8$iil@cletus.bright.net>
Source record: 93472

YOU CAN FLOAT THE BATT AT 13.5 FOREVER....AND YOU WILL BE AT 99.9%
CHARGE. CHECK ELECTROLITE LEVEL AT LEAST ONCE/MONTH.
DE NORM N8RGR

## 163. 80 meter Centennial SSB Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: wespeed@airmail.net
Message-ID: <DB7F900D7BA62151.E31627F9E40C377D.1A7BBBAF01FA39DF@library-proxy.airnews.net>
Source record: 93473

Has anyone built one of these kits from Dan's small parts?
If so how did it work .

## 164. Prescaler chip??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: jvr@pclink.com
Message-ID: <339a9545.839498@news.protocom.com>
Source record: 93474

Hi,

Anybody know the number and availability of a good prescaler I.C. for an old freq counter? This counter only goes to 30 MHz and I would like to extend it to 300 MHz.

Thanks,

Bob

## 165. plans for simple 6 meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: hacker@flash.net
Message-ID: <339c38c1.7781142@news.flash.net>
Source record: 93475

I need the plans for an SMALL 6 meter amp.
I only will be running about 12 watts in ssb, and only
care for about 60 out <can turn the radio down> I really
appreciate the help if possible.
kd5amz

## 166. CB-2-SIX files

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: Anders <anderskv@online.no>
Message-ID: <01bc73fd$da2af620$LocalHost@anders>
Source record: 93476

Hi all.

If some of you missed the CB2SIX article recently, it can now be found at my homepage, at the following url:
http://home.sol.no/anderskv/files/ham/mods/cb2six/

There you can find all the 10 (11) parts stored separately as text files, and also all of them zipped together into CB2SIX.ZIP.

If you are having problems downloading from my that url, please let me know, by sending me a personal email, since I am not visiting the newsgroups to often.

If you have questions regarding the modification itself, I am sorry but I CAN NOT HELP YOU.
I have not tried to perform it, and it is not written by me either. I only received it via packet radio some time ago, and thought it migth be of interest to others.

73 from Anders, LC3HAT

## 167. Re: Help with Transistor Identification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5necpp$o7b@camel3.mindspring.com>
Source record: 93477

the@primenet.com wrote:

>In article <5misd3$nv8@news.asu.edu>, georgie@aztec.asu.edu (GEORGE R.
>COONEY) wrote:

>:I have a transistor I need to replace. It is about the same size
>:and case as a 2N3053.It has RCA on the top. Below the RCA is, what
>:I imagine is, a date code: HY 7901. Above the RCA is a number
>:60352. I imagine this is the identifying number but I can't find
>:it in my catalog. Can anyone help? Please Email. Thank you.
>:
>:73 George, KQ7C
>:
>:--

>Sounds like an OEM part number. You may never find out what the number
>means unless you can find their customer.

If it is worthe the effort to you, try to run a curve trace on it.

good luck
WB0NRU Lou

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

## 168. Sell YourPhotosNYC.Agency

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: Photorep45@ibm.net
Message-ID: <5neec3$f2b$1038@news.internetmci.com>
Source record: 93478

PHOTO PHOENIX INTERNATIONAL

We are an international New York based agency representing
amateur and professional photographers in the following areas: Galleries,
Business and Organizations, Book Publishers, Paper Products, Consumer
Publication, Newspapers & Newsletters Publication, Special Interest Publication,
and Trade Publication.
We are seeking photographers who strive for excellence in the aesthetic/
creative and technological world of images, who have the talent to capture
the setting and to convey the mood. Your work should reflect a genuine,
pervasive interest in photography as a fine art.
Whether your work portrays conservative, experimental, stylish, or innovative
themes, your project proposal should be well thought out before submitting to
us.
For first contact, please submit a query letter, direct mail flier/brochure,
tearsheets, slides, photographs & SASE.
For amateur photographers, send sample photos and/or slides.
TO ALL: Do not send entire portfolio unless we ask for it. If we are not interested,
you might not hear from us, so please submit material that does not need to be
returned.

Send to:
Photo Phoenix International
33-29 58 Street
Woodside, New York 11377
Tele: Florida Branch-(941) 642-660

## 169. Re: What voltage to float deep-cycle RV batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <339dbff3.2213856@news.capital.net>
Source record: 93479

On 8 Jun 1997 03:26:31 GMT, norman <norsan@bright.net> wrote:

>YOU CAN FLOAT THE BATT AT 13.5 FOREVER....AND YOU WILL BE AT 99.9%
>CHARGE. CHECK ELECTROLITE LEVEL AT LEAST ONCE/MONTH.
>DE NORM N8RGR
>
Norm, you shouldn't use all capital letters. It's hard to read and
it's considered shouting.

--
Butch N2YMJ

To send mail
delete the xyz
from my address.

## 170. HTX-202 help fix low TX audio PSE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5neh3o$1ip@camel2.mindspring.com>
Source record: 93480

I need to increase the TX audio on my HT. It is VERY low as set from
the factory. Can you tell me which resistor to tweak...if any?
TNX. Please post and e-mail if possible.
Thanks.
Tony WW2W

## 171. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <339a5bf6.3419627@news.atl.bellsouth.net>
Source record: 93481

On Fri, 06 Jun 97 21:10:08 GMT, netking@dircon.co.uk (Colin Seymour) wrote:
>What about narrow band FM? That has a constant carrier plus sidebands
>(a well known approximation of the math ignores the higher order sidebands,
>leaving two sidebands, like AM, but with different phase, and a constant
>carrier).
>Then the envelope looks to have a constant amplitude but the apparent
>frequency changes (e.g. as represented by zero crossing spacing).
>Now that is harder to imagine with a constant carrier.

Actually, FM doesn't have a constant amplitude carrier. In fact the carrier disappears completely at the Bessel nulls. That's a standard way to determine deviation. What is constant in FM is the *sum* of the carrier and the sidebands.

So, AM has a constant carrier, but amplitude of the total signal varies with the vector sum of the carrier and the sidebands, but FM has a carrier which varies with modulation, but total signal amplitude is constant because, as sideband power increases, carrier power decreases, and vice versa.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 172. AADE filter design update

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <339B0115.6BD8@aade.com>
Source record: 93482

A customer found a bug in Version 1.4. UTILITIES | ENTER DESIGN allows you to enter the schematic and parts list of a filter from a book or magazine for analysis. The program normally saves design specifications for those filters which it designed and uses them to set defaults for analysis. In the case of ENTER DESIGN it does not know the design specifications and saved a bad piece of data. Trying to LOAD the filter caused a runtime error 13 and the program aborts.

Version 1.6 fixes the problem by storing dummy values for design parameters thus producing dummy default analysis parameters that usually work as a firts analysis attempt.

To update to version 1.6, go to my web page and follow the thread to the download page. Download filter.zip, unzip it and replace the filter.exe program where ever you installed it.
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

## 173. Re: Pixies at upcoming hamfest?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: "D.Arnold" <D.Arnold@primocomputers.com>
Message-ID: <339B3BDF.4A22@primocomputers.com>
Source record: 93483

Tom Bruhns wrote:
>
> Hi Curtis...
>
> Curtis Fast (fast@mprgate.mpr.ca) wrote:
> : Anyone going to a California hamfest soon? I understand that the Halted
> : company has previously sold Pixie kits for $5 at their nearby swap
> : meets.
>
> OK, what the heck is a "Pixie" kit?? You make them sound so interesting
> at only $5 that I just have to know!
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com
HI

MY question EXACTLY

DON

## 174. R and S URE help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: Susan Shapiro <rae4@popd.ix.netcom.com>
Message-ID: <339B2201.22D0@popd.ix.netcom.com>
Source record: 93484
Cross-posted to: sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.homebrew

I have a Rohde and Schwartz URE rms voltmeter that needs some tlc.
It consistently comes up with an "error 8" message, which I presume is
something to do with the auto-calibration routine... I do not wish to
cough up the $250 the Tektronix, the US agents, are demanding for the
manual, which is several hundred percent more than the thing cost me!
(Ah, those swap-meet bargains!) If there is anyone out there that could
help either with the loan of a manual, or the way to get rid of the
message, I would be grateful, obviously would be glad to pay reasonable
expenses for copying etc.,
Thanks for taking the time to read this.
Dan AC6AO rae4@ix.netcom.com

## 175. Tubes for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: John Earl <jpearl@interaccess.com>
Message-ID: <01bc7451$b947e180$2f5594cc@john-s-computer>
Source record: 93485

(use tab set of 12 to align columns)

ALL THE FOLLOWING TUBES TESTED FOR THE FOLLOWING:

DYNAMIC MUTUAL CONDUCTANCE
INTERELECTRODE SHORTS
INTERELECTRODE LEAKAGE
GRID CURRENT

QUANTITIES LIMITED TO THOSE SHOWN

TUBE TYPE QUANTITY LOC. price ea. 10 or more
0B2 1 B2 $2.50 $1.25
0C3/VR105 6 B1 $2.50 $1.25
0D3/VR150 1 B1 $2.50 $1.25

10DE7 1 TCS $2.00 $1.00
10GK6 1 LT1 $5.00 $2.50

117Z3 1 TCS $3.00 $1.50
117Z6 1 BTC $3.00 $1.50

12AD6 1 TCS $4.00 $2.00
12AL5 1 TCS $4.00 $2.00
12AU6 2 TCS $4.00 $2.00
12AU6 1 TCS* $5.00 $2.50
12AV7 2 TCS $4.00 $2.00
12AX4 2 TCL $2.50 $1.25
12AX4 1 BTC $2.50 $1.25

12BA6 1 LT1 $2.50 $1.25
12BA6 5 TCS $2.50 $1.25
12BA7 1 TCS $2.50 $1.25
12BA7 1 TCS $2.50 $1.25
12BE3 1 BTC $3.00 $1.50
12BF6 1 TCS $2.50 $1.25
12BL6 1 TCS $3.00 $1.50
12BZ7 1 TCS $2.50 $1.25

12C5 1 TCS $3.00 $1.50
12CA5 1 TCS* $6.00 $3.00
12CA6 1 TCS $3.00 $1.50
12CU5 1 TCS $3.00 $1.50
12CU5/12C5 1 TCS $3.00 $1.50

12D4 1 TCL $2.50 $1.25
12DK7 1 TCS $3.00 $1.50

12DK7 1 TCS $3.00 $1.50
12DQ6 1 /12GW6 BTC $8.00 $4.00
12DQ6 1 /12GW6 BTC* $10.00 $5.00
12DW4 1 COMPCTRN BTC $5.00 $2.50

12GC6 1 BTC $4.00 $2.00
12K5 1 TCS $4.00 $2.00
12K5 1 TCS $4.00 $2.00
12MD8 1 COMPCTRN ONB $6.00 $3.00

12SC7 1 TCL $8.00 $4.00
12SK7 2 TCL $5.00 $2.50

12SN7 1 TCL $2.50 $1.25
12W6 1 TCL $4.00 $2.00

13GF7 1 BTC $5.00 $2.50

14A5 1 B5 $2.50 $1.25
14A7 1 B5 $2.50 $1.25
14B6 3 B5 $2.50 $1.25
14Q7 1 B5 $2.50 $1.25

15CW5 1 TCL $2.50 $1.25

16AQ3 1 TCL $3.00 $1.50
16GK6 1 TCL $3.00 $1.50

17AX4 2 BTC* $6.00 $3.00
17C5 1 TCS* $4.00 $2.00
17DQ6 1 B1 $5.00 $2.50
17DQ6/17GW6 2 B1 $5.00 $2.50
17JM6A 1 COMPCTRN B5* $8.00 $4.00

19T8 2 TCS $2.00 $1.00
19T8 2 TCS* $4.00 $2.00

1A5 1 B5 $2.50 $1.25
1B3/1G3 3 BTC $2.50 $1.25
1K3 2 BTC $2.50 $1.25
1K3/1J3 1 TCL $2.50 $1.25

1L4 7 B3 $2.50 $1.25
1LA4 1 B5 $2.50 $1.25
1LB4 1 B5 $2.50 $1.25
1LH4 2 B5 $2.50 $1.25
1LN5 1 B5 $2.50 $1.25
1R5 5 B3 $3.00 $1.50
1R5 1 B3* $6.00 $3.00
1S5 13 B3 $2.50 $1.25

1T4 4 B3 $2.50 $1.25

1U4 3 B3 $2.50 $1.25
1U5 1 B3 $3.00 $1.50
1X2 2 B3 $3.00 $1.50

20AQ3 1 BTC $4.00 $2.00
22DE4 1 BTC $4.00 $2.00
25DN6 2 B1 $6.00 $3.00
25L6 1 B1 $2.00 $1.00
25Z6 2 TCL $2.00 $1.00
27GB5 1 COMPCTRN BTC $6.00 $3.00

2AF4B 1 B3* $7.00 $3.50
2CY5 1 B3* $6.00 $3.00
2D21 9 THYRATRON B3* $4.00 $2.00

30KD6 1 COMPCTRN B5* $20.00 $10.00

35C5 2 TCS* $4.00 $2.00
35C5 1 TCS $2.00 $1.00
35W4 1 TCS $2.00 $1.00
35W4 1 LT1 $2.00 $1.00
35Y4 1 BTC $4.00 $2.00
35Z5 4 /GT TCL $6.00 $3.00

3AL5 1 B3 $3.00 $1.50
3AT2 1 TCL* $5.00 $2.50
3AT2 1 COMPCTRN BTC $2.50 $1.25
3AU6 1 TCS $3.00 $1.50

3BC5 1 B3 $3.00 $1.50
3BN6 1 B3 $3.00 $1.50
3BU8 1 B3 $3.00 $1.50
3BZ6 5 B3 $3.00 $1.50
3BZ6 2 B3* $5.00 $2.50

3CB6 3 B3 $4.00 $2.00
3CS6 3 B3* $5.00 $2.50

3DB3/3CY3 3 BTC/TCL $6.00 $3.00
3DG4 1 B1 $6.00 $3.00
3DG4 1 B1* $6.00 $3.00
3DT6 2 B3** $4.00 $2.00

3HA5 1 LT1 $4.00 $2.00
3S4 2 B3 $3.00 $1.50

3V4 1 /DLP4 B3 $4.00 $2.00

403A 1 WElec B2* $3.00 $1.50
45Z3 1 TCS $4.00 $2.00

4AU6 1 B4 $2.50 $1.25
4BN6 2 B4 $2.50 $1.25
4BU8 1 B4 $2.50 $1.25
4BZ6 3 B4 $2.50 $1.25

4BZ6 1 B4* $2.50 $1.25
4CB6 4 B4 $2.50 $1.25
4DT6 1 B4 $2.50 $1.25
4EH7 1 B4* $2.50 $1.25
4EJ7 1 B4* $2.50 $1.25
4GK5 1 B4* $2.50 $1.25
50A5 1 TCL $4.00 $2.00

50C5 2 TCS $4.00 $2.00
50C5 1 LT1 $4.00 $2.00
50C5 1 TCS* $4.00 $2.00
50L6 2 TCL $4.00 $2.00
50Y6 3 TCL $4.00 $2.00

5678 1 B2 $4.00 $2.00
5844 4 B2* $5.00 $2.50

5AQ5 1 B4* $2.50 $1.25
5CG8 1 B4* $2.50 $1.25
5CL8A 1 B4* $2.50 $1.25
5GS7 1 B4* $2.50 $1.25
5HZ6 3 LT1 $2.50 $1.25
5U4 6 B1 $3.50 $1.75
5U8 1 B4 $3.00 $1.50
5U8 1 B4* $3.00 $1.50
5V3 2 B5 $3.50 $1.75

6AC7 1 BTC $2.50 $1.25
6AC7 1 BTC $2.50 $1.25
6AF11 1 COMPCTRN TCL* $4.00 $2.00
6AF3 1 TCL* $4.00 $2.00
6AG5 2 TCS* $4.00 $2.00
6AG5 3 TCS $3.00 $1.50
6AG7 4 METAL BTC $5.00 $2.50
6AG7 1 METAL TCL $5.00 $2.50
6AJ4 1 TCS $2.50 $1.25
6AK5 13 TCS $2.50 $1.25

6AM8 2 TCS* $2.50 $1.25
6AM8A 1 TCS $2.50 $1.25
6AN5 1 /WA TCS $5.00 $2.50
6AN8 5 TCS* $6.00 $3.00
6AN8A 1 TCS* $6.00 $3.00

6AQ6 1 TCS $3.00 $1.50
6AS5 2 TCS $3.00 $1.50

6AS6 1 TCS $2.00 $1.00
6AU4GTA 3 BTC/TCL* $3.50 $1.75
6AU5 2 TCL $3.50 $1.75
6AU8 3 TCS $3.50 $1.75
6AU8A 5 TCS* $3.50 $1.75

6AV5 1 BTC $3.00 $1.50
6AW8 2 TCS $3.00 $1.50
6AY3 1 TCL $3.00 $1.50

6BA11 2 COMPCTRN TCL* $4.00 $2.00
6BC7 1 TCS $4.00 $2.00
6BG6 3 B1 $5.00 $2.50
6BH6 2 TCS $3.00 $1.50
6BH6 3 TCS $3.00 $1.50
6BJ6 1 TCS* $4.00 $2.00
6BJ8 2 TCS* $2.50 $1.25
6BK4A 1 B1 $7.00 $3.50
6BK5 1 TCS* $4.00 $2.00
6BK7 2 TCS $2.50 $1.25

6BL8/ECF80 4 TCS* $5.00 $2.50
6BN6 3 TCS $4.00 $2.00

6BQ6 1 BTC* $6.00 $3.00
6BQ6/6CU6 5 BTC $4.00 $2.00
6BS8 1 TCS $2.50 $1.25
6BU8 3 TCS* $4.00 $2.00
6BZ7 1 TCS* $4.00 $2.00

6CD6A 1 BTC $5.00 $2.50
6CJ3/6DW4 3 COMPCTRN BTC/TCL $10.00 $5.00
6CL8A 1 TCS* $2.50 $1.25
6CM7 4 TCS $3.00 $1.50

6CW5 1 TCL* $4.00 $2.00
6CZ5 1 TCL* $6.00 $3.00

6DE4 1 BTC $4.50 $2.25
6DE4 1 BTC* $4.50 $2.25
6DK6 2 TCS* $4.00 $2.00
6DQ6B 4 /6CW6 B1/B2/BTC* $10.00 $5.00
6DT6A 1 TCS* $4.00 $2.00

6EA7 1 TCL* $4.00 $2.00
6EB8 1 TCS* $2.50 $1.25
6EJ7 2 /EF184 TCS $4.00 $2.00

6EM7 1 TCL* $4.00 $2.00
6EM7 3 BTC $2.50 $1.25
6ER5 1 TCS* $2.50 $1.25
6EU8 1 TCS* $2.50 $1.25
6EW6 1 TCS* $6.00 $3.00
6EW6 1 TCS $5.00 $2.50

6F6 2 BTC $7.00 $3.50
6FH5 1 TCS* $4.50 $2.25
6FQ7 4 LT2 $3.00 $1.50
6FQ7/6CG7 2 TCS $10.00 $5.00
6FY5 1 TCS $2.50 $1.25

6GE5 1 BTC* $8.00 $4.00
6GH8 1 TCS $3.00 $1.50
6GH8A 5 TCS $3.00 $1.50
6GJ7/ECF801 1 TCS $5.00 $2.50
6GK5 1 TCS* $4.00 $2.00
6GK6 1 TCL* $10.00 $5.00

6H6 1 TCL $2.50 $1.25
6H6 1 BTC $2.50 $1.25
6HA5 1 TCS $3.00 $1.50
6HA5/6HM5 1 TCS* $4.00 $2.00
6HE5 1 COMPCTRN BTC $3.00 $1.50
6HQ5 1 TCS* $2.50 $1.25
6HS8 1 TCS $2.50 $1.25
6HV5A 2 COMPCTRN BTC* $8.00 $4.00

6J7 2 TCL $3.00 $1.50
6K11 1 COMPCTRN TCL* $3.00 $1.50
6K6 4 TCL $2.50 $1.25

6KT8 3 TCS $4.00 $2.00
6L6 2 /WGB BTC $8.00 $4.00
6LB6 1 COMPCTRN BTC* $8.00 $4.00
6LN8 2 TCS $3.00 $1.50

6S4A 2 TCS $2.50 $1.25
6S8 1 TCL $3.00 $1.50
6SA7 3 TCL $3.00 $1.50
6SA7 1 BTC $3.00 $1.50
6SC7 2 TCL $3.00 $1.50

6SF5 2 /GT BTC $3.00 $1.50
6SG7 1 /Y TCL $4.00 $2.00
6SH7 2 TCL $3.50 $1.75
6SH7 1 BTC $3.50 $1.75

6SK7 11 BTC/TCL $3.50 $1.75
6SL7 3 /GT TCL $3.50 $1.75

6SQ7 1 TCL $3.50 $1.75
6SR7 1 TCL $3.50 $1.75

6T8 1 TCS $3.00 $1.50
6T8 2 TCS* $4.50 $2.25
6U10 3 COMPCTRN TCL/BTC* $7.00 $3.50
6V6 12 /GTA /GTB TCL/BTC/B1 $8.00 $4.00

6W4 5 TCL $3.00 $1.50
6X8 1 TCS* $4.50 $2.25
6X8 1 TCS $3.00 $1.50
6Z10 1 COMPCTRN BTC $3.50 $1.75

7586 1 NUVISTOR B2* $10.00 $5.00

7A4 2 B5 $3.00 $1.50
7A7 1 B5 $3.00 $1.50
7A8 1 B5 $3.00 $1.50
7AU7 1 TCS* $3.00 $1.50
7B4 1 B5 $3.00 $1.50
7C6 1 B5 $3.00 $1.50
7F8 1 B5 $3.00 $1.50

8AW8A 1 TCS $2.50 $1.25
8CM7 2 TCS $2.50 $1.25
8CW5 1 LT1 $2.50 $1.25
8FQ7 2 TCS $2.50 $1.25

9003 3 /ECG B2 $5.00 $2.50

CK512AX 2 SUBMINATURE B2 $2.00 $1.00

HAVE LIMITED SUPPLY OF TUBE SHEILDS FOR ABOVE ADD $.25/EA
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FOR OTHERS ADD $6.00 SHIPPING AND HANDLING FOR QUAN OF 5.
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ADD $.75 FOR UP TO 50
ADD $1.50 UP TO $100
ADD $2.50 UP TO $200

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482 TOTAL TUBES FOR HAMFEST

## 176. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5nf9d8$66p$1@newsserver.dircon.co.uk>
Source record: 93486

In article <339a5bf6.3419627@news.atl.bellsouth.net>,
ke4zv@bellsouth.net (Gary Coffman) wrote:
>Actually, FM doesn't have a constant amplitude carrier. In fact the carrier
>disappears completely at the Bessel nulls. That's a standard way to determine
>deviation. What is constant in FM is the *sum* of the carrier and the
>sidebands.
Narrow band FM does have constant carrier, in approximation, and in the
limiting case as modulation index tends to zero. As the
modulation index increases the Bessel function describing the carrier comes
down and eventually disappears as you say. Except for the Bessel zeroes,
any FM with a constant frequency modulation and constant modulation index
has a constant carrier level (which may differ from AM with the same
unmodulated carrier level).
==========
Colin Seymour G4NNA
1Mb/s 2.45 GHz spread spectrum radio modems & digital video:
http://www.users.dircon.co.uk/~netking/spread.htm

## 177. Suface mounted PCB's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: chumphr527@aol.com
Message-ID: <19970608220901.SAA07468@ladder02.news.aol.com>
Source record: 93487

For anyone wishing to use suface mounted type components of any type can be very difficul unless a specific printed circuit board (PCB) is made. There is now available a PCB that will allow most surface mounted and through hole components to be connected via wires to each other. The PCB can be easily be expanded. For further information please contact me.

## 178. Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: Chris Williams <cwilli@thegrid.net>
Message-ID: <339B40B7.30CB@thegrid.net>
Source record: 93488
Cross-posted to: alt.radio.pirate,sci.electronics.design,sci.electronics.basics,alt.engineering.electrical,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I am trying to put togeather a web site with electronics info and schematics for downloading. If anyone has anything the contribute please e-mail me and visit;

http://www.nethomes.com/cwilli/electronics

Thanks,
Chris Williams

## 179. Need Help on TV Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: thom@newshost.li.net
Message-ID: <5nffa9$3cg@linet06.li.net>
Source record: 93489
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi and thanks in advance for your help,

I trying to repair an RCA 19" TV. The symptoms are that it is
"Deader thank a doorknob". It was on and all of a sudden it went dead.

The power is making it up the cord and through the fuse. The next thing i
would normally check is the on/off switch. The switch itself seems OK,
but the set also is able to be switched on and off by remote control, so
its possible that this is the problem. However, I'm open for any ideas.

Thanks again for any help you can offer

73 de
Tom
WB2QDG

--

---
Friend of Bill W's

Be patient, God is finished with me yet.

---

## 180. Re: The NorCal 38 Special/such a deal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: travis@vgernet.net
Message-ID: <339B6C27.7390@vgernet.net>
Source record: 93490

Jerry Parker wrote:
>
> Over 2500 38 Specials have went out so far.
>
> This CW rig comes with some very intersting features.
>
> 300 to 350 Mw transmitter and great specs.
>
> With just a few parts and simple mods you can add a 5 watt amp to the
> already on board circuitry.
>
> With just a couple of more parts you can add the TiCK 1 or 2 keyer
> to the already on board circuitry. These can be seen at
> http://www.vivanet.com/~gmdsr
>
> Once you have the rig up an running you can mod the dickens out of it
> which you look at off the NorCal Page: http://www.fix.net/norcal.html
>
> Finally when your really ready to put the real finishing touch to your
> new creation go to "Creative Enclosures" page and look at the
> fantastic enclosure available from San Luis Machine:
> http://www.fix.net/~slmachco
>
> Enjoy,,,72,,,Jerry...WA6OWR...K
>
> ps...yes the rig is convertable to 40 meters.....
Jerry, I've had mine for 2 months now, love it but I'm having problems finding a power supply other than a battery that won't cause problems. (unit is 5w mod) My HB regulated PS (mc1463 + 2n3055) introduces some MCW (buzz) I put a big filter cap (4700 uF) after it and the buzz went away but a chirp developed. I've tried puting an RF choke in the battery leads but made things worse. What seems to work? Unregulated supply maybe?

## 181. Re: filament transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: "Paul M. Jaeger" <PJAEGER@pop3.concentric.net>
Message-ID: <339B8F8E.21F@pop3.concentric.net>
Source record: 93491

g riccio wrote:
>
> Im looking for filament xformer for pair of 3-500Z tubes. 5VOLTS@30 AMPS.
> 115ac primary. tnx, Glenn KE1EJ

The Peter W. Dahl Co. in El Paso should have one.
http://www.pwdahl.com/

73 de N7PJ

## 182. Re: Coax Trap Information Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <339B41A2.537F@cam.org>
Source record: 93492

dsnowden@ncdc.noaa.gov wrote:
>
> A few years ago I read an article about building coax traps.
> This was in QST I'm sure. I'd like a copy of it. I'll gladly
> reimburse for copy/postage. I also remember (good memory for an ole fart)
> that there was a VE that had a disk of software to aid in design
> of these traps. I'd also like the callsign/address or a diskette
> from one of you that no longer needs it (payment offered of course).
> The story is that I moved to the mountains of MC from the
> wide open spaces of FLA and need to compromise on antennas.
> Besides it is fun to experiment.
Hi Doug,

You will find attached a program for the "super traps"
(from QST 92?)

I think there is a reprint from the article in
Antenna compendium #3

73

--------------------
Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Windows Antenna Simulation Software

## 183. FS: Cushman CE-6 Service Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: "E. Joe Orrico WB6HRO" <eugene@loop.com>
Message-ID: <339B2036.6177@loop.com>
Source record: 93493

I have (2) Cushman CE-6 service monitors with M-2 high Accuracy option,
for sale. I am in Southern Calif.

$900

de Joe Orrico WB6HRO
eugene@loop.com

## 184. *****Butternut HF6V coils info .Help req!**

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-08 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <339b13cd.576406@news.interbusiness.it>
Source record: 93494
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.antenna

Hi, friends! To homebrew this nice antenna, i need to know:
- the inner diam. number of turns and wire diam of the base impedance adapter/grounding copper coil, and
- internal diam and number of turns of the 30,40,80 mtrs aluminium coils.
I've already the other infos to start to built.
Could anyone owner of HF6V help me about?
TNX and 73 de Vanni, I8JJB
e-mail: grainone@caserta.peoples.it
--
Vanni R.
Caserta,Italy

## 185. Re: Pixies at upcoming hamfest?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <339C5280.232@qsl.net>
Source record: 93307

Check out my ham page. Contains AUTHORIZED reprints
and complete instructions to build the pixie
from junkbox parts. Construction time less than
one hour for ground-plane construction.
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#???/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 186. Re: filament transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <339BD170.1F48@taxes.net>
Source record: 93308

g riccio wrote:
>
> Im looking for filament xformer for pair of 3-500Z tubes. 5VOLTS@30 AMPS.
> 115ac primary.

Peter Dahl.

Or rewind your own. It's pretty simple. Instructions are
(or used to be) in the ARRL Handbook.

Or get a surplus 6V and a variac. This, along with a volt meter
at the filament pins, is the best method if space and weight
are not considerations.

N6OTQ

## 187. ** FLEA at MIT ** Sunday June 15th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <5nhv0q$3g5@senator-bedfellow.MIT.EDU>
Source record: 93309
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday..

*** !!!! WE ARE BACK IN THE GARAGE !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
June 15th, 1997
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >1000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Seperate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)

Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

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Name..... Call.....

Address..... Phone.....

City..... State..... Zip.....

E-Mail .....

Spaces Required ___ Season @ $50 / space = $ ..... CK # .....

___ April ____ May ___ June ____ July

___ Aug ____ Sept ___ Oct

Total Monthy spaces @ $9/ Space = $ ..... CK # .....

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.....

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Received $ from .....

By ..... Stamp

**********

Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754

**********

## 188. Re: Ten Tec 6m Transverter 1208

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: lemenst@fhsmpt.fh.trw.com
Message-ID: <339c42c6.19074742@news.cl.trw.com>
Source record: 93310

On Wed, 04 Jun 1997 19:47:38 GMT, kb8ydx@geocities.com (Adam Liette, KB8YDX) wrote:

>
>Hi. Having lots of trouble with this. Bought as a kit and got to one
>of the very last phases and when it comes time to set a pot, I can't
>get the required voltage at the test points. Anyone else had trouble
>with this kit?
>
>Any help appreciated.
>
> Adam, KB8YDX

The question is, which test point? The phases towards the end check out the T/R switching (again) as well as setting the bias for the output stage. A back issue of _Hambrew_ magazine had an article which described one builders experiences, and he mentioned that Ten Tec tech support told him to ignore the current reading bias set technique in the instruction manual (get an increase of 400mA from idle) and just set the pot so that the emitters of the output transistors are at 0.75VDC. I found the whole output bias adjustment recommendation to be poorly conceived, but when set using the (thrid-hand) recommendations from Ten Tec technical support, things worked out well.

good luck!

-tom KC8GFQ

## 189. 808's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <339CAD5F.1286@sj.bigger.net>
Source record: 93311

Hi,
I have a couple of interesting ol' tubes...one in its original box,
CRC-808, What are they?
Thanks!

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

## 190. Re: Waveguide Component Construction Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <339CACAC.7FBE@sj.bigger.net>
Source record: 93312

Mike Suhar wrote:
>
> I have a question concerning waveguide construction that I hope
> someone in this group may have some knowledge. I want to do some
> experimenting with 10-Ghz microwave components. One limiting factor
> is the availability of waveguide components (at least in the ham's
> price range). Surplus components are available, but never when I
> need them! I began to look for ways to construct the components I
> need. These items may include waveguide to coax terminations, gunn
> oscillator housings, directional couplers, mixer housings, slotted
> waveguide measuring devices, antennas, etc. While 3/4" copper water
> pipe has been used for some of these items; I wanted to use
> rectangular waveguide materials. Attempting to locate rectangular
> metal tubing with the dimensions of WR-90 was not successful.
>
> I then thought about making these items from sand mold castings.
> While this is a hot and dirty process, some very nice metal parts can
> be made this way. Various metals can be used. This brings me to my
> question. The problem I have observed with sand castings is surface
> roughness. How smooth must the inside of various waveguide
> components be? I would appreciate hearing from anyone who has any
> experience or thoughts in this area.
>
> Mike Suhar
> WB8GXB
> michael.suhar@lexis-nexis.com
Very smooth...surface roughness +/- .001 mm is nominal for most
waveguides.

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

## 191. Wanted FRG-7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: Brian Berkes <bberkes@erols.com>
Message-ID: <339CE189.5EF6@erols.com>
Source record: 93313

Want to buy Yaesu FRG-7. State condition and asking price.

Brian Berkes

## 192. Wanted FRG-7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: Brian Berkes <bberkes@erols.com>
Message-ID: <339CE15C.33EB@erols.com>
Source record: 93314

Want to buy Yeasu FRG-7. State condition and asking price.

Brian Berkes

## 193. Amateur Satellite Projects Wanted For "Satellite Times"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: magliaco@email.njin.net
Message-ID: <st0609.1997@grove.net>
Source record: 93315
Cross-posted to:
rec.radio.amateur.space,rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.antenna,rec.radio.amateur.misc

"Satellite Times" magazine is interested in publishing construction projects (antenna designs, frequency downconverters, transverters, amplifiers, modems, etc.) related to Amateur Communication Satellites.

"Satellite Times" is a bi-monthly publication that covers low-earth orbit to geostationary orbit and beyond. If you have an idea for a feature article, please contact "Satellite Times" editor-in-chief Larry Van Horn at:

steditor@grove.net

For more information on "Satellite Times" magazine, feel free to visit the "Satellite Times" home page at:

http://www.grove.net/hmpgst.html

Thanks!

73, de John, KD2BD
Columnist, "Satellite Times" magazine

--
-=-=-=-=-=-=-=-=-=-=-=-=- John A. Magliacane, KD2BD -=-=-=-=-=-=-=-=-=-=-=-=-
Internet : kd2bd@amsat.org | Voice : +1.734.224.2948
Satellite : OSCAR-16, OSCAR-19 | Morse : -.- -.. ..--- -... -..
Packet : KD2BD @ KS4HR.NJ.USA.NA | WWW : http://www.njin.net/~magliaco
Video : 426.250 MHz/439.250 MHz | FAX : +1.734.224.2060
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
"Satellite Times Magazine - We cover space from LEO to GEO and beyond."

## 194. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <E2867F38772CFD7C.5ACC1158366005E2.55ECDF59EA79FD6F@library-proxy.airnews.net>
Source record: 93495

netking@dircon.co.uk (Colin Seymour) wrote:
>Narrow band FM does have constant carrier, in approximation
>any FM with a constant frequency modulation and constant modulation index
>has a constant carrier level

Those are enormous provisos, Colin, and tend to obscure the point. It is true, without reservation, that the carrier level during modulation and the un modulated carrier level are different for both the Narrow-band and wide-band FM signals. It is also true, in the NBFM case, that the carrier level reduction will be small at small modulation indices--but it won't be zero and the carrier won't be constant unless the consistency of the input signal remains.

Fred, W8OY
JFRILEY@AIRMAIL.NET

## 195. Drake TR7 1mixer problems?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199706090927.CAA20139@noc.ucsd.edu>
Source record: 93496

On the first mixer (DBM) LO port of my R7 Drake 1.05 Veff is present.
I think that this doubly balanced mixer is 7 dBm and I believe this
driving voltage in excess.
This LO power can create the malfunctioning (noise, intermodulation
other)???????

Thanks in advance

73 de IW1DZD e-mail: chalpm@hqlab.ico.olivetti.com

## 196. Want: Signal Tracer schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: "Bob, Diane & Jeff Kinner" <rkinner@one.net>
Message-ID: <339BEEE7.1366@one.net>
Source record: 93497

I'd like to build a signal tracer (AF is really all I need), but they just don't seem to be popular any more. Anyone have a schematic for a simple, solid state tracers? TNX, Bob AA8FH
--
I don't have mental illness; I'm a carrier.

## 197. Scanner Parts needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: ej.mars@lagn.com
Message-ID: <46431553@lagn.com>
Source record: 93498

Hi
I am looking for the following:

1) Pro 2003 Scanner: IC Chip (GRE-141) or Substitute.
2) Bearcat 210XL: IC Chip (SK-7731) or Substitute.
3) Need a complete non work (Bearcat 300) for parts. The Case and face plate with the Led's must be in good condition.

Please respond to ej.mars@lagn.com if you have or know where the above can be purchased.

Thanks

## 198. Q: How to open a Yaesu FNB-4A battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: burch@sps.mot.com
Message-ID: <5ngv2v$8c4$3@newsgate.sps.mot.com>
Source record: 93499
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Can anyone tell me how to open the plastic case of a Yaesu FNB-4A battery? The NiCad cells in mine have appearently gone bad (the terminal voltage is 0 Volts regardless of the charger current) and I need to replace them.

Thanks.

Ken Burch
ep5231@email.mot.com

## 199. AMRADIO.TXT file

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: "M.S" <polgron@pi.net>
Message-ID: <339C87F4.6D9C@pi.net>
Source record: 93500

Could anyone send (email) me the AMRADIO.TXT file from the converter kit for converting a car radio into a SW radio. I would like to convert a normal AM radio to a SW radio

M.S.

polgron@pi.net

## 200. Re: Tri Band J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: "Mike B. Allred" <mallred@fscu.org>
Message-ID: <339C1747.6E0B@fscu.org>
Source record: 93501

You may try this Url:
http://www.inlink.com/%7Eraiar/cactus.html

It's not mine, but it seems to be accurate.

73,
Mike KU4GU

## 201. Re: Drake web-site??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <339C23AC.2BDF@ix.netcom.com>
Source record: 93502

chalpm@hqlab.ico.olivetti.COM wrote:
>
> I'm looking for the Drake internet web-site or
> e-mail address.
>
> Tanks in advance
>
> 73 de IW1DZD e-mail : chalpm@hqlab.ico.olivetti.com
---
Try
http://www.rldrake.com/
---
73
Rod in San Diego
AC6V's Ham & DX Reference Guide
With Over 1277 Links To DX And Ham Radio
MAIN PAGE: http://www.netcom.com/~ac6v/index.html
INDEX: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

## 202. Collins FAA TV-36 on 2m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: ed finn <ed.finn@ustc.vlsi.com>
Message-ID: <339C28A1.6FD0@ustc.vlsi.com>
Source record: 93503

Hello,

Does anyone know what needs to be done to PA grid of 4cx250b after removal of the driver tube? I am interested in operating this amp on 2m SSB, but perhaps 432 also. This amp has a 6816 driver which seems to share the LC tuned circuit between the driver plate and PA grid.

Any other required mods. also would be of help.

Any help appreciated.

tnx,
ED WA3DRC
--
Email: ed.finn@ustc.vlsi.com

## 203. Re: Q: How to open a Yaesu FNB-4A battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: turner@safety.ics.uci.edu
Message-ID: <5nhc25$ra1@safety.ics.uci.edu>
Source record: 93504
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

It is a pain in the butt mostly, but can be done with a thin, sharp edge to pry open the edges. I just saw, I think on this group, someone suggesting you stick the battery in the freezer and then bring it out frozen and smack it on a surface to break the glue that Yaesu uses to prevent us from reusing the case (silly Yaesu, they even put it over the batteries sometimes making it very difficult for us with no benefit that I can see....). Check the archives of this list.

I just pry them open, but it can take a half hour or more to do it neatly.

Clark
WA3JPG

## 204. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5nhgo0$e0p@hpcvsnz.cv.hp.com>
Source record: 93505

Colin Seymour (netking@dircon.co.uk) wrote:
: In article <339a5bf6.3419627@news.atl.bellsouth.net>,
: ke4zv@bellsouth.net (Gary Coffman) wrote:
: >Actually, FM doesn't have a constant amplitude carrier. In fact the carrier
: >disappears completely at the Bessel nulls. That's a standard way to determine
: >deviation. What is constant in FM is the *sum* of the carrier and the
: >sidebands.
: Narrow band FM does have constant carrier, in approximation, and in the
: limiting case as modulation index tends to zero. As the
: modulation index increases the Bessel function describing the carrier comes
: down and eventually disappears as you say.

(seems OK...then this:)

: Except for the Bessel zeroes,
: any FM with a constant frequency modulation and constant modulation index
: has a constant carrier level (which may differ from AM with the same
: unmodulated carrier level).

This leads to the absurdity that the carrier very abruptly and suddenly
disappears when the zero-order Bessel function reaches its zero...and is
inconsistent with the preceeding sentence. It's a smooth function.

--
Cheers,
Tom
tomb@lsid.hp.com

## 205. ISO: QRP SWR/Wattmeter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-09 00:00:00 UTC
From: cvoid@netcom.com
Message-ID: <cvoid-0906971132120001@axolotl.macromedia.com>
Source record: 93506

I'm looking for an SWR meter suitable for QRP work. Preferably one that can be used with power levels down to the milliwatt. Most I have looked at require at least 1w to calibrate properly. Either kit or built. Any pointers
would be appreciated!

Thanks in advance!

--
Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
* PGP v2.3a Public Key Available Via Finger *
WWW: http://www.morphine.com/cvoid/

## 206. Drake web-site??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199706091520.IAA20403@noc.ucsd.edu>
Source record: 93316

I'm looking for the Drake internet web-site or
e-mail address.

Tanks in advance

73 de IW1DZD e-mail : chalpm@hqlab.ico.olivetti.com

## 207. Drake TR7: DBM LO power requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199706091527.IAA21624@noc.ucsd.edu>
Source record: 93317

I would like to know which is the LO power requirement
of the first mixer DBM of the TR7 Drake???

Thanks in advance

73 de IW1DZD e-mail: chalpm@hqlab.ico.olivetti.com

## 208. FS: Tubes,Cathode Ray

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <865892530@infoway.com>
Source record: 93318

For sale for ARC, 5 Cathode Ray Tubes, any or all, $20 plus shipping.

3FP7
5NP1
5CP1
5CP1
5BP4

73, Don n6mce www.qsl.net don.phelps@juno.com

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

## 209. Re: ISO: QRP SWR/Wattmeter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5nhv33$qe0$1@nadine.teleport.com>
Source record: 93319

In article <cvoid-0906971132120001@axolotl.macromedia.com>,
cvoid@netcom.com (Christian Void) wrote:
>I'm looking for an SWR meter suitable for QRP work. Preferably one that
can be
>used with power levels down to the milliwatt. Most I have looked at
>require at least 1w to calibrate properly. Either kit or built. Any
>pointers
>would be appreciated!
>
>Thanks in advance!
>
Try "A Simple and Accurate QRP Directional Wattmeter", QST, Feb. 1990. It
was also included in one or more editions of the _ARRL Handbook_ since that
date.

Roy Lewallen, W7EL

## 210. 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <339cc0ba.1820214@nntp.infoave.com>
Source record: 93320

I am building a regenerative reciever from W1FB's Design Notebook....
it call for a 2n4416 transistor which I have not been able to locate.
I do have several 2n2222's laying around though.... does anyone know
if the values of these two transistors are close enough to substitute?

I would do the try it and see what happens smoke test but this is my
first project.... and have spent a good bit of time etching and
placing parts to go blowing something up!

Also if anyone has W1FB's Design Notebook.... the schematic is on
page 109..... and according to the schematic I can not identify
exactly how to connect my feed line. I have 133' dipole 40ft above
ground with 300 ohm ladder line for my feed.... The schematic shows
only one connection on "L1" which of course would go to one of the
side of the ladder line..... does the other side of the feed line go
to any specific point on the PCB or will any portion of the the
grounded areas of the board work.

Thanks in advance to all who respond,

KF4HTL
Marty Hawkins ..... Upstate South Carolina
soon to be a homebrewer!!! If I don't get electricuted 1st :)

## 211. Re: pse help ID GE mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: n3ab@ptdprolog.net
Message-ID: <33a0b56d.3359985@news.ptdprolog.net>
Source record: 93321
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap,rec.ham-radio

On Fri, 06 Jun 1997 08:24:21 -0500, "Christopher W. (Chris) Boone"
<cboone@earthlink.net> wrote:

>Ron, N7TAW wrote:
>>
>> I need help finding a schematic for two old GE mobiles (currently used
>> as local repeaters), especially the wiring for the control head as the
>> controllers are about to be replaced, and the wiring of the old ones us
>> a mess.
>>
>> the numbers listed on the ID plaques are:
>>
>> RG56TFS66, or N.P. 243349
>>
>> and
>>
>> YG56KJJ66, or N.P. 243349
>
>If memory serves, what you have are GE MSTR EXEC II series...one
>standard
>and the other is the IMTS version....Best to use one radio as the rptr.
>They are 60 watt models (the 5 in 56) and are in the 150-174 range (the
>66 at the end) but they do tune to 2mtrs...
>I'll see what I have in my docs on those models...
>Chris
>WB5ITT
>
>>
>> They appear to be the same radios with different options.
>>
>> Thanks to all,
>>
>> Ron, N7TA

Wasn't the first unit listed an Exec I (not the Exec II) that used
tubes for the driver and final (rest of the radio is solid state)? I
used to have RG56TAS66 models on high band that were Exec I units
(from the mid to late 60s I think).

John N3AB

## 212. Re: Need Help on TV Repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseEBJJA1.B0F@netcom.com>
Source record: 93322
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

People in the newsgroup sci.electronics.repair might be able to help.

# 213. FREE FREE FREE FREE -- RTTY EQUIPMENT - GIVE AWAY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: John Earl <jpearl@interaccess.com>
Message-ID: <01bc754e$60765d40$5b9794cc@john-s-computer>
Source record: 93323

FREE FREE FREE FREE -- RTTY EQUIPMENT - GIVE AWAY

INCLUDES THE FOLLOWING --ALL MOUNTED ON STAND:

MODEL 15/19 PRINTER

TYPING REPERFERATOR

TRANSMITTER - DISTRIBUTOR

PRINTER PAPER RE-SPOOLER

ALSO:

INCLUDES ALL SERVICE MANUALS

4 ROLLS OR PRINTER PAPER

1 ROLL OF PUNCH PAPER TAPE

PATCH PANEL

LOOP SUPPLY

CABLES.

FIRST COME FIRST TAKE!!!!-- WEDNESDAY 6/11 IT GOES TO SCRAP!!!!!!

email to dearl@juno.com

## 214. Re: SWL'ers Looking for Pirates!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5nj4ri$g1o@lehi.kuentos.guam.net>
Source record: 93324
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

sig@file.com wrote:

>T.L.Bryant wrote:
>>
>> :> Whata weekend for pirate radio loggings. Logged over 10 so far on
>> :> 6.955mhz. Supposed to be alot of activity on memorial day so tune in
>> :> your recievers and get some pirates in your logbooks.
>> :
>> :> Have fun
>> :
>> :Why?
>> :
>> :Doug - W2DR

Because some SWL's enjoy logging pirates ?

>Yea, it's too bad we couldn't have a Volunteer organization like the
>VEC's to confiscate equipment from pirates/outof banders/ jammers and
>the like.

>We could get lots of ham stations started in high schools with all the
>nifty equipment we would be picking up.

>KA8DDZ - hynde@flash.net
>Equipment NorCal 40A, NorCal 38 Special, Dipoles

That's a GREAT idea !! You can start over here. First, go to the Philippines and get all the slims off 40 meters (look up NPA in the dictionary before you go, and bring your 38 special, you'll need it). Then, you can rent a boat and clean up the high seas in Asia, take the radios away from all the Korean fishing boats (loads of 2 meter rigs) on your way to Indonesia, where you won't have any problem finding pirates at all. On the way home, drop by China and get all the 20 meter radios that are being used as part of the new national HF telephone system, then make a quick stop in Hong Kong and take all the 25-30mhz FM rigs away from the cab drivers. You should get enuff radios to fill a couple 40 containers. And don't forget to order your Radio Police Badge from QST before you leave home, so nobody will complain or question you when you take thier radios away.

But I think, maybe, the guy who wrote the original message was speaking of AM pirate BROADCAST stations, and I'm not sure many high school students would be interested in AM rigs because most of them don't have 2 VFO's, 200 memory channels, and built in antenna tuners.....

73, Jim KH2D

## 215. Re: plans for simple 6 meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: jphelan501@aol.com
Message-ID: <19970610111201.HAA23270@ladder02.news.aol.com>
Source record: 93325

Try the good ole ARRL. They have the schematic, pc board layout, and parts list for a single-transistor 6M amp in the 80W power range. I know about this because a friend of mine asked me to make the pc board for him. I don't know what the name of the project is, so you will have to contact them yourself.
Hope this helps.
73 de John N3DRA

## 216. Parts for HB receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <339d31d6.6745998@news.erols.com>
Source record: 93326

Homebrewers:

I'm thinking about building the "Bare Bones Superhet" Receiver
featured in the June '82 issue of QST.

I'm looking at the parts list and wanted to consult with the group re
parts availability.

Plan calls for use of coils wound on bobbins of an Amidon L-57-1
transformer assembly. Will I be able to find one of these? Where?

The filter is made from three Radio Shack Color burst crystals. Does
RS still sell these?

Has anyone out there built this receiver? Looks like a neat project.
I want to pair it up with my W1VD 6 Watt TX.

73 Bill N2CQR

## 217. Re: Tubes, 1000's of types, $1 and $2 a piece

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <339d4a86.7448544@news.mnsinc.com>
Source record: 93327
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Wed, 04 Jun 1997 10:55:44 GMT, bry@ix.netcom.com (Brian Carling)
wrote:

>Are they new or used? You didn't say! Boxes? Tested?
>
>On 3 Jun 1997 03:34:12 GMT, subbustr@whidbey.net (Dave Schertzer)
>wrote:
>
>>I have these FS?? dave
>>
>>RCA
>>-------
>>$1.25ea (5 minimum order plse) or ALL (58) for $75.00 shipping included CONUS
>> *** Denotes - NOT in org. box. ALL others have org. box.
>>
>>Oak Harbor,WA
>>98277
>>subbustr@whidbey.net
>>de VE7-LFA/W7

No reply so guess he doesn't want to sell!

## 218. Re: 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: w4mvb@aol.com
Message-ID: <19970610142200.KAA03346@ladder02.news.aol.com>
Source record: 93328

Marty,

You can't use a 2N2222 to sub for a 2N4416. The 2222 is a bi-polar xstor
and the 4416 is an FET. You might try using an MPF-102. It is reasonably
close to the 4416 and you can find them at Radio Shack.

Gud Lk
Jess- W4MVB

## 219. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <339d5477.2521903@netnews.worldnet.att.net>
Source record: 93329

On Mon, 09 Jun 1997 11:45:23 +0200, Robert Ganter 3269
<ganter*NOSPAM*@ens.ascom.ch> wrote:
>
>In the 1996 ARRL handbook they say something about:
>bleeder resistor = screen voltage / (screen current + 15..20mA)
>This would be 10 kOhm (and 16W...). A varistor to limit screen voltage
>seems to be a must to protect the screen decoupling caps.

You still need a shunt regulator for SSB if you want good IMD
perfromance. With a shunt regulator you don't need a bleeder, but the
screen supply voltage has to be twice the screen operating voltage to
limit screen dissipation in the case of abnormal conditions.

>I was talking about the control grid. For the 4CX400 the control grid
>voltage is -38V for normal operation and down to -60V to cut it off.
>I just thought, that a series resistor to the grid supply would make the
>control grid voltage to rise toward zero or even positive, which fully
>turns on the tube.

It's a good idea to keep the control grid supply impedance low, that
way if you accidentally run a little grid current the bias won't shoot
up and cause severe distortion.

Grid drive should be monitored with a hold-type peak detecting
indicator that warns you when control grid voltage starts to exceed
allowable values.

This 50 ohms grid resistor non-sense that's been published lately is a
bad idea. Use an L pad or catode drive the tube. Design the PA so
your exciter is nearly at full rated drive, it will have the best IMD
performance then.

73 Tom

## 220. Re: 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Dave Hills <dhills@onramp.net>
Message-ID: <339D6D13.717F@onramp.net>
Source record: 93330

W4MVB wrote:
>
> Marty,
>
> You can't use a 2N2222 to sub for a 2N4416. The 2222 is a bi-polar xstor
> and the 4416 is an FET. You might try using an MPF-102. It is reasonably
> close to the 4416 and you can find them at Radio Shack.
>
> Gud Lk
> Jess- W4MVB

This is correct. Motorola used to make the TO-18 metal can 2N4416 long ago, but have dropped it from their data book. You can however still get them from various surplus dealers. Dan's Small Parts has them for $1.50 each. http://www.fix.net/dans.html Also, "Tanner Electronics", Carrollton, TX has a few for about $1.00 ea. (972) 242-8702, ,takes charge cards.

Dave

--
Dave Hills
DH Associates
Power Supply Engineering, Design, & Consulting
dhills@onramp.net

## 221. Ocean Tech Company Looking For Technician

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Andrew Goldstein <aeg@desertstar.com>
Message-ID: <01bc75b8$2fbbcb80$a267e3a5@howl.com>
Source record: 93331

Dear Reader:

We are a small ocean technology start-up company. Demands for our products Is growing fast, and so we are looking for an electronics / mechanical technician to assist in our production department. The right person is interested in ocean technology and likes working with electronics. You should have skills in reading schematics, operating electronic test equipment and soldering. Maybe you can even design simple circuits. It doesn't matter if you acquired those skills in college or you tought yourself. Recent high-school graduates are certainly accepted.

Our products are underwater navigation and communication systems which are used by robots as well as commercial, scientific and sport divers (check out our web page at http://www.desertstar.com). Your job will be to assemble and test these systems. You must be a reliable and honest worker. As a member of a small, dedicated team, you are fully expected to pull your load. Our customers rely on our equipment in remote corners of the world. It must be reliable. Therefore, we demand attention to detail and the ability to do quality work. We need a person who is interested in getting the job done - putting in long hours should not be a problem.

The job comes with the challenges, risks and opportunities of working for a high-tech startup. While this is an entry level position, you can advance as fast and in whatever direction your talents allow. A lack of 'seniority' won't hurt you, nor will gaining seniority by itself help you. In our company, everyone wears many hats. So you won't be doing just production work, but you'll also be answering the phone, taking orders, answering customer's questions, helping in ocean tests, etc. Initial wages are moderate. Pay will rise as your skills and performance improve.

Benefits:
This is a job for a person who regards working in the ocean field, working on many projects and learning a lot of new skills as a major benefit. We also offer the benefits of a hi-tech start-up: Annual bonus checks that reflect the companies and your performance. Stock options are a possibility if you prove yourself to be an excellent performer.

Our Location:
Desert Star Systems is located at California's central coast, just a few miles north of Monterey. The terrain topside is as spectacular as it is below the water. Unlike the San Francisco area to the north and LA to the south, Monterey County is uncrowded. The weather is usually sunny, though foggy days are common in summer. The diving is great, and it's not far to the mountains or the desert. Our office is located on a former military airport and you can learn flying ultralights or sky diving here. There are several good colleges in the area too.

If you are interested:
Please send an e-mail to Marco Flagg (mflagg@desertstar.com). It helps if you tell us a bit about yourself, why in the world you'd want to get a crazy job like this one, and what your skills and experience are. We are looking forward to hearing from you!

# 222. WANTED: STORNO PROGRAMMING SOFTWARE FOR PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: gatsby@dircon.co.uk
Message-ID: <5nk2jc$e0$1@newsserver.dircon.co.uk>
Source record: 93332

Wanted storno 6000 series programming spftware for pc

GATSBY@DIRCON.CO.UK

## 223. first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Nathan Gordon <nathang@bigfoot.com>
Message-ID: <01bc75cc$06a53600$dff489cc@Sheaffer.mcs.net>
Source record: 93333

Hello All,

I have built several kits, receivers, etc. Presently I am working on finishing a 2 meter kit from Ten Tec. I am wondering if anyone here has any suggestions for a completely home-brew project? I would like to build an HF CW transceiver from scratch. No circuit board, parts packages, etc. Does anyone have any suggestions on a first project??

Thanks,
73, de KF9LI
Nathan
nathang@bigfoot.com

## 224. Re: 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <339DA8B9.1450@qsl.net>
Source record: 93334

I have a whole bunch of the 4416's at home. Are they
better or worse than the mpf-102's?

-Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 225. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <339cf499.354515@news.atl.bellsouth.net>
Source record: 93335

On Sun, 08 Jun 97 22:52:20 GMT, netking@dircon.co.uk (Colin Seymour) wrote:

>In article <339a5bf6.3419627@news.atl.bellsouth.net>,
> ke4zv@bellsouth.net (Gary Coffman) wrote:
>>Actually, FM doesn't have a constant amplitude carrier. In fact the carrier
>>disappears completely at the Bessel nulls. That's a standard way to determine
>>deviation. What is constant in FM is the *sum* of the carrier and the
>>sidebands.
>Narrow band FM does have constant carrier, in approximation, and in the
>limiting case as modulation index tends to zero.

Well, duh. When modulation is zero, there is nothing to cause the carrier to vary. That's a given. With *any* modulation, however, the FM carrier does vary in amplitude. The variation peaks at certain modulation indexes according to the Bessel function. Of course modulation index is a function of both the deviation and the modulating frequency. Even with low deviations, there are modulating frequencies which will yield an index which forms a Bessel zero. In other words, with a voice bandwidth of 30-3,000 Hz and a 3 kHz deviation, the modulation index varies from 100 to 1. That allows a number of Bessel zeros.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 226. MAX 294

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: on1dan@boomer.digibel.be
Message-ID: <339da254.6335642@NEWS.BRU.TFI.BE>
Source record: 93336

Hi,

I'm search the MAX-294.
Where can I order this IC and how many I have to order.

Thanks to help, send e-mail to GINO.VDS@DEBCOM.BE
73's de on1dan (Gino)

## 227. Re: 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <339dbafc.0@cheese.pcug.org.au>
Source record: 93337

Trapper27@juno.com (KF4HTL) wrote:
>I am building a regenerative reciever from W1FB's Design Notebook....
>it call for a 2n4416 transistor which I have not been able to locate.
>I do have several 2n2222's laying around though.... does anyone know
>if the values of these two transistors are close enough to substitute?
>

Marty - It won't work - 2N4416 are single gate FETs, while the 2N2222 is a bipolar NPN transistor - completely different. However, my experience is that almost any small signal FET should work in place of the one specified. Try 2N3819, MPF102, 2N5459, 2N5485, 2N5486 or MPF105 for starters.

I'm not familiar with the receiver circuit, but my own experiences with a similar receiver (FET RF amp, FET detector, LM386 audio) has been good. The secret is to build it like a battleship - metal case and all. Also, use vernier reduction drives if you can get them.

73,

Peter VK1PK

--------------------------------------------------------
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
--------------------------------------------------------

## 228. Re: The NorCal 38 Special/such a deal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <339db929.0@cheese.pcug.org.au>
Source record: 93338

travis@vgernet.net wrote:

>Jerry, I've had mine for 2 months now, love it but I'm having problems
>finding a power supply other than a battery that won't cause problems.
>(unit is 5w mod) My HB regulated PS (mc1463 + 2n3055) introduces some
>MCW (buzz) I put a big filter cap (4700 uF) after it and the buzz went
>away but a chirp developed. I've tried puting an RF choke in the battery
>leads but made things worse. What seems to work? Unregulated supply
>maybe?

Though I've never tried it, I've heard of people curing hum by wiring a
disc ceramic capacitor across each rectifier in the power supply. As I
recal, a value of 0.01-0.1uF was called for.

73,

Peter VK1PK
--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

## 229. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Dave VanHorn <dvanhorn@127.0.0.1>
Message-ID: <01bc75ea$8195b380$35f135ce@hammer.stonewest.com>
Source record: 93339

> > also uses a 200 amp dc Leece Neville alternator to power his driver amp,
> > which is 2 X
> > 2SC2290's driving 8 X 2SC 2879's, this is why we lowly cber's laugh at
> > most hams.
>

And he still dosent' get that when the band isn't open, you aren't going anywhere no matter how much power you run. (which is why hams laugh at CB'ers who think that physics dosen't apply to them, just because they don't understand it)

## 230. Re: pse help ID GE mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: "Ron, N7TAW" <rh@pcez.com>
Message-ID: <339DCE55.783C@pcez.com>
Source record: 93340
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap,rec.ham-radio

John,

These things definately have tube finals, but the club has lots of
spares and they aren't interested in replacing the rigs at this time.

The stamps on one of the boards shows a "built" date of Dec, '72, so
you're in the right ballpark.

If you happen to have any of that old literature laying around, it would
be greatly appreciated.

Thanks again,

Ron, N7TAW

JRS wrote:
>
> Wasn't the first unit listed an Exec I (not the Exec II) that used
> tubes for the driver and final (rest of the radio is solid state)? I
> used to have RG56TAS66 models on high band that were Exec I units
> (from the mid to late 60s I think).
>
> John N3AB

## 231. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <339DE42C.65A1@qsl.net>
Source record: 93341

Build the Pixie2. All plans at my website.
Authorized reproductions and links to others who've
built this. Also k5fo has some grep pics. (link at my website).

Give it a shot!
-Ed Loranger
Nathan Gordon wrote:
>
> Hello All,
>
> I have built several kits, receivers, etc. Presently I am working on
> finishing a 2 meter kit from Ten Tec. I am wondering if anyone here has
> any suggestions for a completely home-brew project? I would like to build
> an HF CW transceiver from scratch. No circuit board, parts packages, etc.
> Does anyone have any suggestions on a first project??
>
> Thanks,
> 73, de KF9LI
> Nathan
> nathang@bigfoot.com

--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 232. need color code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Rafael Diaz <kb2mym-x@li.net>
Message-ID: <339DE409.BCBDCE90@li.net>
Source record: 93342

need color code for a icomhm-23 mic.trying to wire it to a alinco radio dr-570 daul bander.nothing i tried worked.. need to know what color wire on hm-23 mic is for what?

## 233. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <339DDFD1.5BF4@sj.bigger.net>
Source record: 93343

wx wrote:
>
> Don Huff wrote:
> >
> > Thor E. Wiegman wrote:
> > >
> > > Um, excuse me folks. I read a handbook cover to cover in seventh grade. I
> > > understood most of it too. And I was a C and D student too. By tenth
> > > grade I already was reading things like the CET exam book. I would be
> > > suprised if the handbook was written to 10th grade level, my guess is 9th
> > > grade. By the way, the U.S. Air Force only requires that it's enlisted
> > > corps read at the 9th grade level and we deal with electronics far more
> > > advanced in operations and maintenance than anything in modern amateur
> > > radio.
> > >
> > > William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
> > > <3389AFDE.7D9C@crpl.cedar-rapids.lib.ia.us>...
> > > Paul Kein&#65533;nen wrote:
> > > >
> > > >
> > > > >According to Dave N., the handbook is supposed to be written
> > > > >at a 10th grade level.
> > >
> > > The Handbook is not, cannot, and should not be written at a tenth grade
> > > level. There are plenty of introductory books at that level. Barnes and
> > > Noble stores carry lots of them.
> > >
> > > Twelfth grade or Community College or electronic trade school would be
> > > more realistic.
> > >
> > > Any High School worthy of the name teaches algebra, geometry and
> > > trigonometry.
> > >
> > > Bill W0IYH
> > >
> > > ----------
> > Hello Paul and Bill,
> >
> > I too read radio literature at the level of ARRL Handbooks in Jr. High
> > School.
> > But that was Jr High THEN (1950's) not Jr High NOW. With the general
> > dumbing-down of U.S.
> > grade school education over the past 3 decades (10 percent decline in

> > SAT scores
> > in spite of quintupling the constant-dollars spent per student!), it is
> > not surprising
> > that both the ARRL Handbook and QST in general have likewise been
> > dumbed-down. (The ARRL matches
> > the level of material to their target audience; that is how they stay in
> > the publishing business).
> > We have folks who are functionally illiterate in their native (English)
> > language graduating
> > not only from high school, but apparently some colleges too.
> >
> > 73,
> > Don, W6JL
>
> The dumbing-down of our whole education system for 4 decades
> now is becoming very prominently apparent as we compare to achievements
> in other nations. The final cap is that today there are more Master's
> and PhD candidates from off-shore in our U sytems than US born
> candidates.
>
> You can bet that this demise pervades from elementary to
> middle school to high school and colleges. Brought about by the
> "experimental" educators since WW II at every turn! And our
> "friendly" National Education Association.
>
> wx
The pulic gets what the public wants, in short parents don't want the
responcibility of helping to educate thier children, they want to work
at a job, get paid and leave the rest to the bloody school system 'cause
it's easier. The result is what we now have, educational stupidity at
many levels and an amazing lack of public support for our schools. Such
is the situation in California.

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

# 234. HOWARD SAM"S PHOTOFACT FOLDERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: "John P. Earl" <jpearl@interaccess.com>
Message-ID: <339E0AD9.7286@interaccess.com>
Source record: 93344
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.antiques.radio+phono,rec.ham-radio,rec.ham-radio.swap

HOWARD SAM"S PHOTOFACT FOLDERS

HAVE THE FOLLOWING SETS:

148,189,227,240,264,269,304,314,324,347,360,388,371,387,429,481,496,532,542,547,

551,574,594,764,808,873,856,1178,1192 AND 1390.

30 SETS IN ALL.

WILL SHIP ALL FOR MONEY ORDER OF $20.

MOTOROLA CONSUMER PRODUCTS SERVICE MANUALS

ROUGHLY THE SAME VOLUME OF VARIOUS MODELS (EARLY) FOR ANOTHER $20.

REPLY TO dearl@juno.com

## 235. 15-m CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: Glenn Evans Jones <jones_gl@efn.org>
Message-ID: <Pine.SUN.3.95.970610114829.9801A-100000@garcia.efn.org>
Source record: 93345

Has anyone schematics for a 15-m CW QRP transmiter/transciver? thank you

---
forgeeve mi badd spelking, im lasy

## 236. Radar display

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: <>
Message-ID: <339D2093.6E72@ihr.mrc.ac.uk>
Source record: 93346

Can anyone help with connection info for a General Instruments Corp.
Government Systems Division RWR Display. I think it is a rearward
looking aircraft RADAr display. I picked it up at a local radio rally
and would like to use it for a DF vector display.
I need to find out about supplies, data input, how does it store the
image, as the phosphor is not long persistance. Can anyone help???
Thanks in anticipation ... Dave Bullock daveb@ihr.mrc.ac.uk

## 237. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <339DAD18.739024FB@acsu.buffalo.edu>
Source record: 93347

Nathan Gordon wrote:
>
> Hello All,
>
> I have built several kits, receivers, etc. Presently I am working on
> finishing a 2 meter kit from Ten Tec. I am wondering if anyone here has
> any suggestions for a completely home-brew project? I would like to build
> an HF CW transceiver from scratch. No circuit board, parts packages, etc.
> Does anyone have any suggestions on a first project??
>
> Thanks,
> 73, de KF9LI
> Nathan
> nathang@bigfoot.com

Try reading this one:

Build your own intelligent amateur transceiver
written by Randy Henderson

available from
HTTP//www.amazon.com

in paperback at discount.

73 ,

Jim (N2GO)

## 238. Looking for info on Van Eck/Tempest experiments/equipment.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-10 00:00:00 UTC
From: "John K." <johnk@gj.net>
Message-ID: <339E1A9C.2917@gj.net>
Source record: 93348

Has anyone tried to homebrew their own Van Eck test unit? Does anyone know of a good place for kits/plans to experiment with this?

So far Codex has info on it but it is a little more than I can afford starting at about 5k.

Any info like books or articles would be of interest. I have found a few items on the theory and warnings that it can be done but nothing to actually experiment with.

## 239. Re: 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <339e2342.1321605@nntp.infoave.com>
Source record: 93349

On Tue, 10 Jun 1997 03:07:54 GMT, Trapper27@juno.com (KF4HTL) wrote:

Thank you each for responding..... I can't beleive I made such a simple mistake..... Learning all of the different schematics for componets has really been confusing but I will persist! I have a few MPF102's in my junk box.... so I will be applying power this weekend.

Thank you each again,
Marty - KF4HTL

## 240. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <339e2597.1918420@nntp.infoave.com>
Source record: 93350

On 10 Jun 1997 18:28:48 GMT, "Nathan Gordon" <nathang@bigfoot.com>
wrote:

>Hello All,
>
>I have built several kits, receivers, etc. Presently I am working on
>finishing a 2 meter kit from Ten Tec. I am wondering if anyone here has
>any suggestions for a completely home-brew project? I would like to build
>an HF CW transceiver from scratch. No circuit board, parts packages, etc.
>Does anyone have any suggestions on a first project??
>

Nathan sounds like your one or two up on me.... I am building my
very first receiver. It is a regenerative receiver. No kits.... just
a schematic out of a book. I have plenty of schematics for QRP gear.

I just ordered a scanner... and it should arrive at the end of the
week... so if your not in a big hurry.... I could e-mail you some
gifs of schematics for QRP tracievers, after I get the scanner up and
running.
I can also get you phone numbers for MOUSER and NEWARK
ELECTRONICS.... I mail order componets from them and they are much
cheaper than any radio shack.... and shipping is cheap too! Also
there is Dan's Small Parts on the WEB and he caters to homebrewers!
I also have a recent AMIDON catalog with all sorts of coil forms.

I might not be much for knowing what I am doing when I solder.... but
I have been collecting the right resources to have around when I do
start to understand! :)

Just E-mail me at TRAPPER27@JUNO.COM

Marty Hawkins - KF4HTL - South Carolina

# 241. CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Free Cable <larry@aol.com>
Message-ID: <5nl2cn$e72@chronicle.concentric.net>
Source record: 93351

CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Just a few inexpensive parts from Radio Shack and a little time and you can descramble every cable channel. See all your favorite movie channels,pay per view etc

To recieve detail instructions and diagrams on how to construct your own Cable Box Descrambler
Mail $5.00 CASH MONEY ORDER CHECK

S&G Enterprise
12145 Augusta Woods Cir
Suite 3
Orlando FL. 32824

Please be sure to include your full name & address
Allow 10 days to recieve

Thank You
Seth Garner

## 242. FS: Transistors and Diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: pdrunen@aol.com
Message-ID: <19970611035000.XAA18492@ladder02.news.aol.com>
Source record: 93352

HI Group!,

I just posted my list of surplus parts:

ftp://members.aol.com/pdrunen/surplus

I only have my transistors and diodes on the net, but hopefully will have
some more stuff a bit later.

P.S.

This is my hobby, not my real job!
Any reasonable offer, swap or trade considered!

Paul
KJ4UO

## 243. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <339E84F8.655@crpl.cedar-rapids.lib.ia.us>
Source record: 93353

Howard N. Lute wrote:

> The pulic gets what the public wants, in short parents don't want the
> responsibility of helping to educate their children,

That has been true ever since I was in "short parents".

Bill W0IYH

## 244. Help! Need to find mini-tungsten lightbulbs for wattmeter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5nm2po$8l4_001@leeds.ac.uk>
Source record: 93354

I'm looking for some (2+) miniature lightbulbs for an accurate (10microwatt), widerange(HF-500MHz), lowcost wattmeter project described in an old magazine. It uses two miniature (T3/4 size) tungsten lightbulbs each at 5V drawing .02A (giving +-0.1W output) as bolometers. It lists the manuafacturer as Chicago Miniature but I can find no trace of them on the web, the article dates from early '70s. If anyone could help me I'd be very thankful. TIA

73 de Laurens RS171840

## 245. Attention All Photographers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Photoagent@ibm.net
Message-ID: <5nm6j4$2is$890@news.internetmci.com>
Source record: 93355

PHOTO PHOENIX INTERNATIONAL

We are an international New York based agency representing
professional and amateur photographers in the following areas: Galleries,
Business and Organizations, Book Publishers, Paper Products, Consumer
Publication, Newspapers & Newsletters Publication, Special Interest Publication,
and Trade Publication.

The images we are seeking are some of the following:
Animals/Architecture/Art/Automobiles/Business/Celebrities/Documentary/
Entertainment/Erotica-Nudity/Fashion/Food/Health/History/Hobbies/
Outdoors/People/Political/Portraits/Still Lifes/Religious/Science/
Sports/Travel.

Whether your work portrays conservative, experimental, stylish, or innovative
themes, your project proposal should be well thought out before submitting to
us.
For first contact, please submit a query letter, and samples of your work.
Please include SASE.
Do not send entire portfolio unless we ask for it. If we are not interested,
you may not hear from us because of time limitations, so please submit what
does not need to be returned. If we think your work is sellable we
will respond as quickly as possible.

Send to:
Photo Phoenix International
33-29 58 Street
Woodside, New York 11377
Tele: Florida Branch-(941) 642-660

## 246. Re: Fire Dept Taking radio Bids

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: subbustr@whidbey.net
Message-ID: <5nm9od$gu8@news.whidbey.com>
Source record: 93356
Cross-posted to: misc.emerg-services,rec.radio.amateur.homebrew,rec.radio.swap

```
Motorola,G/E ???,condition, ????
Maybe a little more info

Oak Harbor,WA
98277
subbustr@whidbey.net
de VE7-LFA/W7
```

## 247. How do I connect HTX 202 to a MFJ 1278 TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: begg@metraplex.com
Message-ID: <5nma9k$f32$1@news2.digex.net>
Source record: 93357

I need help in connecting an HTX 202 to a MFJ 1278 TNC.
The TNC has the following leads coming out:

GND
SPEAKER
MIC
PTT

How do I connect the PTT into the HTX Mic Jack along with the audio?

Any help would be appreciated. Thanks, Allan Begg ( begg@metraplex.com )
Please e-mail response directly.

## 248. Re: Digital PL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: lemenst@fhsmpt.fh.trw.com
Message-ID: <339eae2f.3527101@news.cl.trw.com>
Source record: 93358

In article <339664E5.ED473C05@connix.com>, Phil Fostini
<pfostini@connix.com> writes
>Does anyone have plans or information on were to buy or build a digital
>PL unit ? Even an explanation on how it works might due?

If you can get your hands on the May 1997 issue of _RF Design_
magazine, on page 56 there is a tutorial on PLL system design, which
assumes some knowledge of PLL basics. An excellent treatment of PLL
design can be found in Motorola application notes AN535, AN827, and
AN1207. AN535 contains a very good introduction. These can probably
be gotten from Motorola via their web page.

-tom KC8GFQ

---

Thomas LeMense * Sr. Project Engineer
TRW Automotive Electronics Group
Farmington Hills, Michigan facility
810.615.7822 * 810.478.7241 fax
internet: lemenst@fhsmtp.fh.trw.com

## 249. Heath replacement parts????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Todd <tboyer@erols.com>
Message-ID: <339EBBD9.3D83@erols.com>
Source record: 93359

Thanks for reading this post.

I have a HEATH SB-104A. I snapped it on the other day, just for GP, and noted no power to the radio. After some investigation I found that I have blown a power transistor Part(417-162) or MHT-9210. I have been unable to find a replacement for this part locally. Does anybody know of a source or suitable replacement? There are a pair of these mounted on the main chassis.

thanx for any help

todd
tboyer@erols.com

## 250. Engineers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: egb <emilgborys@worldnet.att.net>
Message-ID: <01bc767c$26e511a0$5dc392cf@egb.martinauto.com>
Source record: 93360

IMMEDIATE Openings for Controls Engineers and an AUTOCAD Professional

Martin Automatic, Inc., is a machine tool OEM with excellent benefits and competitive salary. We employ over 250 people, have been in business over 30 years, and do business internationally. We have an informal and cooperative work place atmosphere.

Machine controls design to customer specs. Vector, servo drives from various mfgs.; PLCs from various mfgs.; dedicated controllers of our own mfg.; pneumatics; etc. If you like to be exposed to a variety of challenges, this is the place for you!

My departments consist of: Electrical Engineering; Lab (R&D, assembly, electronics repair); Electrical Panel Assembly; Network&Internal Data Systems; Programming (dedicated micro-controllers and company IS systems). I am always interested to speak with bright, capable people that can contribute to Martin Automatic's future.

If you have any questions or would like to schedule an interview, please feel free to contact me, 815-654-4800 or emilgborys@worldnet.att.com. I conduct interviews myself, not through a personnel dept., and I will notify you of the results promptly and in person.
Emil Borys

## 251. Re: How do I connect HTX 202 to a MFJ 1278 TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: mulveyr@ll.aa2ys.ampr.org
Message-ID: <5nmiqi$1i2g$1@node2.frontiernet.net>
Source record: 93361

On 11 Jun 1997 13:47:32 GMT, Allan Begg <begg@metraplex.com> wrote:
>I need help in connecting an HTX 202 to a MFJ 1278 TNC.
>The TNC has the following leads coming out:
>
>GND
>SPEAKER
>MIC
>PTT
>
>How do I connect the PTT into the HTX Mic Jack along with the audio?
>
>Any help would be appreciated. Thanks, Allan Begg ( begg@metraplex.com )
>Please e-mail response directly.
>

Use the wiring diagram for the IC-2A ( or just about any other "leaky PTT"
HT, actually. ) You may need to change the value of the resistor to get it
to key correctly.

- Rich

--
Rich Mulvey
mulveyr@frontiernet.net Rochester, NY USA
http://www.frontiernet.net/~mulveyr
Amateur Radio: aa2ys@amsat.org, aa2ys@wb2wxq.#wny.ny.usa

## 252. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5nml7b$16i@sjx-ixn7.ix.netcom.com>
Source record: 93362

In <01bc75ea$8195b380$35f135ce@hammer.stonewest.com> "Dave VanHorn"
<dvanhorn@127.0.0.1> writes:
>
>
>> > also uses a 200 amp dc Leece Neville alternator to power his
driver
>amp,
>> > which is 2 X
>> > 2SC2290's driving 8 X 2SC 2879's, this is why we lowly cber's
laugh at
>> > most hams.
>>
>
>And he still dosent' get that when the band isn't open, you aren't
going
>anywhere no matter how much power you run. (which is why hams
>laugh at CB'ers who think that physics dosen't apply to them, just
>because they don't understand it)

There is a yahoo in Las Vegas who claims 5KW and he uses a phased array
pointed right at the cab of his pickup truck. The real fun is this guy
is an Amateur Extra. That darn code filter failed again.

Jerry
>

## 253. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <339EF36D.1606@HP.com>
Source record: 93363

Nathan Gordon wrote:
>
> Hello All,
>
> I have built several kits, receivers, etc. Presently I am working on
> finishing a 2 meter kit from Ten Tec. I am wondering if anyone here has
> any suggestions for a completely home-brew project? I would like to build
> an HF CW transceiver from scratch. No circuit board, parts packages, etc.
> Does anyone have any suggestions on a first project??
>
> Thanks,
> 73, de KF9LI
> Nathan
> nathang@bigfoot.com

Hi Nathan OM,

I strongly suggest getting a copy of QRP CLASSICS from ARRL. In there
you will find a wealth of information
on simple TX and RX. Also, "Solid State Design for the Radio Amateur"
is an excellent resource, and much of it
is timeless too. Do not assume that one-off projects need PC boards. I
use ugly construction. You are going
to want to make modifications as you go along, and PC board layouts do
not lend themselves well to this, plus
they require parts that are the right size and shape as the original
design. Too constraining.

73 and GL,
Don, W6JL

## 254. Re: Help! Need to find mini-tungsten lightbulbs for wattmeter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <339EF4FA.22EF@HP.com>
Source record: 93364

L. DE BRUIJN wrote:
>
> I'm looking for some (2+) miniature lightbulbs for an accurate
> (10microwatt), widerange(HF-500MHz), lowcost wattmeter project described in
> an old magazine. It uses two miniature (T3/4 size) tungsten lightbulbs each
> at 5V drawing .02A (giving +-0.1W output) as bolometers. It lists the
> manuafacturer as Chicago Miniature but I can find no trace of them on the
> web, the article dates from early '70s. If anyone could help me I'd be very
> thankful. TIA
>
> 73 de Laurens RS171840

Hi Laurens OM,

Chicago Miniature is in business; I have a catalog in front of me.
Chicago Miniature
1080 Johnson Drive
Buffalo Grove, Illinois 60089
tel 708 459 3400

They might also have a Web Page. Have you looked?

73,

Don, W6JL

## 255. Re: Help! Need to find mini-tungsten lightbulbs for wattmeter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <339edabf.16049265@news.atl.bellsouth.net>
Source record: 93365

On Wed, 11 Jun 1997 12:39:23 +0100 (BST), CBS5LD@leeds.ac.uk (L. DE BRUIJN) wrote:
>I'm looking for some (2+) miniature lightbulbs for an accurate
>(10microwatt), widerange(HF-500MHz), lowcost wattmeter project described in
>an old magazine. It uses two miniature (T3/4 size) tungsten lightbulbs each
>at 5V drawing .02A (giving +-0.1W output) as bolometers. It lists the
>manuafacturer as Chicago Miniature but I can find no trace of them on the
>web, the article dates from early '70s. If anyone could help me I'd be very
>thankful. TIA
>
> 73 de Laurens RS171840

Chicago Miniature is a major manufacturer of indicator lamps. Their products
are carried by most major distributors in the US. Try Newark Electronics. Note
that there are Far East copies of most of their line available at lower cost. Again,
most major distributors will have them.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 256. Writers/Seeking/Publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Litagent@ibm.net
Message-ID: <5nn0q3$ids$917@news.internetmci.com>
Source record: 93366

We are the International Literary Agency of New York. We also have 2
other branches, one in the Lake George region of New York and the
other in Marco Island, Florida, consequently we are able to accept new
clients. Please adhere strictly to the following guidelines for submission
of all fiction & nonfiction.
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Woodside International Literary Agency
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Woodside, New York 11377
(718) 651-8145

Please do not send in complete manuscript unless invited.

## 257. Looking for Heathkit SB-400 manuals/parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: tfh
Message-ID: <339f010e.67351845@news.primenet.com>
Source record: 93367

Does anyone know where I can get the manuals mainly for this unit. I was given this from a friend, and it doesn't have a mike, key, or anything. Just a xceiver unit and a very large amplifier unit. Before playing with it, I need to see how to wire up a mike to it. If anyone can help obtain a source for the user/service manuals on this unit I would greatly appreciate it.

Thanks.

KC7VVG

- TFH -

Spam Stopper -
Remove [] from email address to reply via email!

## 258. Re: Help! Need to find mini-tungsten lightbulbs for wattmeter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: dunnt@cco.caltech.edu
Message-ID: <dunnt-1106971317060001@tom-dunn.caltech.edu>
Source record: 93368

In article <5nm2po$8l4_001@leeds.ac.uk>, CBS5LD@leeds.ac.uk (L. DE BRUIJN) wrote:

> I'm looking for some (2+) miniature lightbulbs for an accurate
> (10microwatt), widerange(HF-500MHz), lowcost wattmeter project described in
> an old magazine. It uses two miniature (T3/4 size) tungsten lightbulbs each
> at 5V drawing .02A (giving +-0.1W output) as bolometers. It lists the
> manuafacturer as Chicago Miniature but I can find no trace of them on the
> web, the article dates from early '70s. If anyone could help me I'd be very
> thankful. TIA
>
> 73 de Laurens RS171840

Sylvania/GTE list a T-3/4 bulb 5.0 volt .021 amp with wire terminals. the part number is 2AS15. Chicago Miniature list 5.0 volt at .06 amp #6833 and 5.0 volt at .0115 amp #7153 The Chicago minis are listed in Newark catalog. Not the Sylvania though. The cost per lamp is $12 to $16. OUCH!

73 Tom WB6IQD dunnt@cco.caltech.edu

# 259. Re: CIRCUITS GALORE !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <339EA7DC.4FCC@sj.bigger.net>
Source record: 93369

Harry Lythall (SM0VPO) wrote:
>
> Yep, I have loads of circuits on my homepage:
>
> http://user.tninet.se/~acz732k/
>
> This page will be updated weekly (about) with new
> projects and data. There are about 50 projects at
> the moment (excluding the other brewing) and there
> are plenty more that I have to find the time to
> 'digitize'.
>
> I have had several requests for sending my project
> files over mail, but this takes an eternity as some
> projects have several files. I have therefore included
> a 'DOWNLOAD' section where you can download them all
> in a single 300K ZIP file. If you want to use them
> for your club magazine, projects etc. then please be
> my guest - download them all. I only ask that the info
> is given freely and without cost.
>
> Hope you enjoy the homepage, and have fun with QRP
> although my page is not 100% dedicated to QRP.
>
> 73s de Harry
Thanks Harry, I'll use some of your circuits in my electronics class
next fall as projects.

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

## 260. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <339EC937.4CFB@atl.org>
Source record: 93370

Nathan-

Tube stuff.

Big parts you can see and not worry about overheating with the soldering
torch.

Regen receivers.
One tube transmitters.

You'll be amazed at how well this old stuff works.

1) Check Brians web site http://www.mnsinc.com/bry/hamfiles.htm
he has links to other tube based stuff too.

2) Check glowbugs mailing list. Send mail to majordomo@www.atl.org with
help
as the only thing in the message body. You will receive instructions.

-bob
wb4mnf

## 261. Homebrew on packet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5nn35c$3ah$1@pommac.tninet.se>
Source record: 93371

QRP project files may be accessed automatically from G0TLA's QRP 'PMS' on Packet radio. Ron has religiously maintained a directory of QRP circuits + antenna projects. The following procedure describes how you access the information on Packet Radio. Access requies NO human intervention, guaranteeing an instant response from Rons server. The text beginning with > is a packet command & assumes that you are connected to your local BBS.

---

To request a DIRECTORY LIST use the "SP REQDIR" command:-

> SP REQDIR@G0TLA.GB7NND.#23.GBR.EU
> QRP@*****
> /EX (or ctrl-Z)

Sends a DIR listing of \QRP directory. ***** is your own BBS.

---

To request a 7PLUS ENCODED FILE use the "SP 7PSERV" command:-

> SP 7PSERV@G0TLA.GB7NND.#23.GBR.EU
> QRP\SWR-PWR\SWR-PWR.GIF@******
> /EX (or ctrl-Z)

Sends a 7PLUS encoded file of "SWR-PWR.GIF". All files in a project are
contained a single PKZIP, which may be accessed by using the "SP 7PSERV" command. ****** is your own BBS.

---

To request a TXT FILE with the "SP REQFIL" command:-

> SP REQFIL@G0TLA.GB7NND.#23.GBR.EU
> QRP\SWR-PWR\SWR-PWR.TXT@SK5BKI
> /EX (or ctrl-Z)

Sends the file "SWR-PWR.TXT". REQFIL may ONLY be used for TXT files. ****** is your own BBS.

---

Note that Wildcards ("*" etc.) are NOT allowed.

I think Ron deserves praise for his voluntary efforts, so if you do use his PMS then I am sure he would appreciate the odd message of thanks. His packet address is

"G0TLA@G0TLA.GB7NND.#23.GBR.EU"

---

Projects and files available at the time of writing this page are listed below - note the directory structure. If you do

request a download the ZIP file you will get ALL the TXT and
GIF files for that project. Projects usually have the same
name as the directory

e.g. 1TUBETX.ZIP is found in the directory \ file:

C:\QRP\1TUBETX\1TUBETX.ZIP

It is worth requesting a 'REQDIR' listing of his QRP\ANTENNA
directory as many active constructors have submitted antenna
for Ron to put on his PMS.
---

QRO\SPARKY - Spark-gap transmitter. Fun from INTERNET 3 files
QRP\160RXMOD - Convert cheap AM radio - 160m. SSB/CW. 4 files
QRP\1TUBETX - Single valve TX (battery valve egDL91). 3 files
QRP\250MWTX - 250mW HF TX with 3W PA stage, for 7MHz. 4 files
QRP\2TUBETX - 7 watt TX using most 6.3/250v Pentodes. 3 files
QRP\317-TX - Experiment. Use voltage regulator as TX. 3 files
QRP\5W-TX1 - Low component CW TX. Uses: 1xNPN+1x7400. 3 files
QRP\ANTENNAS\SHORTANT - Short HF antenna for QRP use.10 files
QRP\ANTENNAS\CRATEANT - Antenna using packing crate. 3 files
QRP\BALCANT - An antenna for appartment dwellers. 3 files
QRP\BUG - Simple VHF/10M FM transmitter (Pw= 1mW). 3 files
QRP\CAVITYRX - VHF/UHF NBFM crystal radio RX simple!. 3 files
QRP\CIGAR-RX - Reprint of Cigar Box RX from PW, 1953. 4 files
QRP\CIGAR-TX - Reprint of Cigar Box TX from PW, 1953. 4 files
QRP\FILT2 - Self tuning AF filter, for CW reception. 3 files
QRP\FM-TX1 - Single crystal FM TX covers 145-146 MHz. 4 files
QRP\GDO-1 - Pocket size G.D.M. (coils in suit-case). 4 files
QRP\GEN.ZIP - Signal Generator. No frills, no menus. 2 files
QRP\IC-RX1 - HF bands RX, using CA3123E (AM/SSB/CW). 4 files
QRP\PCB - Simple methods of making PCB's, for QRP. 4 files
QRP\P-SSB\P-SSB - Phasing type SSB transmitter. 4 files
QRP\Q-MULT - Q-multiplier - for RX-CONV and 160RXMOD. 3 files
QRP\QUICK-RX - Using test gear in the shack as HF RX. 3 files
QRP\REGEN-RX - Kid's stuff very surprising performer. 3 files
QRP\RECEIVER - Synth /VFO HF receiver for LF band. 6 files
QRP\RF-POWER - Estimating low (QRP) RF power TX's. 3 files
QRP\RX-AF - NOTCH and CW filters improve simple RXs. 4 files
QRP\RX-CONV - Convert cheap AM radio to SSB HF bands. 6 files
QRP\SIMPLE-K - Simple key/keyer to build into QRP TX. 4 files
QRP\SSB-TX1 - All transistor QRP HF SSB TX. 1.5w o\p. 5 files
QRP\STEREOCW - Brings weak QRP CW stations from QRM. 3 files
QRP\SWR-PWR - Wattmeter from 1.8MHz-450MHz.1/10w FSD. 3 files
QRP\VALVEPSU - Get 6.3vAC and 250vDC - home/portable. 4 files
QRP\ZN414-RX - HF/VHF AM(FM) RX based on ZN414 IC. 6 files
---
Have fun, de HARRY, SM0VPO, Upplands Vasby, Sweden.
---
Many (but not all) these projects are on my homepage:

http://user.tninet.se/~acz732k/

## 262. Re: 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5nkrnn$pgi$3@nadine.teleport.com>
Source record: 93372

In article <339DA8B9.1450@qsl.net>, Ed Loranger <we6w@qsl.net> wrote:
>I have a whole bunch of the 4416's at home. Are they
>better or worse than the mpf-102's?
>
>-Ed Loranger

Better, in that their specifications are tighter. (For example, the 2N4416 IDSS is specified as 5-15 mA, a 3:1 range. The MPF102 is 2-20 mA, or 10:1.) I wouldn't be surprised if 2N4416's are selected from the same dice MPF102's come from.

Roy Lewallen, W7EL

## 263. Antenna separation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <339F32FF.3291@Bledsoe.net>
Source record: 93373

I would like to try out my MASTR II repeater, Can I use 2 antennas, since I don't have duplexers yet? If so, what kind of vertical separation do I need on them. Also, anything other information that I've forgotten to ask on the subject.

Sam KF4GQS

## 264. antenna separation addition

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <339F342F.5B52@Bledsoe.net>
Source record: 93374

Sorry,
I should have added that it is a 2 meter repeater.
Sam KF4GQS

## 265. Re: Fire Dept Taking radio Bids

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Ramrod <Ramrod@lords_.com>
Message-ID: <339F7FA4.DEF663CD@lords_.com>
Source record: 93375
Cross-posted to: misc.emerg-services,rec.radio.amateur.homebrew,rec.radio.swap

Your going to have to do a better post than this sonny. The readers will
beat
you up if your not more specific....

Stanley Koontz wrote:

> Hello
>
> My local Volunteer Fire Dept. is taking bids for UHF Radios with
> following
> specs;
>
> 3 - Mobiles - >8 ch - 35 Watts or greater
> 5 - Handhelds
>
> Any bids appreciated.
> --
> Stanley Koontz BS
> stush@toolcity.net

## 266. Writers/Seeking/Publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Litagent4@ibm.net
Message-ID: <5nn7rq$nke$917@news.internetmci.com>
Source record: 93376

We are the International Literary Agency of New York. We also have 2
other branches, one in the Lake George region of New York and the
other in Marco Island, Florida, consequently we are able to accept new
clients. Please adhere strictly to the following guidelines for submission
of all fiction & nonfiction.
Fiction: Brief synopsis, first chapter, self-addressed, stamped envelope (S.A.S.E.)
Nonfiction: Brief synopsis, first chapter, S.A.S.E.
Screenplays: (for TV & Movies) Brief synopsis, first 20 pages, S.A.S.E.
Short Stories: Brief synopsis, first 3 pages, S.A.S.E.
Poetry: Send in 3 of your best poems only, S.A.S.E.

Woodside International Literary Agency
1190 North Collier Blvd.
Marco Island, Florida 34145
(941) 642-9660

Please do not send in complete manuscript unless invited.

## 267. Neon lamp 180 meter QRP Xmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Matthew Kleinmann <matthew@bigdog.geo.cornell.edu>
Message-ID: <339F0B2E.3F54BC7E@bigdog.geo.cornell.edu>
Source record: 93377

I should just try this but on the off chance that someone already has..
Can you get a neon lamp relaxation oscilator to run between 1.8 and 2
Mhz? If you cover the lamp and keep it away from your hand and body,
how stable is it? That picture of the little QRP transmitter in the
ARRL handbook based on a TTL gate has gotten me thinking....

--Matthew

## 268. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-11 00:00:00 UTC
From: Mark Brown <kb0pyo@starpoint.net>
Message-ID: <339EC32A.6C09@starpoint.net>
Source record: 93378

> 
> Grid drive should be monitored with a hold-type peak detecting
> indicator that warns you when control grid voltage starts to exceed
> allowable values.
> 
> This 50 ohms grid resistor non-sense that's been published lately is a
> bad idea. Use an L pad or catode drive the tube. Design the PA so
> your exciter is nearly at full rated drive, it will have the best IMD
> performance then.
> 
> 73 Tom

Hi Tom
Why is it non-sense to use a 50 ohm resistor in the grid circuit?
Mark
ps: I am looking for a simple method of driving a 4cx800.

## 269. Help identifying GE preamp transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: gkd@bigwpi.WPI.EDU
Message-ID: <5nq27l$mav$1@bigwpi.WPI.EDU>
Source record: 93257

I have a GE VHF helical reasonator preamplifier salvaged from an old mobile 2-way radio which I'm trying to find a replacement amplifying transistor for. It appears to be late 60s vintage; is a rectangular copper housing about 5" X 1.25" X 1.5" with the number PL19C300428G2 stamped on the side. There are three helical reasonators on the input and a trimmer on the output circuit.

The blown transistor is a PNP with a 4th lead attached to the case, and contains the following markings: Philco 300037-4 1J3 6250. It plugs into a socket through a small hole in the unit's housing. If anyone is familiar with this device and can suggest a suitable replacement transisistor, I'd like to try to get it working.

Greg Doerschler, N1DEM
gkd@wpi.edu

## 270. Re: Prescaler chip??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <33A0E1B4.5CD4@aade.com>
Source record: 93258

Jim wrote:
>
> In article <339a9545.839498@news.protocom.com>, jvr@pclink.com says...
> >
> >Hi,
> >
> >Anybody know the number and availability of a good prescaler I.C. for
> >an old freq counter? This counter only goes to 30 MHz and I would
> >like to extend it to 300 MHz.
> >
> >Thanks,
> >
> >Bob
> >
> Yes, a RCA CA3179.
> It is a divide by 64 or 256 and is good up to 1.25ghz although I have
> got it the read 2.1ghz at .5mw into a Heathkit 2410 counter.
>
> WG0D jstanisi@isd.net
Motorola has some nice ones from 225MHz to 3.5 GHz in 8 pin
DIPs. They are the MC120XX series. check there web site.
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

## 271. WTB: surplus magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: "W. Worley" <worley@snowhill.com>
Message-ID: <33A0EE67.5519@snowhill.com>
Source record: 93259
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

Want surplus #25 magnet wire, at least 3 or 4 lbs, not over $2/lb. Will buy #24 and #26, up to 10 lbs, not over $2/lb please. May need other sizes in future. Email or call 334-347-5281.

## 272. Re: Fire Dept Taking radio Bids - More Details

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: sig@file.com
Message-ID: <33A0B1D7.2A3D@file.com>
Source record: 93260
Cross-posted to: misc.emerg-services,pa.forsale,pgh.forsale,rec.radio.amateur.homebrew,rec.radio.swap

Stanley Koontz wrote:
>
> Since I received tons of e-mail to be more specific here it is:
>
> 3 Mobiles needed:
> UHF 450Mhz to 470 Mhz
> Need PL and common repeater offsets.
> Can be dash or head mount.
> Power 35 Watts or greater.
> Looking for 8 Channels or greater (prefer 16 or >)
> Any brand is ok. Best price and reliability wins.
> Simple is better. The less buttons the better.

I guess I got duped on this one... I thought they were UNLOADING
equipment.

Price and reliablity wins eh? Are you going to buy from halfway across
the nation to save a few dollars? Better find a GOOD radio dealer in
your area that supports their lines of equipment with service and parts
before you start taking bids from all over the country. Your loacal
repair/dealer wont do you any favors when he finds you bought from out
of state to save $10!

Tim Hynde - KA8DDZ - hynde@flash.net
Equipment NorCal 40A, NorCal 38 Special, Dipoles

## 273. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: sig@file.com
Message-ID: <33A0B539.1E67@file.com>
Source record: 93261

Dave VanHorn wrote:

> I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
> Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..
> Using a radio shack discone with a CB, amp and tuner.. (Talk about
> an interference generator!)
>
> I might go ahead and do it.

Mounting two 1/4 antennas one 1/4 apart doesn't change your radiation
pattern?
Is the difference of 2 ft. that critical?
--

Tim Hynde - KA8DDZ - hynde@flash.net
Equipment NorCal 40A, NorCal 38 Special, Dipoles

## 274. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <33A02FEC.701C@idecc.com>
Source record: 93262
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

Web Williams wrote:
>
> I'm a ham operator, and I use relatively high power levels (>1500 watts)
> on many different frequencies.

Do you have the problem running 100 watts? How about 375 watts?
At 375 watts you only loose 1 S-unit of signal strength.

Tim, ka8ddz

## 275. Power Connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Ben Wallace <bwallace@sd.cts.com>
Message-ID: <01bc76c4$f2c69760$749a2e81@bwallace.qualcomm.com>
Source record: 93263

I am having trouble locating the molex plug (power supply side) that plugs into most modern HF transceivers such as the IC-738, Kenwood, ect....

The molex connector has 6 pins.
On the top row of the molex connector the middle terminal is keyed---flat side facing up.
On the bottom row of the molex connector the two end terminals are keyed---flat side facing out.

I have searched and searched but cannot find a good part number nor source of supply.
I refuse to pay 29.95 for a pre-fab power cable with the connector attached (ICOM Price).

Hopefully, some of you folks have had the same problems and can provide an answer for all.

Thanks.
Ben -- WB8HUR

## 276. Re: HAM equipment for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Larin <larin@blueriver.net>
Message-ID: <01bc76b1$3ace0340$a2fe35ce@larin>
Source record: 93379

Hi.

I was wondering what your Email address was..... What kind of RS HT is it?

larin@blueriver.net

Super-Gut <mgutter@iglou.com> wrote in article <EBLIEF.HM8@iglou.com>...
> I am selling the following:
>
> note: I bought this equipment less than a year ago, never got my
> license and now I need the money to support another expensive hobby of
> mine!!! The point is that this equipment was NEVER used, each piece
> is still in its box with manuals!!!!
>
> I am now selling this equipment piece by piece!!!!!!!!!!!!!!!!!!!!!!
>
> Free shipping in the USA!!!!!!!!!!
>
>
> - Realistic 2 meter handheld transceiver, case, and Tucker mobile
>
> antenna = $175
>
> - RF Concepts 30 watt power amp = $100
>
> If you live in the Louisville, KY area, we can arrange to see the
> equipment or you can pick it up!
>
> email if interested,
> Super-Gut
>
>

## 277. Re: What voltage to float deep-cycle RV batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5nnrvh$3h@cletus.bright.net>
Source record: 93380

WOW....CAPITAL LETTERS IMPLY SHOUTING???? DON�T BE SO SENSITIVE.
PURPOSE OF THE CAPITAL LETTERS IS TO DIFFERENTIATE THE ANSWER FROM THE PREVIOUSLY WRITTEN TEXT. COME ON GUYS!!!.

DE NORM N8RGR

## 278. Q?, how to make a split stator cap, 30 kV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Peter Shintani <shintani@tv.sony.co.jp>
Message-ID: <01bc76f5$f5ec4b20$6103022b@dell-for-peter>
Source record: 93381

Hi:
I am thinking of building a very high voltage
split stator capacitor for my loop antenna.
My 5kV vacum cap probably won't work safely
above 100W on my magnetic loop antenna.
The ARRL handbook mentions required voltage
ratings aroudn 30 kV. Has anyone been
successful at homebrewing a high voltage
split stator capacitor for a magnetic loop antenna ?
I know I can look up the dielectric strengths of
air, and other insulator material, but does anyone
have any real experience with the unseen
problems of working with high voltages.
I don't know what sort of shape to cut the
capacitor plate, to make the tuning linear, and
or to reduce the chances corona discharge, etc.
P

## 279. Re: Prescaler chip??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: xxx@xxx.net
Message-ID: <339f8d2d.0@news.isd.net>
Source record: 93382

In article <339a9545.839498@news.protocom.com>, jvr@pclink.com says...
>
>Hi,
>
>Anybody know the number and availability of a good prescaler I.C. for
>an old freq counter? This counter only goes to 30 MHz and I would
>like to extend it to 300 MHz.
>
>Thanks,
>
>Bob
>
Yes, a RCA CA3179.
It is a divide by 64 or 256 and is good up to 1.25ghz although I have
got it the read 2.1ghz at .5mw into a Heathkit 2410 counter.

WG0D jstanisi@isd.net

## 280. Re: Prescaler chip??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5noqve$eke$1@flood.weeg.uiowa.edu>
Source record: 93383

95H90 or 11C90 10:1 scaler

john
WA0VYZ

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

## 281. Re: MAX 294

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <339FED31.7782@up.net>
Source record: 93384

Gino wrote:
>
> Hi,
>
> I'm search the MAX-294.
> Where can I order this IC and how many I have to order.
>
> Thanks to help, send e-mail to GINO.VDS@DEBCOM.BE
> 73's de on1dan (Gino)

You may get a free sample from:
http://www.maxim-ic.com/intro.html

## 282. Homepage updated with loads of links (33Kb)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: erwin.cremers@ingram.nl
Message-ID: <5notot$m24$1@news.Kijfhoek.NL.net>
Source record: 93385
Cross-posted to: alt.military.collecting,rec.antiques.radio+phono,rec.audio.tubes;rec.radio.amateur,rec.radio.amateurboatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Check out the new updated link section on my homepage.

There are Links to : Army/Navy communication
Surplus
Tube information
Homebrew / QRP
Boatanchors/Vintage radio

equipment
Privat Collections and Museums

There are also pictures of my boatanchors.

Check it out ans please let me know what you think, there is a return
form in my main page.

Thanks,

Erwin Cremers

```
____
| |
//////////\\\\\\\\\\
| Erwin Cremers |
| PE1MGR |
| Dutch Radio Operator |
\\\\\\\\\\//////////
|____________________|
______|Check my homepage at|________
|www.geocities.com/capecanaveral/4312|
|------------------------------------|
\----------------------------------/
|_| |_| |_| |_|
```

## 283. Re: Q?, how to make a split stator cap, 30 kV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: gelleric@goethe.informatik.uni-stuttgart.de
Message-ID: <5nou63$8i8@zdi.informatik.uni-stuttgart.de>
Source record: 93386

In article <01bc76f5$f5ec4b20$6103022b@dell-for-peter>, "Peter Shintani"
<shintani@tv.sony.co.jp> writes:
|> Hi:
|> I am thinking of building a very high voltage
|> split stator capacitor for my loop antenna.
|> My 5kV vacum cap probably won't work safely
|> above 100W on my magnetic loop antenna.
|> The ARRL handbook mentions required voltage
|> ratings aroudn 30 kV. Has anyone been
|> successful at homebrewing a high voltage
|> split stator capacitor for a magnetic loop antenna ?
|> I know I can look up the dielectric strengths of
|> air, and other insulator material, but does anyone
|> have any real experience with the unseen
|> problems of working with high voltages.
|> I don't know what sort of shape to cut the
|> capacitor plate, to make the tuning linear, and
|> or to reduce the chances corona discharge, etc.
|> P
|>

Hi Peter,

The problem is that you will need a quite large gap between the plates
in order to get a voltage rating of 30kV. As the capacity decresases
when the gap becomes larger, you would need more and/or larger plates
so the whole capacitor would be _large_. I think, a better idea is to get
a vacuum capacitor which a higer voltage rating. 5kV is the lowest rating
available from Jennings, and they make capacitors for up to 65kV or so.

By the way, 30kV sounds very much... perhaps you can try and increase
the size of you loop. lambda/3 is the maximum value possible as larger
loops become self-resonant due to the loop's stray and distributed
capacity. Increasing the loop is also advantageous as this increases
the antenna's radiation resistance, too (which is quite low in for
small tuned loops). And, according to theory, the voltage is lower when
you have a large loop and a small capacitance.

73, Wolfgang DJ3TZ

## 284. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Nathan Gordon <nathang@bigfoot.com>
Message-ID: <01bc7740$58629800$dff489cc@Sheaffer.mcs.net>
Source record: 93387

Thanks to everyone for their help and suggestions. I am going to get a copy of Solid State Design for Radio Amateur, and a couple of other books. I am collecting parts for the pixie 2 that someone mentioned and hope to have that working in a weekend or so.

Thanks again, I really appreciate the help. Hopefully I will see some of you on the air someday.

73,
de KF9LI
Nathan
nathang@bigfoot.com

## 285. CQ VP-20BL PA Module?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: john.c@btinternet.com
Message-ID: <5np34k$hkt@neon.btinternet.com>
Source record: 93388

I have an FTV707 2 metre transvertor with a blown PA module type VP-20BL, part number G1090216. I have tried to get hold of one of these modules from many emporiums but with no success. Can anyone help please?

John

## 286. Lookin' fer a part

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: "Stan Labinsky Jr." <u1004786@warwick.net>
Message-ID: <33A00D4B.660A@warwick.net>
Source record: 93389

I'm looking for a source of the Stag 455-4-lug IF transformers. The standard ones found in the All American Gutless Wonder 5 tube table radios, the AD/DC types with the 50C5, 35W4, etc. tube lineup. Must be the chassis mountable type, the ones that installed with the "U" shaped brass colored hold down clip. Naturally equivalent units would be fine... I bought up all the ones at our local radio/tv parts store/museum. Theirs were made by J.W.Miller... BTW. does anybody have an Email address for Miller or Stag, if Stag still exists?
Thanks for any help... Stan. Oh, please respond to the Email address, thanks.

## 287. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Dave VanHorn <dvanhorn@127.0.0.1>
Message-ID: <01bc774d$bf790da0$25f135ce@hammer.stonewest.com>
Source record: 93390

> There is a yahoo in Las Vegas who claims 5KW and he uses a phased array
> pointed right at the cab of his pickup truck. The real fun is this guy
> is an Amateur Extra. That darn code filter failed again.

Nothing's perfect..

I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..
Using a radio shack discone with a CB, amp and tuner.. (Talk about
an interference generator!)

I might go ahead and do it.

## 288. Need HTX-202 schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: "William D. Redfearn, Jr." <william.redfearn@nt.com>
Message-ID: <339FF08E.28EE@nt.com>
Source record: 93391

Need operator manual, service manual or schematic for the Tandy HTX-202
2 Meter HT.

Thanks - Dave.

==========
Dave Redfearn, Sr RF Engineer NORTEL RTP, NC.
Ph.(919) 992-3925 Email: william.redfearn@nt.com
QRL? de N4ELM/ qrp

All opinions are my own, no one else wants them.

## 289. 33cm (900 MHz) Antenna/Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: lui@netcom.com
Message-ID: <luiEBo9Bw.BM5@netcom.com>
Source record: 93392

I'm experimenting with 33cm (902-928 MHz) in hopes of putting up a voice repeater in the near future. I've been looking at what is commerically available (e.g. the Comet FP-19 or various Decibel Products Commercial antennas) and wanted to know if anyone had any good suggestions on constructing my own antenna.

Also, is constructing a 33cm duplexer feasible? I've worked with one ham who makes his own 70cm duplexers with good results.

Stephen
KY6K

## 290. Mega Power Mobiles! (Darwin was right) or was he?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <9vQgWLAcF$nzEwZK@two-way.demon.co.uk>
Source record: 93393

In article <5nml7b$16i@sjx-ixn7.ix.netcom.com>, Gerald Schmitt
<kc5egg@ix.netcom.com> writes
>In <01bc75ea$8195b380$35f135ce@hammer.stonewest.com> "Dave VanHorn"
><dvanhorn@127.0.0.1> writes:
>>
>>
>>> > also uses a 200 amp dc Leece Neville alternator to power his
>driver
>>amp,
>>> > which is 2 X
>>> > 2SC2290's driving 8 X 2SC 2879's, this is why we lowly cber's
>laugh at
>>> > most hams.
>>>
>>
>>And he still dosent' get that when the band isn't open, you aren't
>going
>>anywhere no matter how much power you run. (which is why hams
>>laugh at CB'ers who think that physics dosen't apply to them, just
>>because they don't understand it)
>
>There is a yahoo in Las Vegas who claims 5KW and he uses a phased array
>pointed right at the cab of his pickup truck. The real fun is this guy
>is an Amateur Extra. That darn code filter failed again.
>
> Jerry
>>
>
Dave,
You should know the laws of physics never stand still,
Tesla told us that.
I'll also agree to dissagree with Jerry.
Recently myself and several other here in the UK have experienced some
unusual propagation on 160m, only experienced during daytime and with
two or more high powered stations (we operate full legal mobile) whereby
there is deffinately something up with our 'D' layer. There are short
bursts of very stong signals received at both ends of a two way, similar
to MS. The normal micky mouse op's hear this phenomenon but don't
experience it. Global warming???
Answers please on a postcard...

PS. I'll tell my friend up there in the windy city to auction off his
mobile cos you said it was'nt worth it.
I know what his answer will be.

73 de G4ZOW/M Phil. Life's too short for QRP.

--
philip de cadenet

## 291. Re: Want: Signal Tracer schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5npbe6$ivu@camel3.mindspring.com>
Source record: 93394

"Bob, Diane & Jeff Kinner" <rkinner@one.net> wrote:

>I'd like to build a signal tracer (AF is really all I need), but they
>just don't seem to be popular any more. Anyone have a schematic for a
>simple, solid state tracers? TNX, Bob AA8FH
>--
>I don't have mental illness; I'm a carrier.

I refer you to the ARRL HANDBOOK most any edition, test and
measurement section, where you may encounter anything from
a single transistor for an injector/tracer to a conversion of an
existing radio for the purpose.

Good luck.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

## 292. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1206970840580001@news.vcnet.com>
Source record: 93395

In article <339d5477.2521903@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Mon, 09 Jun 1997 11:45:23 +0200, Robert Ganter 3269
> <ganter*NOSPAM*@ens.ascom.ch> wrote:
> >
> >In the 1996 ARRL handbook they say something about:
> >bleeder resistor = screen voltage / (screen current + 15..20mA)
> >This would be 10 kOhm (and 16W...). A varistor to limit screen voltage
> >seems to be a must to protect the screen decoupling caps.
>
- I do not understand this statement.

> You still need a shunt regulator for SSB if you want good IMD
> perfromance.

IMO, a screen shunt-regulator has nothing to do with IMD, but it has
everything to do with the preventing destruction of the tube . Shunt
regulation is one of the two means of preventing potentially-fatal screen V
runaway due to reverse screen I.

>With a shunt regulator you don't need a bleeder, but the
> screen supply voltage has to be twice the screen operating voltage to
> limit screen dissipation in the case of abnormal conditions.

True enough. More R would be better. The most logical source is the
positive HV supply, which is typically about six times the screen v.

> >I was talking about the control grid. For the 4CX400 the control grid
> >voltage is -38V for normal operation and down to -60V to cut it off.
> >I just thought, that a series resistor to the grid supply would make the
> >control grid voltage to rise toward zero or even positive, which fully
> >turns on the tube.
>
> It's a good idea to keep the control grid supply impedance low, that
> way if you accidentally run a little grid current the bias won't shoot
> up and cause severe distortion.

Does it make sense that::
-1-. 'a little grid current' would 'shoot up' the bias V, cause a large
decrease in ZSAC, resulting in 'severe distortion'?
-2-. after adjusting an AB1 amplifier's grid bias V to prevent Zero grid
current, that the operator would decrease the grid bias V to cause grid
current?

I use a Class AB1 8169 amplifier. If I mis-adjust the bias V to a lower
amount, as the grid is over-driven, the DC grid V and DC grid current begin

to increase. However, as the DC grid V increases, grid I decreases, so the process is self-limiting and the sky does not fall, afterall.
>
.....snip.....
> This 50 ohms grid resistor non-sense that's been published lately is a
> bad idea. Use an L pad or catode drive the tube. ...snip...

Agreed--especially if an inductor is connect in series. I have also seen a published recommendation that a cathode RF negative feedback resistance (Rk) be used. Another solution is to use a broadband, bifilar step-down toroidal transformer and a 12.5 ohm grid terminating R. This is a more satisfactory solution than using large values of Rk to consume overdrive volts. To explain: Screen-to-cathode voltage has an exponential influence on peak emission. Let's say that the grid bias V is 50v and that the exciter produces 100 peak volts (100w-pep into 50 ohms). To prevent grid current, 50 peak v would have to be consumed across Rk. However, this 50v drop will also subtract 50v from the screen to cathode potential--which will simultaneously cause a (Esc1/Esc2)^3/2 decrease in peak cathode emission--which will offset the IMD benefit of RF-NFB.
- A possible workaround to this problem is the (untested) circuit shown in Figure 10 in *Amplifiers* at:
http://www.vcnet.com/measures
If the circuit works as I designed it, any voltage drop across Rk can not subtract from the screen to cathode potential.
Rich---

--
--Rich-- ---805-386-3734, ag6k

## 293. Re: plans for simple 6 meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33a0332a.0@lightning.ica.net>
Source record: 93396

hacker@flash.net wrote:

>I need the plans for an SMALL 6 meter amp.
>I only will be running about 12 watts in ssb, and only
>care for about 60 out <can turn the radio down> I really
>appreciate the help if possible.
>kd5amz

I have a schematic for an 80 watt amp for 6m.
e-mail me if you're interested.

73 de Hugh VA3TO

## 294. Re: Q?, how to make a split stator cap, 30 kV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <33A0555A.8C@HP.com>
Source record: 93397

Peter Shintani wrote:
>
> Hi:
> I am thinking of building a very high voltage
> split stator capacitor for my loop antenna.
> My 5kV vacum cap probably won't work safely
> above 100W on my magnetic loop antenna.
> The ARRL handbook mentions required voltage
> ratings aroudn 30 kV. Has anyone been
> successful at homebrewing a high voltage
> split stator capacitor for a magnetic loop antenna ?
> I know I can look up the dielectric strengths of
> air, and other insulator material, but does anyone
> have any real experience with the unseen
> problems of working with high voltages.
> I don't know what sort of shape to cut the
> capacitor plate, to make the tuning linear, and
> or to reduce the chances corona discharge, etc.
> P
>
Hi Peter,

30KV in air will require a plate spacing of about 1.2 inches (at 25 KV/inch)! You can easily calculate the plate area required from formulas in the ARRL handbook (at least the older versions; the newer ones may have been dumbed-down and some material deleted). It WILL be a big capacitor. I suggest you instead make the loop larger, as the radiation resistance will increase, Q will decrease, and consequently the voltage on the capacitor will also decrease.
Loops can be made up to 1/3 wavelength in circumfrence before becoming self-resonant (tuning capacitance = 0). See ARRL Antenna Book or Handbook for loop design equations.

GL and 73,
Don, W6JL

## 295. Balloon Launch Saturday!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: mai@iquest.net
Message-ID: <5npgeg$28c_038@news.iquest.net>
Source record: 93398

WINDTRAX BALLOON LAUNCH!!!

WindTrax 12 scheduled for liftoff this Saturday, JUNE 14, 1997

See WindTrax website for last minute details and realtime I-NET photos!

www.windtrax.org

Launch Date: June 14, 1997 (this Saturday!)
Time: Estimated @ 1200 UTC/0700 EST (Indiana local)

Location: Challenger Center, Harris Middle School, Brownsburg, Indiana
Elev ~ 800 MSL Lat 39.49.57N Long 86.23.58W

Crusing Alt: Max Alt estimated at 100,000 feet

FORECASTED TRAJECTORY & CLIMB TO 60,000 FEET:
A. 50 mile SE of launch site, while climbing to 100,000 feet, then decending to surface via
parachute
B. 1 hour to 60,000 feet, and 90 minutes to maximum altitude.

PRELAUNCH FREQ's:
Check-ins (HF) 3.860 to 3.870MHz WD9CXU/Dennis Local Talk-in
147.015/R N9KRS/Bob
NETS BEGIN AT 1145UTC/0645 Local
Balloon type: Kaymont 1500GR Parachute is 8 ft diameter custom made
by KB9BSV/Barb
Flight Packages on flight:
Crossband Repeater by W9DUU/Paul Bohr
2m rcvr to 6 m & 70 cm Xmtrs, with voice ID Nicad powered, half wave
vertical ant., 100mW
GPS/Packet by WB9HIS/Chuck Crist
Garmin GPS rcvr, controlled via Paccom Packet & TNC, dwn linked on 446.0
ATV by KT9B/Terry
CCD's - one B&W up-view, one color Horz. View, plus WB8ELK color
graphics board &downlinked on Wyman ATV xmtr via ' wave antenna
FLIGHT PACKAGE FREQ's:
Crossband Repeater - Dwn 52.525 & 444.85MHz (VP) 50 & 100mW Pout
UP - 144.3MHz (VP)
NOTE! PLEASE REMEMBER! VOICE ONLY ON THE CROSSBAND REPEATER!!!

GPS/Packet - Dn 446.00MHz @ 1200 baud packet (VP) 750mW Pout
ATV - Dn 439.25MHz (VP) 1.5W Pout

ALL AMATEURS WELCOME TO PARTICIPATE! WEB, FM, PACKET, ATV! JOIN THE FUN!

## 296. Balloon Launch Saturday!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: mai@iquest.net
Message-ID: <5npii1$19k_003@news.iquest.net>
Source record: 93399

WINDTRAX BALLOON LAUNCH!!!

WindTrax 12 scheduled for liftoff this Saturday, JUNE 14, 1997

See WindTrax website for last minute details and realtime I-NET photos!

www.windtrax.org

Launch Date: June 14, 1997 (this Saturday!)
Time: Estimated @ 1200 UTC/0700 EST (Indiana local)

Location: Challenger Center, Harris Middle School, Brownsburg, Indiana
Elev ~ 800 MSL Lat 39.49.57N Long 86.23.58W

Crusing Alt: Max Alt estimated at 100,000 feet

FORECASTED TRAJECTORY & CLIMB TO 60,000 FEET:
A. 50 mile SE of launch site, while climbing to 100,000 feet, then decending to surface via
parachute
B. 1 hour to 60,000 feet, and 90 minutes to maximum altitude.

PRELAUNCH FREQ's:
Check-ins (HF) 3.860 to 3.870MHz WD9CXU/Dennis Local Talk-in
147.015/R N9KRS/Bob
NETS BEGIN AT 1145UTC/0645 Local
Balloon type: Kaymont 1500GR
Parachute is 8 ft diameter custom made by KB9BSV/Barb
Flight Packages on flight:
Crossband Repeater by W9DUU/Paul Bohr
2m rcvr to 6 m & 70 cm Xmtrs, with voice ID Nicad powered, half wave
vertical ant., 100mW
GPS/Packet by WB9HIS/Chuck Crist
Garmin GPS rcvr, controlled via Paccom Packet & TNC, dwn linked on 446.0
ATV by KT9B/Terry
CCD's - one B&W up-view, one color Horz. View, plus WB8ELK color
graphics board &downlinked on Wyman ATV xmtr via ' wave antenna
FLIGHT PACKAGE FREQ's:
Crossband Repeater - Dwn 52.525 & 444.85MHz (VP) 50 & 100mW Pout
UP - 144.3MHz (VP)
NOTE! PLEASE REMEMBER! VOICE ONLY ON THE CROSSBAND REPEATER!!!

GPS/Packet - Dn 446.00MHz @ 1200 baud packet (VP) 750mW Pout
ATV - Dn 439.25MHz (VP) 1.5W Pout

ALL AMATEURS WELCOME TO PARTICIPATE! WEB, FM, PACKET, ATV! JOIN THE FUN!

## 297. F.S. - Tubes, radios, books, etc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970612203800.QAA06281@ladder02.news.aol.com>
Source record: 93400

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #528-T. - Approx. 100 new publication titles just added to the list.

## 298. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33a06455.0@cheese.pcug.org.au>
Source record: 93401

wmeara@erols.com (Bill Meara ) wrote:
>On 10 Jun 1997 18:28:48 GMT, "Nathan Gordon" <nathang@bigfoot.com>
>wrote:
>
>>Hello All,
>>
>>I have built several kits, receivers, etc. Presently I am working on
>>finishing a 2 meter kit from Ten Tec. I am wondering if anyone here has
>>any suggestions for a completely home-brew project? I would like to build
>>an HF CW transceiver from scratch. No circuit board, parts packages, etc.
>>Does anyone have any suggestions on a first project??
>>

Nathan:

Have a look at the QRP "Best Buys" section on the Australian QRP Home
Page (URL below). There's several suggestions on simple transmitters and
transceivers for the homebrewer. Also see the comments on equipment in
Novice Notes ONline. Both of these should give you a good start on what
to build.

73,

Peter VK1PK

--

----------
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
----------

## 299. Microwave oven tranformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: marty gunnarsson <marty@fia.net>
Message-ID: <33A083CA.7960@fia.net>
Source record: 93402

someone posted a few months ago about removing the magnetic shunt.what
is its purpose and why would you remove it thanks

# 300. ANTIQUE TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: "John P. Earl" <jpearl@interaccess.com>
Message-ID: <33A0AB8E.4C11@interaccess.com>
Source record: 93403
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.ham-radio.packet,alt.ham-radio.vhf-uhf,alt.ham-radio.packet,rec.antiques.radio+phono,rec.ham-radio,rec.ham-radio.swap

ANTIQUE TUBES FOR SALE

HAVE ONLY THE FOLLOWING TUBES LEFT.

ALL ARE TESTED FOR :

DYNAMIC MUTUAL CONDUCTANCE
INTERELECTRODE LEAKAGE AND SHORTS
GRID CURRENT
ALL TESTED GOOD

2EA 24A $3.50 EA
1EA 26 $4.00 EA
4EA 35/51 $3.00 EA
2EA 1V $5.00 EA

IF INTERESTED REPLY TO dearl@juno.com

## 301. Vac.Var.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: marty gunnarsson <marty@fia.net>
Message-ID: <33A09158.3C38@fia.net>
Source record: 93404

Can anyone tell me the voltage and cap ratings of a jennings vv-060-20
thanks marty@fia.net

## 302. Vac. Variable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: marty gunnarsson <marty@fia.net>
Message-ID: <33A09267.6E86@fia.net>
Source record: 93405

Can anyone tell me the voltage rating and min. and max capacitance of a Jennings VV-060-20 thanks marty@fia.net

## 303. Microwave oven transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-12 00:00:00 UTC
From: marty gunnarsson <marty@fia.net>
Message-ID: <33A09303.77C8@fia.net>
Source record: 93406

Someone posted a few months ago about removing the magnetic shunt from
the tranformer .Why and what is its purpose? thanks Marty@fia.net

## 304. Re: Microwave oven tranformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5nq6i4$2t8@lace.colorado.edu>
Source record: 93264

It's there as a current limit. If you short the secondary, the max.
current will be limited by this: all the extra magnetic field goes through
the shunt and NOT through the secondary, and the transformer is less
likely to burn out. OTOH it makes the voltage sag under load, which
results in poor performance for powering things like linear amps, in which
you want the voltage to hold steady. Fortunately for us hams, it's
easy to locate and knock out the shunts. What remains isn't a Peter Dahl
hypersil monster, but it won't cost you hundreds of dollars, either.

## 305. Fire Dept Taking radio Bids - More Details

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: Stanley Koontz <stush@toolcity.net>
Message-ID: <01bc77ab$67f5b480$45e90bd0@stargate20.sgi.net>
Source record: 93265
Cross-posted to: misc.emerg-services,pa.forsale,pgh.forsale,rec.radio.amateur.homebrew,rec.radio.swap

Since I received tons of e-mail to be more specific here it is:

3 Mobiles needed:
UHF 450Mhz to 470 Mhz
Need PL and common repeater offsets.
Can be dash or head mount.
Power 35 Watts or greater.
Looking for 8 Channels or greater (prefer 16 or >)
Any brand is ok. Best price and reliability wins.
Simple is better. The less buttons the better.

5 Portables needed.
UHF 450Mhz to 470 Mhz
Need PL and common repeater offsets.
Power 5 Watts
Will take price for any brand but HT-1000, Sabers, and Kenwoods prefered.
Looking for 8 Channels or greater (prefer 16 or >)
Simple is better. The less buttons the better.
The more rugged the better. They will be bounced !!!

I hope this helps. Please e-mail prices of units.

Thanks to all who already made suggestions on equipment.

--
Stanley Koontz BS
stush@toolcity.net

--
Stanley Koontz BS
stush@toolcity.net

## 306. ???SPEECH PROCESSOR CIRCUIT???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: kc5mbs@aol.com
Message-ID: <19970613084101.EAA10351@ladder02.news.aol.com>
Source record: 93266

Any tips on where to find a circuit design for a good speech processor/compressor?

# 307. Re: Help! Need to find mini-tungsten lightbulbs for wattmeter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5nr72f$8jo_002@leeds.ac.uk>
Source record: 93267

In article <339EF4FA.22EF@HP.com>, Don Huff <don_huff@HP.com> wrote:
>L. DE BRUIJN wrote:
>>
>> I'm looking for some (2+) miniature lightbulbs for an accurate
>> (10microwatt), widerange(HF-500MHz), lowcost wattmeter project described
in
>> an old magazine. It uses two miniature (T3/4 size) tungsten lightbulbs
each
>> at 5V drawing .02A (giving +-0.1W output) as bolometers. It lists the
>> manuafacturer as Chicago Miniature but I can find no trace of them on the
>> web, the article dates from early '70s. If anyone could help me I'd be
very
>> thankful. TIA
>>
>> 73 de Laurens RS171840
>
>Hi Laurens OM,
>
> Chicago Miniature is in business; I have a catalog in front of me.
> Chicago Miniature
> 1080 Johnson Drive
> Buffalo Grove, Illinois 60089
> tel 708 459 3400
>
>They might also have a Web Page. Have you looked?
>
> 73,
>
> Don, W6JL

Thanks,
I've found their webpage but I'm based in the UK and they are stupid and
don't list their UK address/dealer even though they say they have one! Nor do
they list a general email address (only one for ordering product info). I'm
looking through their site as I type, notheless I'll perservere...

73 de Laurens

# 308. Re: ???SPEECH PROCESSOR CIRCUIT???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33A12824.4787@crpl.cedar-rapids.lib.ia.us>
Source record: 93268

KC5MBS wrote:
>
> Any tips on where to find a circuit design for a good speech
> processor/compressor?

See Communications Quarterly magazine, Winter 1997 edition.

Bill W0IYH

## 309. Help!! 300MHz oscillator and mixer needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: hjerrild@post4.tele.dk
Message-ID: <5nrb8k$h3t$1@news.uni-c.dk>
Source record: 93269

Hi

I'm building my own scanner based on a UHF radio, but a lot a the interesting frequencies (e.g. Danish Police) is in the VHF band. Therefore I need this to move the VHF band up in the UHF band. I want to do that with a 300MHz oscillator and a mixer (Maybe a diode mixer) Does anybody have a good design idea for a 300MHz oscillator and mixer. A Schematic would be nice or even better a PCB drawing and schematic.

Response via e-mail very welcome.

Regards Karsten Hjerrild

hjerrild@post4.tele.dk

## 310. Pixie 2 information pointer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: Peter_Simpson@3com.COM
Message-ID: <852564B5.0043F1F7.00@hqoutbound.ops.3com.com>
Source record: 93270

The Pixie 2 files are available from:

ftp://ftp.lehigh.edu/pub/listserv/qrp-l/rigs/

pixie2.txt.Z
pixie2.ps.Z

They are in Unix "compress" form, so you will need
an uncompress utility. There is a postscript
schematic and a circuit description file.

I have built the Pixie 2 and it takes about an hour
if you build "ugly" and use a scrap piece of copperclad.
It works. It's simple. No NE602, just a couple of
2N3904 transistors, and a handful of discretes and
an LM386. It's a great starter rig and you don't
even really need to buy the kit.

Be warned, though, that it's a simple rig. Very
simple. No sidetone, crystal controlled and not
all that sensitive, but with a resonant dipole
or inverted vee (it's gotta be resonant) you can
copy lots of signals.

72,
Peter, KA1AXY

## 311. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33a15137.2634600@netnews.worldnet.att.net>
Source record: 93271

On Thu, 12 Jun 1997 08:40:58 -0700, measures@mail.vcnet.com (R. L. Measures ) wrote:

>
>True enough. More R would be better. The most logical source is the
>positive HV supply, which is typically about six times the screen v.

Once the unregulated screen supply voltage is two times the regulated voltage, you can never overdissipate the screen under any condition IF the regulator quiescent dissipation is set to equal the rated screen dissipation. Try it. Thevenin's equivalents work in linear dc circuits

Anything beyond perfect is still perfect.

73 Tom

## 312. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1306970432310001@news.vcnet.com>
Source record: 93272

In article <339d5477.2521903@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Mon, 09 Jun 1997 11:45:23 +0200, Robert Ganter 3269
> <ganter*NOSPAM*@ens.ascom.ch> wrote:
> >
> >In the 1996 ARRL handbook they say something about:
> >bleeder resistor = screen voltage / (screen current + 15..20mA)
> >This would be 10 kOhm (and 16W...). A varistor to limit screen voltage
> >seems to be a must to protect the screen decoupling caps.
>
- I do not understand this statement.

> You still need a shunt regulator for SSB if you want good IMD
> perfromance.

IMO, a screen shunt-regulator has nothing to do with IMD, but it has
everything to do with the preventing destruction of the tube . Shunt
regulation is one of the two means of preventing potentially-fatal screen V
runaway due to reverse screen I.

>With a shunt regulator you don't need a bleeder, but the
> screen supply voltage has to be twice the screen operating voltage to
> limit screen dissipation in the case of abnormal conditions.

True enough. More R would be better. The most logical source is the
positive HV supply, which is typically about six times the screen v.

> >I was talking about the control grid. For the 4CX400 the control grid
> >voltage is -38V for normal operation and down to -60V to cut it off.
> >I just thought, that a series resistor to the grid supply would make the
> >control grid voltage to rise toward zero or even positive, which fully
> >turns on the tube.
>
> It's a good idea to keep the control grid supply impedance low, that
> way if you accidentally run a little grid current the bias won't shoot
> up and cause severe distortion.

Does it make sense that::
-1-. 'a little grid current' would 'shoot up' the bias V, cause a large
decrease in ZSAC, resulting in 'severe distortion'?
-2-. after adjusting an AB1 amplifier's grid bias V to prevent grid
current, that the operator would decrease the grid bias V to cause grid
current?

I use a Class AB1 8169 amplifier. If I mis-adjust the bias V to a lower
amount, as the grid is over-driven, the DC grid V and DC grid current begin

to increase. However, as the DC grid V increases, grid I decreases, so the process is self-limiting and the sky does not fall, afterall.
>
.....snip.....
> This 50 ohms grid resistor non-sense that's been published lately is a
> bad idea. Use an L pad or catode drive the tube. ...snip...

Agreed--especially if an inductor is connect in series. I have also seen a published recommendation that a cathode RF negative feedback resistance (Rk) be used. Another solution is to use a broadband, bifilar step-down toroidal transformer and a 12.5 ohm grid terminating R. This is a more satisfactory solution than using large values of Rk to consume overdrive volts. To explain: Screen-to-cathode voltage has an exponential influence on peak emission. Let's say that the grid bias V is 50v and that the exciter produces 100 peak volts (100w-pep into 50 ohms). To prevent grid current, 50 peak v would have to be consumed across Rk. However, this 50v drop will also subtract 50v from the screen to cathode potential--which will simultaneously cause a (Esc1/Esc2)^3/2 decrease in peak cathode emission--which will offset the IMD benefit of RF-NFB.
- A possible workaround to this problem is the (untested) circuit shown in Figure 10 in *Amplifiers* at:
http://www.vcnet.com/measures
If the circuit works as I intended, any voltage drop across Rk should not subtract from the screen to cathode potential.

--
--Rich-- ---805-386-3734, ag6k

# 313. FS: Large AM transmitter, 160 - 10 M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: Chuck O'Neal <CONEAL@microtouch.com>
Message-ID: <01bc7808$af6da040$f7512ec0@coneal>
Source record: 93273

Hi Folks,

I have available for sale an extremely well built high power AM transmitter that covers 160 thru 10 meters. Final is a 4CX1500A modulated by a pair of 3CX1200A7's using 5KW broadcast iron. Fully metered, vacuum variables with turns counters, extra final tube, all machining professionally done. Plate power supply not included, needs 3500VDC at up to 1.5 amps, depending on the desired output power. All other supplies built in. Requires about a total of 26" of 19" rack space, plus room for the modulation transformer, reactor and plate supply. It can run very conservativly at 375 watts out...up to....well look up the final tube. Priced at $1.00 a watt at full output. Due to weight it is pick up only in Bolton, MA. 30 miles west of Boston. Email me for details. This is a one of a kind that exceeds broadcast quality in operation and appearance.

Need room for the next rig under construction.

Chuck...K1KW

## 314. Re: The NorCal 38 Special/such a deal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5nrtdt$a0i$1@news1.rmi.net>
Source record: 93274

: travis@vgernet.net wrote:

: >Jerry, I've had mine for 2 months now, love it but I'm having problems
: >finding a power supply other than a battery that won't cause problems.
: >(unit is 5w mod) My HB regulated PS (mc1463 + 2n3055) introduces some
: >MCW (buzz) I put a big filter cap (4700 uF) after it and the buzz went
: >away but a chirp developed. I've tried puting an RF choke in the battery
: >leads but made things worse. What seems to work? Unregulated supply
: >maybe?

PMFJI -- but, at those voltages, "...a big filter cap" is NOT "(4700 uF)".
A Big Filter Cap would be more like 47,000 uF.

And, as for the chirp -- with a better regulated and smoothed supply,
you may want to re-visit the transmitter alignment discussions found
in the original article and many of the mod's articles.

--
73
Jonesy - W3DHJ
jonz@rmi.net
Gunnison, Colorado

--
SK

## 315. Re: Need HTX-202 schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: jkesling@wa8zgo.norden1.com
Message-ID: <33a177af.706410@207.14.113.2>
Source record: 93275

"William D. Redfearn, Jr." <william.redfearn@nt.com> wrote:

>Need operator manual, service manual or schematic for the Tandy HTX-202
>2 Meter HT.
>
>Thanks - Dave.

Dave,

I think these can still be ordered directly from Radio Shack and the
price is reasonable. I seem to remember paying slightly over $10.00
for my service manual but I could be mistaken.

The service manual has a few foldout pages and several shaded PCB
layout diagrams that probably wouldn't photocopy very well.

If you can find one anyplace else let me know.

73 - John
---
John Kesling - WA8ZGO - jkesling@wa8zgo.norden1.com

## 316. Re: Help!! 300MHz oscillator and mixer needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: John Miles <jmiles@digitalanvil.NoSpamHere.com>
Message-ID: <33A19353.7E6@digitalanvil.NoSpamHere.com>
Source record: 93276

hjerrild@post4.tele.dk (Karsten Hjerrild) wrote:
>
> Hi
>
> I'm building my own scanner based on a UHF radio, but a lot a the
> interesting frequencies (e.g. Danish Police) is in the VHF band.
> Therefore I need this to move the VHF band up in the UHF band. I want
> to do that with a 300MHz oscillator and a mixer (Maybe a diode mixer)
> Does anybody have a good design idea for a 300MHz oscillator and
> mixer. A Schematic would be nice or even better a PCB drawing and
> schematic.
>
> Response via e-mail very welcome.
>
> Regards Karsten Hjerrild
>
> hjerrild@post4.tele.dk

A stable 300 MHz signal could be easily obtained with a 50 or 60 MHz PC crystal clock module and a one-or-two-transistor frequency multiplier circuit. The trick is to get the tuned circuitry right -- you have to be able to reject all other harmonics of the 50/60 MHz crystal besides 300 MHz. This would not be a difficult thing to do, but I'd hate to tackle it without a grid-dip meter. Do you have access to any basic RF test equipment at all?

The mixer part is trivial -- you could order one for about $10 U.S. from a company like Mini-Circuits.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

## 317. VHF contest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33A1ABA5.2781@pactitle.com>
Source record: 93277

Hello every one.
Look for Bill (wa6itf) and my self Dave (kc6wfs) working the contest all
weekend long from my QTH dm04rk in Saugus.

Rigs:

Cleg 99'r 50.400AM +- a few kc's Halo antenna
IC-726 6m ssb 150w Marage brick 5 elem horiz, Cushcraft 6m vert.
Yeasu ft-680 fm Cushcraft 6m vert

Will also be FM on
2M 170w
220 5w
440 35

Please try to work us on 50.400AM over the weekend.
Be sure to check out my 50.400AM web page.

73 and have fun fun fun....

Dave Booth kc6wfs dm04rk
booth@pactitle.com
http://www.geocities.com/Hollywood/5860/50am.html

## 318. Mobile screwdriver antenna.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: unit77 <unit77@concentric.net>
Message-ID: <33A1AEA7.1B20@concentric.net>
Source record: 93278

Can you supply me with the plans/parts list and specs for the above project?

## 319. Superregeneration:Looking for a good reference article with transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: Tom C <tcipollo@ix.netcom.com>
Message-ID: <33A1C004.6FA9@ix.netcom.com>
Source record: 93279

Hi

I am looking for a good reference on regenerative receivers using transistors. I have an "Electronic Designers Handbook" that shows a vacuum tube circuit , as one would expect since the technique is quite old. I have heard that there is a "famous" QST article on regeneration but I do not know what the date is on the article or where I can view back issues.

Can anyone help?

Thanks

Tom C

KE6EST

tcipollo@ix.netcom.com

# 320. PASS BAND FILTER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: jasont@waverider.co.uk
Message-ID: <5nsk3t$a9n$1@melody.waverider.co.uk>
Source record: 93280

I am currently building a Direct Conversion HF radio receiver for my college project. Unfortunately, I cannot seem to get my active band pass filter to work good enough to resolve CW/SSB/AM adequately. I am basing my active filter around the op-amp LF353. Can anyone offer me a simple active band pass circuit design that I can incorporate within my radio receiver
Your help would be greatly appreciated

Many thanks,

Jason
Birmingham
England

jasont@waverider.co.uk

## 321. Low noise oscillators: JFET or Bipolar?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: Stewart Cobb <stu@notme.IntegriNautics.com>
Message-ID: <33A20036.4A8F@notme.IntegriNautics.com>
Source record: 93281

I'm planning a 400MHz narrow bandwidth VCO for a project. Phase noise
is very important. The most critical ingredients in low phase noise
design seem to be (1) hi-Q resonators, (2) emitter/source degeneration,
and (3) low-noise oscillator transistors.

Conventional wisdom (Solid State Design for the Radio Amateur, and
similar books of that vintage) seems to state the following:
- use JFET's up to a few hundred MHz,
- use bipolar transistors up to a few GHz (fT limited),
- and use GaAsFET's only when necessary (higher GHz).

It seems to me from the above that I should start with a JFET
design for 400MHz, perhaps a U310. But ...

The references I've seen are all a couple of decades old, as are the
classic transistor part numbers. Given the speed of technological
progress, has anything changed?

(1) Is the previously quoted conventional wisdom still accurate?
(2) Are there better JFET's available now?
(3) Are bipolars (or even GaAsFET's) now better than JFET's at 400MHz?
(4) Is there some other active element I should consider instead?

Thanks in advance for your advice.
Cheers!
--Stu, N5JXE

PS: If you reply by email, delete the "notme" spam filter
from my return address.

## 322. Re: Engineers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: "Robert R. Koblish" <Xn3hat@erols.com>
Message-ID: <33A1E670.7802@erols.com>
Source record: 93282

egb wrote:
>
> IMMEDIATE Openings for Controls Engineers and an AUTOCAD Professional
>
> Martin Automatic, Inc., is a machine tool OEM

[...]

Located where?? Or can I work from home and fax it in???
Not appropriate for this NG anyway. Try *.jobs

--
regards
-rrk

To reply, remove the leading X in my return address.

## 323. Re: Superregeneration:Looking for a good reference article with transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33A21296.2B40@crpl.cedar-rapids.lib.ia.us>
Source record: 93283

Tom C wrote:
>
> Hi
>
> I am looking for a good reference on regenerative receivers using
> transistors.

The 1997 edition of ARRL Handbook has an excellent construction article
in chapter 17.

Bill W0IYH

## 324. Bias to MRF245

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: Pentti Jutila <pentti.jutila@ntc.nokia.com>
Message-ID: <33A0DCB7.2EA6@ntc.nokia.com>
Source record: 93284

I&#65533;d like to drive MRF 245 on ssb what kind of bias circuit I had to use ?

OH6MRA/Pena

## 325. Re: Neon lamp 180 meter QRP Xmitter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-13 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEBrx8H.70w@netcom.com>
Source record: 93285

In article <339F0B2E.3F54BC7E@bigdog.geo.cornell.edu>,
Matthew Kleinmann <matthew@bigdog.geo.cornell.edu> wrote:
>I should just try this but on the off chance that someone already has..
>Can you get a neon lamp relaxation oscilator to run between 1.8 and 2
>Mhz? If you cover the lamp and keep it away from your hand and body,
>how stable is it? That picture of the little QRP transmitter in the
>ARRL handbook based on a TTL gate has gotten me thinking....

Digging into a GE Glow Lamp Manual, it says that the "transmission time",
the small signal delay is only as fast as 6 microseconds for a 5AB (NE-23)
and slows down with lower currents. And that's when the lamp is lit.
The timing charts for relaxation oscillators only go up to 20 kHz or so.

Hydrogen Arc transmitters, the multikilowatt (input power) negative
resistance oscillators used before high power vacuum tubes took over
operated at 1800 to 18,000 meter wavelenghts (166 kHz to 16 kHz),
according to an old book I read. These worked by having an electric arc
with a alcohol drip, with the arc stretched with a strong magnetic field.
These were usually operated as FSK where there were two frequencies used.
One was the signal, the other, the backwave, was complementary. Or they
were keyed as AFSK where a mechanical chopper varied the main tuning at
an audio rate, and the key brought the chopper in and out of the circuit.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 326. ?? LOOKING FOR PLANS FOR 440 DUPLEXER??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: MICHAEL SMITH <mjs@now-online.com>
Message-ID: <01bc7858$58a38d60$055bcecf@mjs>
Source record: 93286

I AM LOOKING FOR PLANS FOR BUILDING 440 CANS. I HAVE PLANS TO BUILD A 2
METER DUPLEXER IN THE ARRL ANTENNA BOOK, IS IT THE SAME BUT JUST CHANGE
THE LENGTHS FOR 440?? DOES THE DIA'S AND THE WALL THICKNESS PLAY A PART??
WHAT ABOUT COAX LENGTH BETWEEN THE CANS?? ANY HELP??? PLEASE E-MAIL
THANKS......MIKE
--
mjs@now-online.com

## 327. Icom 706 software??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc7878$d5541f80$92229bcf@kn6dv.qnet.com>
Source record: 93287

I have seen a msg. somewhere about software for the Icom 706, to program
the Radio.
Please e-mail me any info.
Thanks 73 Will, KN6DV

kn6dv@contesting.com

--
http://www.av.qnet.com/~kn6dv

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for atractive vices, he will fail.
(Walter Lippmann)

## 328. FS E.F.Johnson Tuning Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: Rick Peterson <ve3fmc@execulink.com>
Message-ID: <01bc787f$9e7e7a80$90a0d8cf@ve3fmc>
Source record: 93288

Hello I have an E.F.Johnson variable tuning capacitor for sale. Rated at
470uuf at 4500 volts. The air gap is .125 and approx size is 16" L X 6" W X
6" H. Make an offer
email at ve3fmc@execulink.com
Tnx Rick

## 329. Re: Superregeneration:Looking for a good reference article with transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: David Newkirk <dnewkirk@bellatlantic.net>
Message-ID: <01bc78ba$32440520$1279c697@namn>
Source record: 93289

Tom C <tcipollo@ix.netcom.com> wrote in article
<33A1C004.6FA9@ix.netcom.com>...

[deletions]

> I have heard that there is a "famous" QST article on regeneration
> but I do not know what the date is on the article or where I can view
> back issues.

I think the "famous" article you mean is H. A. Robinson, "Regenerative Detectors," QST, February 1933, pp 26-30 and 90. It doesn't cover superregeneration--superregeneration and regeneration are related, but different, circuit behaviors--but it's an excellent investigation into the behavior of vacuum tubes as regenerators and practical applications of regenerative detectors using tubes of the day.

Robinson's article applies to transistors only a "macro" sense--that is, in that a transistor regenerator is essentially a transistorized oscillator that simultaneously operates as an amplifier, oscillator and mixer (during heterodyne detection) or amplifier and mixer (during "envelope" detection). The differences between solid-state and vacuum-thermionic physics, and the difference in FET and BJT physics, can make for some surprising behavioral differences at and around critical regeneration among tubes, FET and BJT detectors. I know of no transistor-based analog to Robinson's article.

Regards,

David Newkirk, W9VES

## 330. Optimist-80 QRP rig info update

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: Johan Bodin <sm6lkm.jbeab@swipnet.se>
Message-ID: <01bc78be$fc818fc0$4464f482@win95.swipnet.se>
Source record: 93290

Hello!

Anyone out there building my Optimist-80 DSB QRP transceiver?

Some builders have reported problems with VFO tuning. I have added a new page to my DIY QRP Corner with updated VFO information.

Good Luck!

72 de Johan / SM6LKM

Email: sm6lkm.jbeab@swipnet.se
Homepage: http://home4.swipnet.se/~w-41522/

P.S.

My distance record is about 1000 km with the Optimist-80, SM <-> G, using a dipole 3 meters up! With 500 mW per sideband that's 2000 km / Watt on 80 meter phone!!!

Johan

## 331. Re: Mobile screwdriver antenna.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: grimm@Zalison.sbc.edu
Message-ID: <33a393e4.9853668@alison.sbc.edu>
Source record: 93291

On Fri, 13 Jun 1997 16:33:43 -0400, unit77 <unit77@concentric.net>
wrote:

>Can you supply me with the plans/parts list and specs for the above
>project?

Probably the best bet would be for you to invest in a copy of "40+5
Years of HF Mobileering" by Don Johnson, W6AAQ. In addition to much
useful information on mobile antennas generally, Don lays out the
details of how to build your own version of his Big DK3 screwdriver
antenna. I got my copy from the Radio Bookshop for about $15. It is
well worth the price if you are at all interested in the development
of mobile antennas, tuning devices, etc.
73,

Ken K4XL
(to reply remove the Z from my address in the header)

## 332. Homebrew Amplifier problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: vank6@aol.com
Message-ID: <19970614165201.MAA20536@ladder02.news.aol.com>
Source record: 93292

I've built a small amplifier for 20 thru 80 using a pair of 811A's in
grounded grid configuration.The problem I'm having is matching the output
of my solid stste final
IC-728 to the input impedance of the amplifier.I get out of the amp only
slightly more than the input from the 728.Is a tuned input going to be
required? Any hints, tips are solicited. Thanks in advance for any help.
73 Van. E-mail to vank6@aol.com, or reply to this posting.

## 333. NEWBIE...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: powerkickr@aol.com
Message-ID: <19970614172500.NAA23400@ladder02.news.aol.com>
Source record: 93293

I am new to the radio seen. I have two old Signal Corps Radio (RT-111c/TRC-20) with Power Supply (PP-1067/GR). It is a radio tube type. I am not knowledgeable about radio tubes and would like to know where I can find info/equipment on working with radio tubes. If not, at least someone to repair or trade for newer equipment. Please E-Mail me at: PowerKickr@aol.com

P.S. The radios are equiped with schematics.

## 334. Re: Drake TR7: DBM LO power requirement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: F5LCI@wanadoo.fr
Message-ID: <33a2689f.2269953@news.wanadoo.fr>
Source record: 93294

On 10 Jun 97 00:32:17 GMT, chalpm@hqlab.ico.olivetti.COM wrote:

>
>I would like to know which is the LO power requirement
>of the first mixer DBM of the TR7 Drake???

According to the schematics, L.O. In is 0.9 Veff.

@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@ Jean-Marc BOURDEREAU F5LCI@wanadoo.fr @
@ 23000 GUERET / FRANCE @
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

# 335. SOME TUBE INFO PLEASE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: Panos <orion@otenet.gr>
Message-ID: <01bc78ea$0192a780$cb01aac3@kitsos>
Source record: 93295

HI THIS IS PANOS FROM GREECE I JUST FOUND SOME TUBES MARKED 6094 AND SOME OTHERS 5814 MAY I ASK SOME INFO AND APPLICATION OF THESE?

BEST REGARDS
PANOS

## 336. FS SELSYN motors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <33A2E0D1.946CA30@acsu.buffalo.edu>
Source record: 93296

I have a box of selsyn motors for sale.
They are miniature 1.5" long x 1" diameter
(excluding the shaft which is 0.5"long x .125" diameter

Manufactured by Scot inc. P/N 5007cw0708/s07/1524

Theses are new in original boxes.

Price is $10 per pair plus $3 for 2nd day priority mail..

Thanks, Jim (N2GO)

## 337. WTB: Homebrew CW only transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: n3bj@aol.com
Message-ID: <19970614224300.SAA21346@ladder02.news.aol.com>
Source record: 93297

Anyone have some laying around unused ??

Would be interested in reconditioning and putting on the air. Especially multiband, VFO controlled projects from QST, etc.

Appreciate any response.

Alan, N3BJ

## 338. Re: Mobile screwdriver antenna.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: stop@all.spam.com
Message-ID: <33a31e4e.23013300@netnews.worldnet.att.net>
Source record: 93298

Don sells a complete set of plans for $5.00. He sells the completed antenna for $150.00. Just send him a check and he will get them back to you very quickly. I just bought a set.

grimm@Zalison.sbc.edu (Kenneth D. Grimm) wrote:

>On Fri, 13 Jun 1997 16:33:43 -0400, unit77 <unit77@concentric.net>
>wrote:
>
>>Can you supply me with the plans/parts list and specs for the above
>>project?
>
>Probably the best bet would be for you to invest in a copy of "40+5
>Years of HF Mobileering" by Don Johnson, W6AAQ. In addition to much
>useful information on mobile antennas generally, Don lays out the
>details of how to build your own version of his Big DK3 screwdriver
>antenna. I got my copy from the Radio Bookshop for about $15. It is
>well worth the price if you are at all interested in the development
>of mobile antennas, tuning devices, etc.
>73,
>
>Ken K4XL
>(to reply remove the Z from my address in the header)

## 339. Need tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33a32872.8353598@news.mnsinc.com>
Source record: 93299
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi - anyone have an extra 6BR5 / EM80 magic eye tube laying around?
I need one for a project here. Thanks - Bry, AF4K
Please e-mail me at bry@mns.net - thanks

********

HATE Is not a family value.

To reply to this message, you MUST IGNORE my shown address.
It is there to fool annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry AT mnsinc 'DOT' com
For some GREAT Messianic Jewish resources on the Web, VISIT:
http://www.mnsinc.com/bry/mjlynx.htm

# 340. Re: 8295 A or 8877

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33a328e5.8468720@news.mnsinc.com>
Source record: 93300

On Wed, 04 Jun 1997 13:31:27 +0200, "Dr. Hartmut Waldner"
<waldner@uni-bonn.de> wrote:

>Hi,
>
>I am looking for cheap 8295A power tubes by Eimac or Penta Labs, perhaps
>"pull outs". Also looking for used 8877 as alternative tube. Any source?
>
>73's Hartmut, DF6PW
>waldner@uni-bonn.de

Take a look at:
http://www.mnsinc.com/bry/mega/tubes.htm

That is a massive list of sources for tubes!
I hope it helps you! - Bry, AF4K

********

HATE Is not a family value.

To reply to this message, you MUST IGNORE my shown address.
It is there to fool annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry AT mnsinc 'DOT' com
For some GREAT Messianic Jewish resources on the Web, VISIT:
http://www.mnsinc.com/bry/mjlynx.htm

## 341. Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: Chris Williams <cwilli@thegrid.net>
Message-ID: <33A3641B.7B33@thegrid.net>
Source record: 93301
Cross-posted to: alt.radio.pirate,sci.electronics.design,sci.electronics.basics,alt.engineering.electrical,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

My electronics web page is back up and rollin'. Its only the start of an Idea for putting togeather a collection of radio and electronics circuits and files. If you have anything to offer please send me e-mail and visit;

http://www.geocities.com/CapeCanaveral/Lab/3904

Chris Williams

## 342. Re: Superregeneration:Looking for a good reference article with transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: inisglas@inisglas.seanet.com
Message-ID: <inisglas.441.010C7D0F@inisglas.seanet.com>
Source record: 93302

In article <01bc78ba$32440520$1279c697@namn> "David Newkirk" <dnewkirk@bellatlantic.net> writes:

>I think the "famous" article you mean is H. A. Robinson, "Regenerative
>Detectors," QST, February 1933, pp 26-30 and 90. It doesn't cover
>superregeneration--superregeneration and regeneration are related, but
>different, circuit behaviors--but it's an excellent investigation into the
>behavior of vacuum tubes as regenerators and practical applications of
>regenerative detectors using tubes of the day.

>Robinson's article applies to transistors only a "macro" sense--that is, in
>that a transistor regenerator is essentially a transistorized oscillator
>that simultaneously operates as an amplifier, oscillator and mixer (during
>heterodyne detection) or amplifier and mixer (during "envelope" detection).
> The differences between solid-state and vacuum-thermionic physics, and the
>difference in FET and BJT physics, can make for some surprising behavioral
>differences at and around critical regeneration among tubes, FET and BJT
>detectors. I know of no transistor-based analog to Robinson's article.

I noted plans for regenerative and possibly a superregenerative receiver in a book of 103 transistor projects, originally written by Tom Kneitel. I suppose that CRB Research would still have copies around.

Gordon Cooper
former spook

## 343. FS: tubes, test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-14 00:00:00 UTC
From: sales@emodus.com
Message-ID: <33a35f8f.0@news.cyberannex.com>
Source record: 93303

Hello!

Used Tubes, Pulled from Surplus Equipment, unteseted,
Priced accordingly, Substatnial quantities available:

6AL5 $0.50; 6AU6A $1.00; 6CL6 $ $1.00; 6X4 $1.00;
5963 (12AU7A) $1.25; 8136 $0.75; 8532W $1.00'

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!

Amphenol 31-5061 TNC MALE CONNECTOR
for: RG59, RG62, RG140, RG210 COAXIAL CABLE.
New, In original bags, FREE SHIPPING on 4 or more.
$0.75 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 5000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.10 each

For more ELECTRON TUBES (both new and/or used), various
ANTIQUE RADIO COMPONENTS or
ELECTRONIC TEST EQUIPMENT, please E-mail:
sales@emodus.com
For a complete list.

Thank you!

# 344. ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33a3a3d9.401062@nntp.infoave.com>
Source record: 93207

1st let me say I am a newbie to home brewing, which I usually make self apparent by some of the stupid things I type!

I got my crystal AM detector radio working last night... (1n34a diode and 10K ohm phones) Woke the wife up to go stand in the yard and listen to the BBC at 11 O'clock at night! :) <BTW... helpfull hint!> Don't dragg your wife out in the yard in the dark to stand under 133ft of copper wire and expect her to have the same giddy grin that you have. I know I WON'T ever do it again!

For my 2nd project, I am attempting a regenerative reciever!

I am working with the schematic for a renerarative reciever on pg 109 of W1FB's Design note book. I have completed building the circuit on my breadboard and have double and tripple checked parts placement. When I apply 12 volts and slip on my 8 ohm phones I get nothing!
I have two things I am uncertain of:

1) I replaced the 2n4416 with a MPF102 because of availability..... the 2n4416 is due to arrive by mail next week.... the MPF102 was in my parts box already!

2) On the schematic pins 1 & 3 of the LM386 are jumped together and at that connection is a small circle similar to the +12V connection pictured elsewhere on the Schematic! Only difference is that the circle stemming from pins 1 and 3 doesn't have "+12V" printed next to it, that the other circle does. In fact it doesn't have anything except that little empty circle! I assumed it was the counter part of my source voltage.... so I put a jumper between pins 1 & 3 and the negative terminal of the battery.

Is the substituted transistor the problem..... or did I just smoke the LM386? BTW how do you check an IC for short circuits?

Thanks in advance for any assistance you may lend,
GOD KNOWS IT IS NEEDED!

Marty Hawkins KF4HTL

## 345. W1FB's Renerative Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33a3b4de.4757933@nntp.infoave.com>
Source record: 93208

I am a nebie to homebrewing gear. I am attempting the Regen Rcvr pictured on pg 109 of W1FB's Design Notebook. This is my second project if you count a diode detetor which I built earlier in the week.

Pins 1& 3 of the LM386 are jumped to each other.... and there is a small circle there. What is that circle? Is that where I connect the negative lead from my supply voltage? The circle looks very similar to the one on the schematic that has the (+12v) printed next to it!

# 346. ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33a3ba87.6206854@nntp.infoave.com>
Source record: 93209

1st let me say I am a newbie to home brewing, which I usually make self apparent by some of the stupid things I type!

I got my crystal AM detector radio working last night... (1n34a diode and 10K ohm phones) Woke the wife up to go stand in the yard and listen to the BBC at 11 O'clock at night! :) <BTW... helpfull hint!> Don't dragg your wife out in the yard in the dark to stand under 133ft of copper wire and expect her to have the same giddy grin that you have. I know I WON'T ever do it again!

For my 2nd project, I am attempting a regenerative reciever!

I am working with the schematic for a renerarative reciever on pg 109 of W1FB's Design note book. I have completed building the circuit on my breadboard and have double and tripple checked parts placement. When I apply 12 volts and slip on my 8 ohm phones I get nothing!
I have two things I am uncertain of:

1) I replaced the 2n4416 with a MPF102 because of availability..... the 2n4416 is due to arrive by mail next week.... the MPF102 was in my parts box already!

2) On the schematic pins 1 & 3 of the LM386 are jumped together and at that connection is a small circle similar to the +12V connection pictured elsewhere on the Schematic! Only difference is that the circle stemming from pins 1 and 3 doesn't have "+12V" printed next to it, that the other circle does. In fact it doesn't have anything except that little empty circle! I assumed it was the counter part of my source voltage.... so I put a jumper between pins 1 & 3 and the negative terminal of the battery.

Is the substituted transistor the problem..... or did I just smoke the LM386? BTW how do you check an IC for short circuits?

Thanks in advance for any assistance you may lend,
GOD KNOWS IT IS NEEDED!

Marty Hawkins KF4HTL

## 347. App: 6CD6GA sweep tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33a3c551.277700@news.mnsinc.com>
Source record: 93210
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

I have a question regarding 6CD6GA sweep tubes.
The ARRL Handbook listing for them doesn't really tell us much.
No MAXIMUM listings other than Plate Dissipation of 20 watts.
Can someone supply the data on maximum plate voltage & current
please?

I would like to build a 4 tube parallel amplifier using these,
in G-G and wanted to know what is the highest reasonable plate
voltage & current to use. I want to get about 500 watts INPUT
in CW and SSB service.

I know it has been done with 6KD6 tubes per the 1969 HANDBOOK
PP 197-200

They run that at 900V DC and get 1200 watts p.e.p. input, so
if I run these at HALF that it should work. ( 667 mA anode current)
for a 600 watt DC input, which seems reasonable for ICAS service
with these. THey have dire warnings about not leaving it "key down"
for more than 30 seconds with over 100 mA flowing!

Perhaps I should use 6 of them?!

Now, they suggest the 6LQ6 as a substitute. Let's see...

Well, these both appear to have a slightly higher plate current rating
than my 6CD6es but not by much. Heater currents are about the same
if that is any indication.

Any thoughts..... I know "Don't use sweep tubes" (grin!)

## 348. HeatSink nylon hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <33A3E72F.1C68@lafn.org>
Source record: 93211

Hi,

I purchased by mail order last year, a nice assortment of insulting mounting
hardware for heatsinks and TO-3 transistors and IC's (LM317K), assorted nylon shoulder washers, screws, nuts but have lost the source company name. Just built a multiple output power supply with several LM317K TO-3 IC's and depleted all my nylon heatsink hardware.

After checking with Dan's Small Parts and DC Electronics, I am running out of ideas.

Please suggest some possible sources. These were just assortments of nylon parts in small plastic bags.

73, W6MIK...Thanks
--
_____________________________________
Dave Shalita,
af389@lafn.org
Van Nuys, CA

## 349. WTB: VHF PWR Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: ak2f@qsl.net
Message-ID: <866381269.26881@dejanews.com>
Source record: 93212
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Wanted to buy:

Need a pair of power transistors to repair a mirage B1060 amplifier.
Should be about 80 Watts each at 146 MHz. Something like MRF245. Pse
respond via e-mail to: AK2F@qsl.net

73s,
Woody

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 350. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: murrayp <murrayp@MCI2000.com>
Message-ID: <01bc7993$6f03ba80$0c1537a6@kevin--home>
Source record: 93213

Used Tubes, Pulled from Surplus Equipment, unteseted,
Priced accordingly, Substatnial quantities available:

6AL5 $0.50; 6AU6A $1.00; 6CL6 $ $1.00; 6X4 $1.00;
5963 (12AU7A) $3.00; 12AU7A $3.00; 12AX7A $3.00;
6080 $4.00; 8136 $0.75; 8532W $1.00

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!

Amphenol 31-5061 TNC MALE CONNECTOR
for: RG59, RG62, RG140, RG210 COAXIAL CABLE.
New, In original bags, FREE SHIPPING on 4 or more.
$0.75 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 5000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.10 each

For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIOCOMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail:
sales@emodus.com
Thank you!

## 351. Re: ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Steve <semann@nr.infi.net>
Message-ID: <33A3F3D3.2566@nr.infi.net>
Source record: 93214

KF4HTL wrote:

> 2) On the schematic pins 1 & 3 of the LM386 are
> jumped together and at that connection is a small circle similar to
> the +12V connection pictured elsewhere on the Schematic! Only
> difference is that the circle stemming from pins 1 and 3 doesn't have
> "+12V" printed next to it, that the other circle does. In fact it
> doesn't have anything except that little empty circle! I assumed it
> was the counter part of my source voltage.... so I put a jumper
> between pins 1 & 3 and the negative terminal of the battery.
>
>
> Is the substituted transistor the problem..... or did I just smoke the
> LM386? BTW how do you check an IC for short circuits?
>

Marty,
I don't have that book so I can't definitely answer your question.
However, I do have a National Semiconductor Databook which lists the
LM386, and the following info is from that book.

pin 6 = +v
pin 4 = -v (for a single ended supply this will probably be ground)

Inputs are pins 3 (non-inverting) and pin 2 (inveting). For common
audio amp useage input is usually taken to pin 3 with pin 2 connected to
ground. The volume control center connector usually goes to pin 3 when
it is used as the input pin.

Gain of the amp is about 20 when there is no connection between pins 1
and 8.
If a 10 uF cap is connected between these pins (+ toward 1, - toward 8)
the gain of the amp increases to 200.

Double check the schematic and make sure that that pin 1 and 3
connection wasn't supposed to be 1 and 8.

Again, I haven't seen the circuit you are describing so I can't be
certain exactly what the writer was intending, so keep this in mind.

If the IC didn't get hot when you tested the circuit chances are that
you didn't blow it. When you find the correct connections it will
probably work. The FET substitution should be ok.

Homebrewing can be very frustrating at times but the satisfaction you
feel when you have it working makes it all worth it. Hang in there and
don't give up!

Steve, N4EY

The FET sub you used should be fine.

## 352. Re: Low noise oscillators: JFET or Bipolar?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <T+$piBA+M9ozEwkV@ddwyer.demon.co.uk>
Source record: 93215

Not a lot has changed in 10 years.
I have an article by Dekker (search for other Dekker references) in UK Electronics and Wireless World July 87 quotes 2N3823 Jfet in a good cct giving -116dbc/hz@5kHz as his best result.
The rf device must also have good LF performance hence emitter degredation.
I once got some very good narrow band performance using a two section helical filter as the resonator, you then need a lot of phase shift to pull the frequency . Other high Q/low loss elements are 1/4wave rigid coax. The best noise floor/ssb noise can come from SAW resonators because you can drive them with a higher current Q about 10000 limits pulling. Could fry pulling by controlled temperature variation.
Good luck.
Doug. .

In article <33A20036.4A8F@notme.IntegriNautics.com>, Stewart Cobb <stu@notme.IntegriNautics.com> writes
>I'm planning a 400MHz narrow bandwidth VCO for a project. Phase noise
>is very important. The most critical ingredients in low phase noise
>design seem to be (1) hi-Q resonators, (2) emitter/source degeneration,
>and (3) low-noise oscillator transistors.
>
>Conventional wisdom (Solid State Design for the Radio Amateur, and
>similar books of that vintage) seems to state the following:
> - use JFET's up to a few hundred MHz,
> - use bipolar transistors up to a few GHz (fT limited),
> - and use GaAsFET's only when necessary (higher GHz).
>
>It seems to me from the above that I should start with a JFET
>design for 400MHz, perhaps a U310. But ...
>
>The references I've seen are all a couple of decades old, as are the
>classic transistor part numbers. Given the speed of technological
>progress, has anything changed?
>
>(1) Is the previously quoted conventional wisdom still accurate?
>(2) Are there better JFET's available now?
>(3) Are bipolars (or even GaAsFET's) now better than JFET's at 400MHz?
>(4) Is there some other active element I should consider instead?
>
>Thanks in advance for your advice.
>Cheers!
>--Stu, N5JXE
>

>PS: If you reply by email, delete the "notme" spam filter
>from my return address.

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax: +44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

## 353. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5o0soc$b0f$81@news.internetmci.com>
Source record: 93216

Hello!
Another special offer:

Used Tubes, Pulled from Surplus Equipment, unteseted,
Priced accordingly, Substatnial quantities available:

6AL5 $0.50; 6AU6A $1.00; 6CL6 $ $1.00; 6X4 $1.00;
5963 (12AU7A) $3.00; 12AU7A $3.00; 12AX7A $3.00;
6080 $4.00; 8136 $0.75; 8532W $1.00

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!

Amphenol 31-5061 TNC MALE CONNECTOR
for: RG59, RG62, RG140, RG210 COAXIAL CABLE.
New, In original bags, FREE SHIPPING on 4 or more.
$0.75 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 5000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.10 each

For more ELECTRON TUBES (both new and/or used), various
ANTIQUE RADIO COMPONENTS or
ELECTRONIC TEST EQUIPMENT, please E-mail:
sales@emodus.com
For a complete list.

Thank you!

## 354. Re: first home-brew project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33a4031c.17460651@news.atl.bellsouth.net>
Source record: 93217

On Wed, 11 Jun 1997 16:50:15 +0100, BOB DUCKWORTH <bob@atl.org> wrote:
>Nathan-
>
>Tube stuff.
>
>Big parts you can see and not worry about overheating with the soldering
>torch.
>
>Regen receivers.
>One tube transmitters.

I'd strongly urge the novice builder to avoid tube equipment. They require dangerous voltages, and usually considerable metalwork is needed to make them safe to be around. ICs and transistors are much safer because of the lower voltages they use, and ICs give you much more functionality as well. Opamps, MMICs, Gilbert cell mixers, etc are also generally more stable and forgiving of design flaws, other than overvoltage, in your project. And of course if you drop one, just pick it up. If you drop a tube, go get the dust pan and sweep up all the broken glass.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 355. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <33a409c9.1408821@netnews.worldnet.att.net>
Source record: 93218

On Wed, 11 Jun 1997 08:24:26 -0700, Mark Brown <kb0pyo@starpoint.net>
wrote:
> Why is it non-sense to use a 50 ohm resistor in the grid circuit?

What Tom is suggesting is that if you calculate the PEAK voltage
across a 50 Ohm resistor driven with 100 (or more) watts, that value
is very close to the value you will impress on the grid. (It's
actually less because the tube starts drawing a bunch of grid current
and lowers the termination impedance dynamically.) The peak drive
voltage would destroy the grid quickly due to over dissipation. This
mode of driving the tube is called passive grid and works where the
grid capacitive reactance is large in comparison to the terminating
resistance and where the voltage developed across the terminating
resistor is appropriate for the tube(s) used..

On the other hand, if you place the terminating resistor between the
cathode and ground the output current of the tube also flows in the
resistor effectively cancel ling part of the drive; it's inverse
feedback. But again, if you take the voltage developed and look at
the voltage needed you still have too much voltage and can burn out
the tube grids.

Many years ago I published an article in which I copied an idea that
ETO used and applied it to a Dentron MLA-2500 ( pair of 8875's). That
approach was to lower the value of resistor from the cathode to ground
to whatever value was needed for the tubes. Then I used a broadband
auto-transformer wound on a toroidal core to step down the drive
voltage (and impedance) to the complex value formed by the resistors
and the cathode. The problem with this method is that you can still
see excessive grid current if you lose the feedback around the tube
because of a loss of plate voltage--for whatever reason. Tom pointed
out the need for grid over current sensing no matter what the drive
mechanism.

Another suggestion, if you are intent on driving the grid with a
passive grid circuit is to use an L pad, as Tom suggested, that has a
total resistance is 50 Ohms. But you put the grid at (what is
essentially) a tap point where the drive voltage is appropriate for
the tubes. Then you can have a broadband input with no tuning that
provides the proper drive voltage. But, you give up the inverse
feedback around the tube that you have in grounded grid so your
distortion products rise about 10 db.

This is what engineering is all about: deciding whether you take the
higher distortion products or go through the trouble of a cathode
drive circuit.

Fred
jfriley@airmail.net

## 356. Need info on qrp-l list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33a41023.14685736@news.erols.com>
Source record: 93219

Can someone send me the instructions for subscribing to the qrp-l mailing list? I need the e-mail address for subscription, what I need to put in the body of the message etc.

Thanks! 73 Bill N2CQR

## 357. Component questions: 40673 and xtals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33a410d6.14865396@news.erols.com>
Source record: 93220

Homebrewers:

I'm building the "Bare Bones Superhet" receiver that Doug Demaw described in a June 82 QST article.

I'm gathering parts.

The circuit calls for a 40673 (3N211) dual gate MOSFET mixer. The same device is used throughout the receiver - elsewhere in the rig the MPF102 is listed as an acceptable substitute, but in the mixer Doug recommends the 40673. I'm having trouble finding one of these. Any suggestions?

The circuit also calls for the use of Radio Shack color burst crystals for the IF filter and BFO. As far as I can tell, RS isn't making these any more. I do, however, see a lot of microprocessor crystals available at 3.579545 Mhz. They are listed as having load capacities of 17pf or "series" I suppose I should order the series model, correct? Does anyone have any info on substituting these rocks for the RS color burst crystals in an IF filter application?

Other Q's: I see that silver mica caps are getting hard to find. Will I have any real problems if I just use high tolerance dipped mica caps (in the voltage dividers in the VXO and BFO Colpitts circuits and in the IF filter).

Doug called for the use of Carbon composition resistors. Any benefit or disadvantage in using the film resistors?

Thanks! 73 Bill N2CQR

## 358. Re: App: 6CD6GA sweep tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: triodeel@ameritech.net
Message-ID: <33a41e10.67151854@news.chicago.il.ameritech.net>
Source record: 93221
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

bry@mnsinc.com (Bry) wrote:

>I have a question regarding 6CD6GA sweep tubes.
>The ARRL Handbook listing for them doesn't really tell us much.
>No MAXIMUM listings other than Plate Dissipation of 20 watts.
>Can someone supply the data on maximum plate voltage & current
>please?

If you want to see how those are typically used, DuKane Corp
made a lot of amplifiers using 6CD6-G/7867...
If I can find the model number for it you can call them for
a copy of the diagram.

BTW, the audio specs are under 7867, those are listed in the
GE tube manual. Same tube, just re-speced as audio output tube.

Ned Carlson
Triode Electronics
2225 w. Roscoe St
Chicago, IL 60618 USA
email: triodeel@ameritech.net
ph:773-871-7459
fax:773-871-7938
"Worldwide service,
Neighborhood prices"
since 1985

## 359. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1506970813330001@news.vcnet.com>
Source record: 93222

In article <33a15137.2634600@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Thu, 12 Jun 1997 08:40:58 -0700, measures@mail.vcnet.com (R. L.
> Measures ) wrote:
>
> >
> >True enough. More R would be better. The most logical source is the
> >positive HV supply, which is typically about six times the screen v.
>
> Once the unregulated screen supply voltage is two times the regulated
> voltage, you can never overdissipate the screen under any condition IF
> the regulator quiescent dissipation is set to equal the rated screen
> dissipation. Try it. Thevenin's equivalents work in linear dc circuits
>
Agreed. However, why go to the expense and trouble of designing and
building a separate 2x screen voltage supply so we can use a smaller R to
supply the zener-string regulator? The anode supply is already there. Why
not use it? If the anode V goes away, the screen V goes too. This is
good.

--
--Rich-- ---805-386-3734, ag6k

## 360. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1506971001140001@news.vcnet.com>
Source record: 93223

In article <33a409c9.1408821@netnews.worldnet.att.net>,
jfriley@worldnet.att.net (J. Fred Riley) wrote:

> On Wed, 11 Jun 1997 08:24:26 -0700, Mark Brown <kb0pyo@starpoint.net>
> wrote:
> > Why is it non-sense to use a 50 ohm resistor in the grid circuit?
>
> What Tom is suggesting is that if you calculate the PEAK voltage
> across a 50 Ohm resistor driven with 100 (or more) watts, that value
> is very close to the value you will impress on the grid. ...

The peak cathode current for a 4cx800A is about 2.4a in Class AB1 service
with 0v on the grid. . If the (50 ohm terminated) grid is biased with
minus 47v (Svetlana) and driven with 100w.pep/100v-peak, it appears that
53v needs to be dropped across the cathode feedback resistor (Rk). Rk =s
53v/2.4a = 22 ohms. Is 22 ohms 'very close' to 50 ohms?

> On the other hand, if you place the terminating resistor between the
> cathode ... snip...

In a Class AB1 amplifier, no current flows between the grid and the
cathode. How is it possible that the terminating R for the exciter can be
placed in the cathode?
>
> Many years ago I published an article in which I copied an idea that
> ETO used and applied it to a Dentron MLA-2500 ( pair of 8875's). That
> approach was to lower the value of resistor from the cathode to ground
> to whatever value was needed for the tubes. Then I used a broadband
> auto-transformer ...snip...

A flywheel is needed at the input of a g-g amplifier---and a transformer
isn't one. ETO finally woke up and stopped using a transformer input.
Wakeup time, Fred.
>
...snip...
> This is what engineering is all about: deciding whether you take the
> higher distortion products or go through the trouble of a cathode
> drive circuit.
>
It seems to me that an engineer should read the technical specifications
sheet for the tube being used. Did Fred?
According to Svetlana, this tube has a 2w max. grid. Svetlana says
nothing about using the 4cx800A in other than grid driven Class AB1
service. In my un-"expert" opinion, a 2w-rated grid is not appropriate for
g-g operation with a tube that has an 800mA anode rating..

--
--Rich-- ---805-386-3734, ag6k

## 361. Need help! re: Pulse modulation @ 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: raven1 <raven1@netaccess.on.ca>
Message-ID: <33A43EDF.35F6@netaccess.on.ca>
Source record: 93224

I'd like to experiment using [inexpensive] 2-meter
equipment using pulse modulation. I have an enclosure
which prevents interference to local repeaters and QSOs.

I have available two completed Ramsey Kits: The FT-146
transmitter and it's companion PA-1 power amp, with
expected output of 25 watts or so.

The FT-146 seems to be able to handle pulses at CW speeds
using the PTT input as the key jack, and grounding the
FM mike input.

My old 'scope can't quite tell me if the crystal oscillator
is following pulses at 50 kHz, duty cycle of 10% on, 90%
off nominally.

Can anyone suggest a better way or a sure way to get the
oscillator to follow high speed pulses?

One reason (besides low cost) that I chose a simple kit
is that the parts tend to be easily accessible.

Thanks,

Eleanor White, VE3LKE
430 Cumberland Ave. #312
Hamilton ON L8M 3M9
Canada
raven1@netaccess.on.ca

## 362. Re: Superregeneration:Looking for a good reference article with transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33A43F32.373F@calweb.com>
Source record: 93225

Tom C wrote:
> 
> Hi
> 
> I am looking for a good reference on regenerative receivers using
> transistors. I have an "Electronic Designers Handbook" that shows a
> vacuum tube circuit , as one would expect since the technique is quite
> old. I have heard that there is a "famous" QST article on regeneration
> but I do not know what the date is on the article or where I can view
> back issues.
> 
> Can anyone help?
> 
> Thanks
> 
> Tom C
> 
> KE6EST
> 
> tcipollo@ix.netcom.com
Check out Communications Quarterly a few issues back. A fellow at
Analog Devices did a first class article on Regens using xistors. I
belive his last name was Kitchen?

73

Bob, KE6F

## 363. Re: Superregeneration:Looking for a good reference article with transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33A445A6.55E7@crpl.cedar-rapids.lib.ia.us>
Source record: 93226

Bob Miller wrote:

> Check out Communications Quarterly a few issues back. A fellow at
> Analog Devices did a first class article on Regens using xistors. I
> belive his last name was Kitchen?

His name is Charles Kitchin and his regen project is in the 1997 ARRL handbook, chapter 17.

Bill W0IYH

## 364. 88 mH toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33a4446d.1281565@news.mnsinc.com>
Source record: 93227
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi - someone was recently looking for some 88 mH toroids.

Well, I found some for you.

He doesn't have many left, but a fellow was selling these at
the Frederick, MD hamfest today:

Julius Barthelme - (717) 334-7084

I think he lives in southern PA.

I hope that helps you!

Bry

## 365. Re: Need help! re: Pulse modulation @ 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: nielsen@primenet.com
Message-ID: <slrn5q8i4c.7tl.nielsen@nielsen.tus.primenet.com>
Source record: 93228

In article <33A43EDF.35F6@netaccess.on.ca>, raven1 wrote:
>I'd like to experiment using [inexpensive] 2-meter
>equipment using pulse modulation. I have an enclosure
>which prevents interference to local repeaters and QSOs.
>
>I have available two completed Ramsey Kits: The FT-146
>transmitter and it's companion PA-1 power amp, with
>expected output of 25 watts or so.
>
>The FT-146 seems to be able to handle pulses at CW speeds
>using the PTT input as the key jack, and grounding the
>FM mike input.
>
>My old 'scope can't quite tell me if the crystal oscillator
>is following pulses at 50 kHz, duty cycle of 10% on, 90%
>off nominally.
>
>Can anyone suggest a better way or a sure way to get the
>oscillator to follow high speed pulses?
>
>One reason (besides low cost) that I chose a simple kit
>is that the parts tend to be easily accessible.

I would think a better way would be to let the oscillator run continuously and use some sort of diode switch to pulse modulate a higher level stage (preferably after any multiplication). Maybe between the exciter and the amplifier or possibly modulating by biasing off and on the amplifier.

I am not familiar with Canadian amateur rules, but in the U.S. pulse is not permitted on two meters.

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
AX.25: w6swe@wb7tls.az.usa.noam
http://www.primenet.com/~nielsen

## 366. Adjust your picture tubes & monitors HERE!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33a45b42.7125200@news.mnsinc.com>
Source record: 93229
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

http://www.mnsinc.com/bry/imag/ham/tvscreen.gif

Enjoy!

## 367. Re: Help!! 300MHz oscillator and mixer needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33a44c34.0@cheese.pcug.org.au>
Source record: 93230

John Miles <jmiles@digitalanvil.NoSpamHere.com> wrote:

>
>The mixer part is trivial -- you could order one for about $10 U.S. from
>a company like Mini-Circuits.
>
>-- jm

An NE602 should also be a good choice as a mixer - it has some gain and
should prove effective.

73, Peter


---
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.


---

## 368. Dan's Small Parts and Kits New On-Line Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5o1pit$fbt$4@zinger.callamer.com>
Source record: 93231

Great News.

Dan has a new on line catalog. His Catalog has been expanded and list many many

more items than in the past. He also has many quantity purchase discounts listed.

Check it out.

http://www.fix.net/dans.html

Dan has announced that his on line Catalog will be in a continual state of

change. This means he intends to update it on a regular basis reflecting the

latest deals he has to offer and also to take off out of stock or discontinued

items.

Dan is taking advantage of the Internet to quickly get his new offerings out to us.

The days are gone of having to wait for specials or next years catalog to get the

latest listing of goodies.

Enjoy,,,72,,,Jerry...K

## 369. 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: diback@aol.com
Message-ID: <19970615232701.TAA06661@ladder02.news.aol.com>
Source record: 93232

I am 15 years old, and I'm realy into radio. I got started with C.B., I then progressed to scanners, then to short wave utilety stations, and I'm currently studeing for my HAM radio liceance. Another field I wish to get into to is RF circut design. I want to be able to take a pile of commponents and, from memory, build a radio. I want to be able to design radios to recieve any freq. I want. ( no, I don't plan to breech the ECPA laws, although I do believe they are wrong, but thats another post!) You know, I want to know about what each indivdual resistor, capacitor, and IC chip in a radio does, just by looking at the schematic.

I am lerning about circut components, and design in my study guide "Now Your talking", but I feel that it won't have nearly all the info I need to achive my goals. Are there
What want to know is, how can I achieve this nowlage, are there any good books out there? I have flipped through Joe Carr's " secrets of RF circot design" or whatever it's called, but I feel it may be above my skill level.
If any one out there can help me, I would be most appreceative!
Thanx,
Scott
Diback @AOL.com

## 370. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: rocci@worldnet.att.net
Message-ID: <33A48637.F4337881@worldnet.att.net>
Source record: 93233

Diback wrote:

> What want to know is, how can I achieve this nowlage, are there any
> good books out there? I have flipped through Joe Carr's " secrets of
> RF
> circot design" or whatever it's called, but I feel it may be above my
> skill level.
> If any one out there can help me, I would be most appreceative!
>

Scott,Get a copy of the "Radio Amateur's Handbook" from the ARRL
(American Radio Relay League). You can find their Web site on line at
www.arrl.org.
I'm an RF Engineer by dint of about 25 years of hands on experience, but
most of what I've learned stems from the same kind of burning desire to
learn how to build radios. I got my start through ham radio and the
Handbook was my early bible.
Drop me an e-mail and maybe I can steer you onto some things that can
lead to a career path. Good luck.

Joe
WA3CMQ

## 371. Re: Need info on qrp-l list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <33A486E4.2A51@postoffice.worldnet.att.net>
Source record: 93234

Bill Meara wrote:
>
> Can someone send me the instructions for subscribing to the qrp-l
> mailing list? I need the e-mail address for subscription, what I
> need to put in the body of the message etc.
>
> Thanks! 73 Bill N2CQR

Send a message to listserver @lehigh.edu. In the body of the message
include the words Subscribe qrp-l <your call>

You will receive verification and instructions on other fuctions
available to the list.
--
**********
**********
73 de
KC8DGU
Tom Isgro
OHIO

10-X #68364 SCI #1479 QRP-L #945 ARS #203
C.A.T.T #2115 FIST 2360 NORCAL ARRL

**********
**********

## 372. *NEW* Fox_Tango Reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: ShortCkt <ShortCkt@primenet.com>
Message-ID: <33A49727.6F76@primenet.com>
Source record: 93235

*NEW* Fox_Tango Reflector

Fox_Tango is a mailing list (reflector) devoted entirely
to "vintage" and "classic" equipment manufactured by the
Yaesu Musen Co., Ltd. of Tokyo Japan.

* equipment, accessories
* collecting, restoring, refurbishing
* buy, sell, trade, swap
* repairs, modifications, enhancements
* questions, discussions, etc
* just plain operating old Yaesu stuff

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe fox_tango

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe fox_tango

To post items to the reflector, send email as follows:
TO: fox_tango@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

## 373. Re: Help!! 300MHz oscillator and mixer needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <33A49285.522E@pop.removethistomailme.net>
Source record: 93236

Peter Parker wrote:
>
> John Miles <jmiles@digitalanvil.NoSpamHere.com> wrote:
>
> >
> >The mixer part is trivial -- you could order one for about $10 U.S. from
> >a company like Mini-Circuits.
> >
> >-- jm
>
> An NE602 should also be a good choice as a mixer - it has some gain and
> should prove effective.
>
> 73, Peter
>
> _____________________________________________________
> Peter Parker
>
> E-mail: parkerp@pcug.org.au
> Phone: (06) 285 1004 (ah)
> Amateur Radio: VK1PK
>
> Home Page: http://www.pcug.org.au/~parkerp/
> The home of Novice Notes Online and the VK QRP Web Page.
> _____________________________________________________

Hmm, but do they work up to 300 MHz, though? Not familiar with the
'602.

-- jm

---

Note: My E-mail address has been altered to avoid spam

---

## 374. Re: Need info on qrp-l list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: ac6v@ix.netcom.com
Message-ID: <33A4B503.681E@ix.netcom.com>
Source record: 93237

Hi Bill -- there are 97 Mail List/Reflectors at URL:
http://pw2.netcom.com/~ac6v/pageae.html
including QRP-L

73
Rod in San Diego
--

## 375. Major WWW Updates

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: ShortCkt <ShortCkt@primenet.com>
Message-ID: <33A4BFBC.7348@primenet.com>
Source record: 93238

```
Major WWW Updates
http://www.qsl.net/k7on

New pages, new sections, new, new...
(CW section, BoatAnchor section, Digital section enhanced,
Radio Modifications, Frequency Lists, Local Az Section,
Fox_Tango mailing list, more, more, more...)
```

## 376. Re: Need info on qrp-l list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <33A4D2BA.3595@aade.com>
Source record: 93239

Bill Meara wrote:
>
> Can someone send me the instructions for subscribing to the qrp-l
> mailing list? I need the e-mail address for subscription, what I
> need to put in the body of the message etc.
>
> Thanks! 73 Bill N2CQR

Instructions for the qrp-l list as well as many others are
available in the "my favorite links" page at my URL below.
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

## 377. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEBvJon.Fz0@netcom.com>
Source record: 93240

In article <01bc774d$bf790da0$25f135ce@hammer.stonewest.com>,
Dave VanHorn <dvanhorn@127.0.0.1> wrote:
>Nothing's perfect..
>
>I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
>Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..

Talking to an ex-truckdriver computer programmer coworker of mine
many years ago, he did it to even out the receive pattern, not
anything to do with the transmitting (that's what linears were for ;-) ).
Just sticking one antenna on the semi tractor gave a lopsided pattern,
and they change trailers all the time, so you can't stick a rooftop
antenna in the center of the vehicle.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 378. 2E26 Tubes 4-Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: JOSH KAYSON <jkmtl@total.net>
Message-ID: <33A3E935.7E5@total.net>
Source record: 93241

I HAVE A QUANTITY OF TUBE TYPE 2E26 FOR SALE. ALL BRAND NEW IN RCA BOXES.

I WOULD LIKE TO SELL SAME SINCE I NO LONGER USE THESE.

ASKING $5.00 EACH US FUNDS

JOSH KAYSON VE2JKK

## 379. Plans for 33cm Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: lui@netcom.com
Message-ID: <luiEBsppw.J9G@netcom.com>
Source record: 93304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Does anyone have plans to construct a 33cm (902-928 MHz) duplexer, or plans that can be scaled to this band? This is for a 25 MHz split voice repeater project.

Stephen
KY6K

## 380. Re: Homebrew Amplifier problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <33A380B5.12990E49@imaxx.net>
Source record: 93305

VANK6 wrote:

> I've built a small amplifier for 20 thru 80 using a pair of 811A's
> in
> grounded grid configuration.The problem I'm having is matching the
> output
> of my solid stste final
> IC-728 to the input impedance of the amplifier.I get out of the amp
> only
> slightly more than the input from the 728.Is a tuned input going to be
>
> required? Any hints, tips are solicited. Thanks in advance for any
> help.
> 73 Van. E-mail to vank6@aol.com, or reply to this posting.

I provide a Free Grounded Grid Triode Tube Amplifier program
called T.A.P. 2.0 on my Web Page you might like to try out. It
provides Input and Output Matching.

--
---
Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net
---

## 381. Where to get Nude Cheerleaders

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-15 00:00:00 UTC
From: pqwoeiur@poeujf.net
Message-ID: <5o01om$6l5$47@nw003.infi.net>
Source record: 93306

Hey, just thought i'd share with everyone,
I found a site with loads of nude CHEERLEADERs. The
address is:

http://www.mid-night.com/

--Jason--

(Sorry for the intrusion, everyone needs some short skirts in their life)

P.S. They also a have spanish / latina women archive

## 382. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: cjNOSPAM@hth.com
Message-ID: <33a55661.90438819@news.buller.se>
Source record: 93057
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

Have a nice summer,

/Christer

[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

## 383. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33a53fde.1348027@netnews.worldnet.att.net>
Source record: 93058

On Mon, 16 Jun 1997 08:00:39 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>Almost anything that can go wrong with a tetrode amplifier can be
>detected by monitoring the screen current, and automatically switching
>the amp back to standby if the screen current goes too far positive or
>negative. Screen currents approaching the power dissipation limit are
>usually way out of line for normal operation, so the alarm circuit can
>be set to operate some way inside the dissipation limit.

But if the screen shunt regulator is fed from ANY supply voltage at
least 2X the screen operating voltage, the screen will NEVER be over
dissipated. That includes if you power up the screen with NO bias and
anode voltage.

The only chance for excessive dissipation is if the screen grid is
receiving high values of negative current. While that condition is a
rare operating parameter, negative screen current protection can be
accomplished by measuring the screen regulator return current if you
use a separate supply.

In my commercial PA's I use the blower airflow vane to activate the
bias supplies, and the bias activates the plate and screen supply
(supplies).

>This isn't theory - it's all proven technology. European hams continued
>to use tetrodes throughout the years when USers were almost exclusively
>using triodes. We did a lot of design work on power supply and control
>circuits, and have been using highly stabilized screen supplies with
>electronic protection for 10-15 years now.

So recently? ;-)

Perhaps you are confused Ian. Good designs were popular here when
tetrode were commonly used (in the 60's and early 70's), but back then
more US Hams understood electronics.

Now, mainly due to marketing and less technical skill, the USA is
attempting to abandon good tetrode designs. Some manufacturers and
their employees recommend no screen protection, no screen stability,
and "easy to tickle" PA grids with no warning or protection systems.

These designs were mostly the result of hard work, being tested and
developed on the 27 MHz CB band.

73 Tom

## 384. Re: App: 6CD6GA sweep tubes (DuKane amps_

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: triodeel@ameritech.net
Message-ID: <33a55477.76576874@news.chicago.il.ameritech.net>
Source record: 93059
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

Rick Francis <rfranci@uoft03.utoledo.edu> wrote:

>I ha e a rusty but probably good pair of DuKanes that use the 6CD6 (and
>5U4, OD3, 12AU7), and have the schematic + other info. Contact me if
>interested. I can test the Dukes if anyone wants to buy them.

I know those very well.
I don't know about the sonic qualities
(I had them in a PA application),
but they're built like a tank.

>
>Rick
>
>Ned Carlson wrote:
>> If you want to see how those are typically used, DuKane Corp
>> made a lot of amplifiers using 6CD6-G/7867...
>> If I can find the model number for it you can call them for
>> a copy of the diagram.

BTW: I goofed completely here...the original poster
was asking about an RF amp, not audio!

Ned Carlson
Triode Electronics
2225 w. Roscoe St
Chicago, IL 60618 USA
email: triodeel@ameritech.net
ph:773-871-7459
fax:773-871-7938
"Worldwide service,
Neighborhood prices"
since 1985

## 385. www.hamradio-online.com: Photo of Yaesu's pager-sized HT available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: vbook@vbook-nospam.com
Message-ID: <5o3s4o$s3g$1@kanga.accessone.com>
Source record: 93060
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

I've just uploaded a photo of Yaesu's new pager-sized dual-band "micro-HT". That's right, the size of pager... 1/2 watt on internal battery or 1 watt with external supplied power. Yaesu was showing this radio at the SeaPac Ham Radio Convention and ARRL NW Div. Convention at Seaside, Oregon on 6/14 and 6/15. The radio is said to go on sale on July 1st.

Ham Radio Online is a free online web "magazine" about ham radio. No ads. Its run by volunteers. We have nothing to sell. Come enjoy our web site at http://hamradio-online.com

---
Ed (KF7VY) and Kim (N7VPL) Mitchell
SEND email replies to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

## 386. Power amplifier help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: "Philippe Givet, F1IYJ" <phil@Hamradios.com>
Message-ID: <01b91194$8ecb00e0$b3be95c2@f1iyj>
Source record: 93061

Who can help us (radio club) with schematics and/or good ideas for building
a power amplifier with valves for about 500 w output, the new legal limit
in France (last was 250w !). This amplifier will be a club project for hams
who have already build their own HF tranceivers (we know what is a
soldering iron ! hi ! )
Perhaps with tubes like 811A, etc... which not needed 3.5kV power supply !
All answers and propositions are good !
thank you helping OM who think homebrew is a good way to be a ham !
73 - Phil -
- F1IYJ

## 387. Let Hams see what you have to sell.....LOOK.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: george@sky.net
Message-ID: <33a5a763.3953408@news.sky.net>
Source record: 93062
Cross-posted to: rec.radio.amateur.equipment,rec.ham-radio.swap,rec.ham.radio,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello
Do you have soom equipment for sale.Well when you post a Forsale
message on this newsgroup you can now send a picture too the person
that would like to buy your equipment.This will allow him to see what
you have for sale and what kind of shape it is in before you send it
to him.
How can you do this.Simple.Just take a picture of the equipment you
have forsale and send it to me by snail mail.Inclued your e-mail
address and 50 cents.When I get your picture I will scan it and send
it back to you by e-mail.
Heres the address

KB0MAI
G Epley
113e Broadway
Grainvalley Mo
64029

## 388. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Dave VanHorn <dvanhorn@127.0.0.1>
Message-ID: <01bc7a98$ec8b48a0$b5f135ce@hammer.stonewest.com>
Source record: 93063

Mark Zenier <mzenier@netcom.com> wrote in article
<mzenierEBvJon.Fz0@netcom.com>...
> In article <01bc774d$bf790da0$25f135ce@hammer.stonewest.com>,
> Dave VanHorn <dvanhorn@127.0.0.1> wrote:
> >Nothing's perfect..
> >
> >I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
> >Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..
>
> Talking to an ex-truckdriver computer programmer coworker of mine
> many years ago, he did it to even out the receive pattern, not
> anything to do with the transmitting (that's what linears were for ;-) ).

> Just sticking one antenna on the semi tractor gave a lopsided pattern,
> and they change trailers all the time, so you can't stick a rooftop
> antenna in the center of the vehicle.
>
> Mark Zenier mzenier@eskimo.com mzenier@netcom.com
>

The point is that mounted 1/4 wave apart (9') they provide a strong
front-back pattern, which would be good for highway use. 6' apart,
the pattern is a mess...

If you are doing something to your antenna, you are doing it to transmit
and receive, it's not possible to differentiate at the antenna.

## 389. testing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: The-Enforcer <the-enforser@nowhere.net>
Message-ID: <33A5C60D.7BE7@nowhere.net>
Source record: 93064

Please don't fill this area with for sale. There is a spot for that..I
don't read them here, anyways

## 390. Re: W1FB's Renerative Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33a5a115.0@cheese.pcug.org.au>
Source record: 93065

Trapper27@juno.com (KF4HTL) wrote:
>I am a nebie to homebrewing gear. I am attempting the Regen Rcvr
>pictured on pg 109 of W1FB's Design Notebook. This is my second
>project if you count a diode detetor which I built earlier in the
>week.
>
>Pins 1& 3 of the LM386 are jumped to each other.... and there is a
>small circle there. What is that circle?

Trapper - that circle (or semicircle) is when two leads happen to cross one another on a diagram but are NOT connected in actual practice (I think that's what you're describing). In no LM386 amplifier are pins 1 & 3 connected. Pin 1 normally is wired (via a small electrolytic/tantalum capacitor) to Pin 8 (for more gain). Pin 3 is the audio input (from the preceding audio amplifier or regen detector).

Is that where I connect the
>negative lead from my supply voltage?

No. In an LM386 amplifier you apply 12v to pin 6 (maybe via a 10 ohm resistor). Pins 2 & 4 are grounded.

All of the foregoing is critical, and if you don't follow the above, your amplifier will not work. I'd suggest you read up on schematic diagram drawing conventions, what constitutes a connection, what constitutes a crossover, etc. For many years the ARRL handbook has had a page showing these conventions as well as the schematic symbols for various components.

73, Peter VK1PK

--


_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.


_____

# 391. Re: Component questions: 40673 and xtals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-1606971841410001@k4dii.ksc.nasa.gov>
Source record: 93066

In article <33a410d6.14865396@news.erols.com>, wmeara@erols.com (Bill Meara ) wrote:
> The circuit calls for a 40673 (3N211) dual gate MOSFET mixer.
> The same device is used throughout the receiver - elsewhere in the rig
> the MPF102 is listed as an acceptable substitute, but in the mixer
> Doug recommends the 40673. I'm having trouble finding one of these.
> Any suggestions?

Bill-

I think the MPF-102 is a J-FET, and isn't a direct substitute, even though it may function in some areas of your circuit.

Perhaps one of the other dual-gate MOSFETs in the 3N2XX series would be available. I think one was intended for use as a mixer, while the 40673 was intended for use as an RF amplifier.

Another point is that the 40673 was one of the earliest dual-gate MOSFETs. The 3N2XX series is newer, but is probably past 20!

73, Fred, K4DII

## 392. Parts bonanza 4$ale - Only $9

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Brian Mork <morkNOSPAM@usa.net>
Message-ID: <33A5E7C6.5A4F@usa.net>
Source record: 93067
Cross-posted to: alt.hacking,sci.electronics.equipment,rec.radio.amateur.homebrew,rec.ham-radio.swap

(ObHack - okay, a weak one since I just wanted to post
this for sale notice - When making custom interface
connections such as those used by an HP48 or a Fluke97,
I used to use Epoxy poured onto a form mold. Not
any more. Look into Crayola "Magic modeling clay"!
The stuff dries firm, yet flexible, and seals bunches
of little connecting wires in place with no goop
on the host piece of electronics.)

An electronic parts bonanza. Only nine bucks or less!

Computerized, digital, multi-line units to use as-is, or
strip for parts! They're Eagle Telephones, each with the
following, plus more.

o DC-to-DC power supply convertor on an Astec daughter card,
2.5"x 1.5".

o Epoxy encapsulated magnetic reed-switch (and the magnet
-- in the handset).

o 12-button high-quality feel phone pad, about 2"x 3", with 8-wire
flat ribbon cable/connectors.

o 2" diameter, 8-ohm speaker

o Bunch of ICs: CD4081, HCF4069, 2x HCF4066, LS404CB, 2x ULN2003A,
2x ULN2032, SN75176, AMI 8948 (programmed 8048?), LM386

o 3.579575 MHz crystal

o 1.5" x 7" 20 push-button selector panel. Each button has two
colored LEDs and room to insert a small paper label. 34-wire
ribbon cable/connectors.

o 4-digit LED display, with ":" and decimals built onto the display

o One 4-pin, and two 6-pin J-connectors (telephone connectors,
often used on computer network cables, too).

o 8 position DIP switch

o Two 10k-ohm dial pots

o Beige enclosure, handset, and connecting cord.

I'll sell these for $9 + shipping, prepaid. Check exact shipping
costs with the UPS web site cost calculator (my ZIP is 80840):

http://www.ups.com/using/services/rave/rate.html.

--
Delete NOSPAM from address to reply!
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

## 393. Re: App: 6CD6GA sweep tubes (DuKane amps_

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: David Lefavour <VFCS@WWA.COM>
Message-ID: <33A5CD25.4103@WWA.COM>
Source record: 93068
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

Rick Francis wrote:
>
> I ha e a rusty but probably good pair of DuKanes that use the 6CD6 (and
> 5U4, OD3, 12AU7), and have the schematic + other info. Contact me if
> interested. I can test the Dukes if anyone wants to buy them.
>
> Rick
>
> Ned Carlson wrote:
> > If you want to see how those are typically used, DuKane Corp
> > made a lot of amplifiers using 6CD6-G/7867...
> > If I can find the model number for it you can call them for
> > a copy of the diagram.
> >
> > BTW, the audio specs are under 7867, those are listed in the
> > GE tube manual. Same tube, just re-speced as audio output tube.
> >
Hey Rick
Can't do newsgroups at wk but am doing laundry at a friend's place;
I've got a pair of DuKanes that use a quad of 8417's and nuvistor
pre-drivers and want to use the iron off 'em to make an EL509 triode
connected amp-ciao- rbtr@snds.com

## 394. *NEW* Kenwood Reflector!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: ShortCkt <ShortCkt@primenet.com>
Message-ID: <33A5F853.37E3@primenet.com>
Source record: 93069

*NEW* Kenwood Reflector!!!

Kenwood is a mailing list (reflector) devoted entirely
to equipment manufactured by the Kenwood Communications
Corporation (Amateur Radio Products Group).

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe kenwood

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe kenwood

To post items to the reflector, send email as follows:
TO: kenwood@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Fox_Tango is a mailing list (reflector) devoted entirely
to "vintage" and "classic" equipment manufactured by the
Yaesu Musen Co., Ltd. of Tokyo Japan.

* equipment, accessories
* collecting, restoring, refurbishing
* buy, sell, trade, swap
* repairs, modifications, enhancements
* questions, discussions, etc
* just plain operating old Yaesu stuff

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe fox_tango

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe fox_tango

To post items to the reflector, send email as follows:
TO: fox_tango@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP, QRP, APRS
-Packet, Pactor, GTOR, Clover, AMTOR, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
-homebrew, modifications, interfacing, widgets, etc

To subscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: SUBSCRIBE bitbucket

To unsubscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: UNSUBSCRIBE bitbucket

As we encourage the free exchange of ideas, if you pay for
email service by the byte you may want to consider carefully
before subscribing.

To submit materials:
TO: bitbucket@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

bit bucket /n./

1. The universal data sink (originally, the mythical receptacle
used to catch bits when they fall off the end of a register
during a shift instruction). Discarded, lost, or destroyed data
is said to have `gone to the bit bucket'. On Unix, often used
for /dev/null. Sometimes amplified as `the Great Bit Bucket in
the Sky'.

2. The place where all lost mail and news messages eventually go.
The selection is performed according to Finagle's Law;
important mail is much more likely to end up in the bit bucket

than junk mail, which has an almost 100% probability of getting delivered. Routing to the bit bucket is automatically performed by mail-transfer agents, news systems, and the lower layers of the network.

3. The ideal location for all unwanted mail responses: "Flames about this article to the bit bucket." Such a request is guaranteed to overflow one's mailbox with flames.

4. Excuse for all mail that has not been sent. "I mailed you those figures last week; they must have landed in the bitbucket." Compare black hole.

This term is used purely in jest. It is based on the fanciful notion that bits are objects that are not destroyed but only misplaced. This appears to have been a mutation of an earlier term `bit box', about which the same legend was current; old-time hackers also report that trainees used to be told that when the CPU stored bits into memory it was actually pulling them `out of the bit box'. See also chad box.

Another variant of this legend has it that, as a consequence of the `parity preservation law', the number of 1 bits that go to the bit bucket must equal the number of 0 bits. Any imbalance results in bits filling up the bit bucket. A qualified computer technician can empty a full bit bucket as part of scheduled maintenance.

-Brian
shortckt@primenet.com

## 395. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Mike Volz <mvolz@avci.net>
Message-ID: <33A60311.3BCE@avci.net>
Source record: 93070

Doug DeMaw, W1FB has written a number of fine books including Solid State Design for the Radio Amateur, QRP Classics (contains info on building transmitters, receivers, transceivers, and many accesories to them) along with more.

I also have worked at a local TV/VCR retail/repair shop with the owner having 46 years of electronics experience to pass on wisdom. I mention this since working there has helped me and you're old enough to get into a shop like that, if the manager is willing.
I started at the shop when I was 14, I'm now 17 and still puttering on there.
--
Mike
KG8UK
2 WH 103
ICQ 1262284

## 396. Re: Power amplifier help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <33A60593.85DA8DB2@imaxx.net>
Source record: 93071

Philippe Givet, F1IYJ wrote:

> Who can help us (radio club) with schematics and/or good ideas for
> building
> a power amplifier with valves for about 500 w output, the new legal
> limit
> in France (last was 250w !). This amplifier will be a club project for
> hams
> who have already build their own HF tranceivers (we know what is a
> soldering iron ! hi ! )
> Perhaps with tubes like 811A, etc... which not needed 3.5kV power
> supply !
> All answers and propositions are good !
> thank you helping OM who think homebrew is a good way to be a ham !
> 73 - Phil -
> - F1IYJ

Try my HomeBrewer's Web page at:
http://www.imaxx.net/~kd9jq

I provide a free Triode Tube Grounded Grid Amplifier
program called T.A.P.2.0 to the amateur radio community.

Happy Building

Chuck KD9JQ

--
----------
Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net
----------

# 397. Reduced output on Kenwood TS-570D HF tranceiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Bjarke <bjmko@tdk.dk>
Message-ID: <33A58EA0.62519B49@gatekeeeper.teledanmark.dk>
Source record: 93072
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.digital

Hello radio amateur freak

I have a Kenwood TS-570D HF tranceiver and like to use it in combination with a transverter for going SSB on 144MHz.

My home build transverter want an input signal of max. 100mW for transmitting but my TS-570D deliver min. 5000 mW (5W).

Do you know if it is possible to reduce the output signal of the TS-570D transceiver to 100mW - by push any buttons on startup or something like that?

What else can I do - 34 dB attenuation is quite a lot.

Yours faithfully

OZ2BKK /Bjarke

## 398. Radio Shack HTX-212/242 Problems

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: "Gary E. Euler" <downeast@ij.net>
Message-ID: <33A50176.5AD3@ij.net>
Source record: 93073

Hello to all

Has anyone out there had any problems with their RS htx-212/242
mobile radios. We had a few with the PIN switching circuit burning
a hole through the circuit board. Also the final breaks into
oscillation on the HTX-212 in high power (45 watts). We also have found
the HTX-242 radios are having a problem with the CTCSS and DTMF not
having the right frequency and or low deviation. If you have seen these
problems with these two radios please e-mail me with the details of your
problems and what Tandy did to resolve the problem. A few of us have
been burned by Tandy with these products. I myself went through six (6)
radios starting with the HTX-212. I now have the HTX-242 and I still
have problems with the radio, the deviation is too low on the DTMF
output from the radio. There is no DTMF/CTCSS level control. All
signals go to a single deviation control (RV1) per the schematic.
Please e-mail me if you had problems. We need all the support we
can get on this matter since Tandy states that the radio has no known
problems. If you are going to purchase any of the amateur line from
Radio Shack, do yourself a favor and get the extended service (TSP).
Thank You
Gary
downeast@ij.net

## 399. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <KLBhoCArRHpzEwtc@ifwtech.demon.co.uk>
Source record: 93242

Rich Measures wrote:

> According to Svetlana, this tube has a 2w max. grid. Svetlana says
>nothing about using the 4cx800A in other than grid driven Class AB1
>service. In my un-"expert" opinion, a 2w-rated grid is not appropriate for
>g-g operation with a tube that has an 800mA anode rating..

There's no problem in principle about cathode-driving any tetrode in class AB1 or AB2, provided that:

1. both grids can be effectively grounded to RF;
2. both grids have the correct DC potentials applied relative to the cathode; and
3. the amplifier is not overdriven.

These conditions can be successfully met using a wide variety of tetrodes, with rated control grid dissipations all the way down to "zero" (the cathode-driven 4CX1000A in the Collins 30-S1).

The practical problem about cathode-driving tetrodes such as the 4CX250B-350A-400A-800A is the base pinout, which is intended for grounded-cathode and makes it very difficult to ground the control grid effectively. That is why cathode drive is not mentioned on the data sheets for those tubes.

On the other hand, cathode drive with RF-grounded grids is the normal configuration for coaxial-based tetrodes used at UHF. The amplifier is more stable, and also input (G1-cathode) capacitance of the tube is much easier to match when it appears in parallel with a low cathode impedance than in parallel with a high grid impedance.

Svetlana's preliminary data sheet for the coaxial-based 4CX1600U (U, not B) shows typical 432MHz data for cathode drive. The control grid dissipation is only 1.5W, and data are given both for class AB1 (-30V with respect to cathode, zero grid current) and AB2 (-30V, grid currents up to 42mA). The 4CX1600U already has a successful track record as the GS-23B, and there are many cathode-driven amplifiers using these tubes. Likewise the Siemens YL1050-1052-1056 TV transmitting tetrodes are constructed and rated for cathode drive.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

## 400. Re: Fire Dept Taking radio Bids - More Details

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: bbowers@townsqr.com
Message-ID: <5o21va$da7@tofu.alt.net>
Source record: 93243
Cross-posted to: misc.emerg-services,pa.forsale,pgh.forsale,rec.radio.amateur.homebrew,rec.radio.swap

sig@file.com wrote:

>Price and reliablity wins eh? Are you going to buy from halfway across
>the nation to save a few dollars? Better find a GOOD radio dealer in
>your area that supports their lines of equipment with service and parts
>before you start taking bids from all over the country. Your loacal
>repair/dealer wont do you any favors when he finds you bought from out
>of state to save $10!

AMEN!!!!!

## 401. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33a3ec3a.1384221@netnews.worldnet.att.net>
Source record: 93244

On Wed, 11 Jun 1997 08:24:26 -0700, Mark Brown <kb0pyo@starpoint.net>
wrote:

>Hi Tom
> Why is it non-sense to use a 50 ohm resistor in the grid circuit?
> Mark
>ps: I am looking for a simple method of driving a 4cx800.

Hi Mark.

Because the 50 ohm resistor does not set the drive power to a value
that matches the exciter power, except in the case of blind luck.

Most exciters put out best IMD performance at median power levels, say
50 watts envelope power for a 100 watt rig. They also have overshoot
(caused by slow ALC attack time) that often greatly exceeds the power
you have the rig set for.

The IDEAL drive setting is one that holds the exciter in the middle of
optimum IMD performance for the LARGEST amount of the time, then you
generate the least IMD. The correct power setting for this is
generally FULL power with no speech processing, and half power with
heavy speech processing.

Just "throwing" a 50 ohm resistor on the grid of a low bias AB1 tube
like the 4CX800 has several disadvantages:

1.) It increases IMD from the exciter, because the exciter is operated
outside the optimum range for IMD performance.

2.) It increases the likelyhood you will overdrive the PA, since you
will have to carefully adjust drive when you go from barefoot to PA

3.) It increases the effects of already common exciter overshoot (my
IC706 overshoots to 150 watts at the leading edge of speech when set
to 20 watts output! (Many but not all other rigs, including Kenwoods,
other ICOM's and Yeasus also do this! And it happens so fast you need
a triggered scope or storage type power meter to see it.)

4.) It makes the system much less stable and fussier to adjust than
it could be.

AB1 PA's are very critical for screen regulation and require careful
planning, if you don't want to splatter. Many manufacturer's primary
goal is to sell tubes, so they downplay how important good screen and
control grid design is.

The correct grid circuit would involve selecting a grid resistor (or including an attenuator pad) that allowed the exciter to be operated at near full output. The drive impedance could still be 50 ohms. The control grid supply should have low ESR (voltage limited) and include some type of peak drive warning indicator besides a meter.

The screen should be VERY well regulated and properly protected from excessive dissipation.

The only article I've seen LATELY that was a good was written by W6FR and published a few years ago in Comm Quarterly. If an attenuator pad was added to his design, allowing the exciter to operate at nearly full power, it would be a very good design.

73 Tom

## 402. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Dave VanHorn <dvanhorn@127.0.0.1>
Message-ID: <01bc79f4$fa139620$6ff135ce@hammer.stonewest.com>
Source record: 93245

Get yourself a copy of Horowitz and Hill's Art of Electronics.
It's about $70 and worth it.
It dosen't cover RF much, but you will be glad you got it.

If I knew of a book for RF that was that good, I'd pass it along.

## 403. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33a48fc7.655949@netnews.worldnet.att.net>
Source record: 93246

On Sun, 15 Jun 1997 08:13:33 -0700, measures@mail.vcnet.com (R. L. Measures ) wrote:

>Agreed. However, why go to the expense and trouble of designing and
>building a separate 2x screen voltage supply so we can use a smaller R to
>supply the zener-string regulator? The anode supply is already there. Why
>not use it? If the anode V goes away, the screen V goes too. This is
>good.

I didn't suggest a separate supply.

I said:
>>With a shunt regulator you don't need a bleeder, but the
>> screen supply voltage has to be twice the screen operating voltage to
>> limit screen dissipation in the case of abnormal conditions.

You said:
>True enough. More R would be better. The most logical source is the
>positive HV supply, which is typically about six times the screen v.

More R is not "better". The only thing more R adds is more heat. If it's unavoiidable, then it's unavoidable.

With small tube I use a center tapped transformer for the HV, and run the screen from the HV supply center tap. That saves heat. With big tubes (4CX5000's and up) I use a separate transformer winding on the plate transformer.

The main requirement is the screen supply voltage must be at least two times the operating voltage to provide screen protection.

73 Tom

## 404. Home brew vfo wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: rs2bk@aol.com
Message-ID: <19970616015800.VAA20534@ladder02.news.aol.com>
Source record: 93247

Looking for any home brew vfo. Would prefer a handbook design but i would consider others. tnx rs2bk@aol.comm

## 405. Re: Need help! re: Pulse modulation @ 2 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970616040600.AAA03914@ladder02.news.aol.com>
Source record: 93248

In article <33A43EDF.35F6@netaccess.on.ca>, raven1
<raven1@netaccess.on.ca> writes:

>
>Can anyone suggest a better way or a sure way to get the
>oscillator to follow high speed pulses?
>
>

Keep the oscillator running and gate it in.
You need high speed stuff though. TTL
tops out about 125 mHz. Motorola has some
VHF devices.

Carl

## 406. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <33A4D593.3580@pop.removethistomailme.net>
Source record: 93249

Dave VanHorn wrote:
>
> Get yourself a copy of Horowitz and Hill's Art of Electronics.
> It's about $70 and worth it.
> It dosen't cover RF much, but you will be glad you got it.
>
> If I knew of a book for RF that was that good, I'd pass it along.

The ARRL Handbook is still pretty tough to beat for comprehensible coverage of RF issues. IMHO he'd do well to steer clear of the 'TAB' books by Carr et al., as they tend to have the sort of nobody-at-this-publisher-gives-a-hoot editing problems that can really frustrate a newcomer.

As for my personal recommendation, they'll take my two volumes of Jim Williams' 'Analog Circuit Design: Art, Science, and Personalities' from me when they pry my cold, dead fingers off the cover!

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

## 407. Re: Component questions: 40673 and xtals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: alex_x@iserv.net
Message-ID: <33a4a266.43859090@snews2.zippo.com>
Source record: 93250

On Sun, 15 Jun 1997 16:12:36 GMT, wmeara@erols.com (Bill Meara )
wrote:

>The circuit calls for a 40673 (3N211) dual gate MOSFET mixer.
>The same device is used throughout the receiver - elsewhere in the rig
>the MPF102 is listed as an acceptable substitute, but in the mixer
>Doug recommends the 40673. I'm having trouble finding one of these.
>Any suggestions?

Bill:

You may find your semi's at Dan's Small Parts and Kits,
http://www.fix.net/dans.html. Do a search with your browser as
this site is kind of unorganized.

Otherwise, some years ago, I was able to find RCA 40673's
packaged for sale via SK Electronics.

Good Luck with your project!

Alex

```
Alex's Electronic Test Bench --> www.iserv.net/~alexx
```

# 408. Re: Superregeneration:Looking for a good reference article with transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33a4f92e.0@cheese.pcug.org.au>
Source record: 93251

>Bob Miller wrote:
>
>> Check out Communications Quarterly a few issues back. A fellow at
>> Analog Devices did a first class article on Regens using xistors. I
>> belive his last name was Kitchen?
>

Not only a first class article, but a first class receiver, too. My version of the unit covers 3.5 - 10 Mhz and is easily the best regen receiver I've ever built, transistor or valve. Highly recommended.

73,

Peter VK1PK
--
_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____

## 409. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33a4fbfe.0@cheese.pcug.org.au>
Source record: 93252

Scott - a good book is Solid State Design for the Radio Amateur, published by the ARRL. Also, look out for anything written by Pat Hawker G3VA (available through RSGB). There's a lot of material/circuits put out by the various QRP (low power transmitter) amateur radio clubs.

There's a lot of circuits on the Net - SM0VPO and G3YCC home pages spring to mind. There's links to them through the Australian QRP Home Page (URL below). While you're there, you might want to check out the Novice Notes Online pages and the new "QRP Best Buys" section.

73,

Peter VK1PK

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

## 410. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33a4faf3.0@cheese.pcug.org.au>
Source record: 93253

--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

## 411. Re: Component questions: 40673 and xtals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33a4fabb.0@cheese.pcug.org.au>
Source record: 93254

wmeara@erols.com (Bill Meara ) wrote:
>Homebrewers:
>
>I'm building the "Bare Bones Superhet" receiver that Doug Demaw
>described in a June 82 QST article.
>
>I'm gathering parts.
>
>The circuit calls for a 40673 (3N211) dual gate MOSFET mixer.
>The same device is used throughout the receiver - elsewhere in the rig
>the MPF102 is listed as an acceptable substitute, but in the mixer
>Doug recommends the 40673. I'm having trouble finding one of these.
>Any suggestions?
>

A BF981, BF960 (?), MPF121, MPF131, 3N201(?) or a MFE301 should all work.

>The circuit also calls for the use of Radio Shack color burst crystals
>for the IF filter and BFO. As far as I can tell, RS isn't making
>these any more. I do, however, see a lot of microprocessor crystals
>available at 3.579545 Mhz. They are listed as having load capacities
>of 17pf or "series" I suppose I should order the series model,
>correct? Does anyone have any info on substituting these rocks for
>the RS color burst crystals in an IF filter application?
>

I'd think they're pretty much the same components, and microprocessor
crystals should be OK. In any case you can always vary the capacitance
values in the ladder filter and put an inductor or capacitor in series
with the xtal in the BFO to get the selectivity characteristics you want.
I think for a filter it's important thet the xtals are of the same
brand/type.

>Other Q's: I see that silver mica caps are getting hard to find.
>Will I have any real problems if I just use high tolerance dipped mica
>caps (in the voltage dividers in the VXO and BFO Colpitts circuits and
>in the IF filter).

Polystyrene capacitors are a good choice for VFOs. You could try dipped
mica caps, though I've never used them myself.

>
>Doug called for the use of Carbon composition resistors. Any benefit
>or disadvantage in using the film resistors?
>

I wouldn't worry about the difference myself.

73, Peter VK1PK
--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____

## 412. Re: Low noise oscillators: JFET or Bipolar?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: Richard Stearn <rstearn@bell-labs.com>
Message-ID: <33A522BF.3298@bell-labs.com>
Source record: 93255

Douglas Dwyer wrote:
< pruned >
> pull the frequency . Other high Q/low loss elements are 1/4wave rigid
> coax.

I have used 1/4 wave rigid coax in mobile VCO's for some years with good
results. I was after the low microphony but I found that the phase
noise
was better than with many other resonators available to me.

I started from a Plessy (I think) application note at 145MHz and after
success there moved onto 430MHz with similar success. Both designs used
J310. Can not (at the moment) find the results I took.

In article <33A20036.4A8F@notme.IntegriNautics.com>, Stewart Cobb
<stu@notme.IntegriNautics.com> writes
>I'm planning a 400MHz narrow bandwidth VCO for a project. Phase noise
>is very important. The most critical ingredients in low phase noise
>design seem to be (1) hi-Q resonators, (2) emitter/source degeneration,
>and (3) low-noise oscillator transistors.
>

However as my application was for the synthesiser VCO in packet txcvrs
this
may not be low noise enough for your application.

--
Regards
Richard
+---------------------------------------------------------------------------+
| Richard.Stearn@lucent.com | Phone +44 1666 833183 | Fax +44 1666
832844 |
| Lucent Technologies, Swindon Road, Malmesbury, Wiltshire, UK. SN16
9NA |
| Richard.Stearn@lucent.com
G1SOG |
+---------------------------------------------------------------------------+

## 413. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-16 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <ICuxaFAXSOpzEwcP@ifwtech.demon.co.uk>
Source record: 93256

Tom Rauch replied to Rich Measures:

>>True enough. More R would be better. The most logical source is the
>>positive HV supply, which is typically about six times the screen v.
>
>More R is not "better". The only thing more R adds is more heat. If
>it's unavoiidable, then it's unavoidable.
>
>With small tube I use a center tapped transformer for the HV, and run
>the screen from the HV supply center tap. That saves heat. With big
>tubes (4CX5000's and up) I use a separate transformer winding on the
>plate transformer.
>

The point about heat is a good one. For a typical medium-sized PA requiring say 2500V anode, and 360V screen at 30mA, the resistor needs to be about 70k at 65W minimum. Since this dissipation would be continuous, the chain of resistors would need to be rated at well over 100W. The dissipation also increases as (Va-Vg2)^2 for higher anode voltages.

Also there's the matter of packaging convenience. There's no problem if you have a table-top amplifier where the anode supply, low-voltage supplies, metering, control and RF deck are all in the same box. But if you wish to break these functions up into physically separate units, it can be quite inconvenient to cross-connect the anode and screen supplies in this way.

>The main requirement is the screen supply voltage must be at least two
>times the operating voltage to provide screen protection.

Rich is correct to say that the voltage dropping resistor will automatically remove the screen supply if the anode supply fails, and normally I favor this kind of automatic passive protection; but there are other ways to do it.

Almost anything that can go wrong with a tetrode amplifier can be detected by monitoring the screen current, and automatically switching the amp back to standby if the screen current goes too far positive or negative. Screen currents approaching the power dissipation limit are usually way out of line for normal operation, so the alarm circuit can be set to operate some way inside the dissipation limit.

This isn't theory - it's all proven technology. European hams continued to use tetrodes throughout the years when USers were almost exclusively using triodes. We did a lot of design work on power supply and control

circuits, and have been using highly stabilized screen supplies with electronic protection for 10-15 years now.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

## 414. Re: App: 6CD6GA sweep tubes (DuKane amps_

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Rick Francis <rfranci@uoft03.utoledo.edu>
Message-ID: <33A5EDAD.32BC@uoft03.utoledo.edu>
Source record: 93074
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

I ha e a rusty but probably good pair of DuKanes that use the 6CD6 (and 5U4, OD3, 12AU7), and have the schematic + other info. Contact me if interested. I can test the Dukes if anyone wants to buy them.

Rick

Ned Carlson wrote:
> If you want to see how those are typically used, DuKane Corp
> made a lot of amplifiers using 6CD6-G/7867...
> If I can find the model number for it you can call them for
> a copy of the diagram.
>
> BTW, the audio specs are under 7867, those are listed in the
> GE tube manual. Same tube, just re-speced as audio output tube.
>

## 415. Re: Mobile screwdriver antenna.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970617001000.UAA25867@ladder02.news.aol.com>
Source record: 93075

In article <33A1AEA7.1B20@concentric.net>, unit77 <unit77@concentric.net>
writes:

>Can you supply me with the plans/parts list and specs for the above
>project?

No, but for $5.00 postpaid, Don Johnson, W6AAQ, the conceiver
of the screwdriver antenna will happily do so. He also will sell
all of the parts and the like for $150 shipped.

DONALD K JOHNSON W6AAQ
BOX 595
ESPARTO, CA, 95627-0595

is the latest address for him. Good luck, the only antenna that works
better is a big BugCatcher, and you can't switch bands while driving with
a bugcatcher.

-art clemons-

-art clemons-

## 416. Re: App: 6CD6GA sweep tubes (DuKane amps_

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: triodeel@ameritech.net
Message-ID: <33a5ecc4.115459160@news.chicago.il.ameritech.net>
Source record: 93076
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

David Lefavour <VFCS@WWA.COM> wrote:

>Rick Francis wrote:
>>
>> I ha e a rusty but probably good pair of DuKanes that use the 6CD6 (and
>> 5U4, OD3, 12AU7), and have the schematic + other info. Contact me if
>> interested. I can test the Dukes if anyone wants to buy them.

>Hey Rick
>Can't do newsgroups at wk but am doing laundry at a friend's place;
>I've got a pair of DuKanes that use a quad of 8417's and nuvistor
>pre-drivers and want to use the iron off 'em to make an EL509 triode
>connected amp-ciao- rbtr@snds.com

If you need diagrams for these, the DuKane Corp, has helped me in the
past. Phone number iis 630-584-2300..ask for parts dept.

If, by any stroke of luck the have any manuals for those, that will
give you pretty complete specs on them.

Ned Carlson
Triode Electronics
2225 w. Roscoe St
Chicago, IL 60618 USA
email: triodeel@ameritech.net
ph:773-871-7459
fax:773-871-7938
"Worldwide service,
Neighborhood prices"
since 1985

## 417. Need Schematic for PRC-41 PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Ben Wallace <bwallace@sd.cts.com>
Message-ID: <01bc7ac6$092404c0$3506a3cd@bwallace.cts.com>
Source record: 93077

I need a power supply schematic for the PP-3700 power supply used for the
PRC-41.
Can Anyone help. I will pay copy/postage fees.

Tnx
de ben wb8hur

# 418. Re: ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33a62293.152032@nntp.infoave.com>
Source record: 93078

On Sun, 15 Jun 1997 09:18:10 GMT, Trapper27@juno.com (KF4HTL) wrote:

>For my 2nd project, I am attempting a regenerative reciever!
>
> I am working with the schematic for a renerarative reciever on
>pg 109 of W1FB's Design note book. I have completed building the
>circuit on my breadboard and have double and tripple checked parts
>placement. When I apply 12 volts and slip on my 8 ohm phones I get
>nothing!
> I have two things I am uncertain of:
>

> 2) On the schematic pins 1 & 3 of the LM386 are
>jumped together and at that connection is a small circle similar to
>the +12V connection pictured elsewhere on the Schematic! Only
>difference is that the circle stemming from pins 1 and 3 doesn't have
>

Thank each of you who responded via e-mail..... I got over my fear of tearing something up and removed the jumper between pins 1 and 3 and WhaaaLAaa! I began receiving AM Broadcast stations! (BBC, Radio America, etc... ) and I couldn't tune away from them! They were all booming in at once! I have since found out that I smoked the MPF102's Drain.... so the FET was acting as a diode.

I will be picking up another MPF102 tomorrow and hopefully the regeneration will allow me to tune in some SSB and CW.

Thank again to everyone!

Marty - KF4HTL

## 419. Re: W1FB's Renerative Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33a625a4.936910@nntp.infoave.com>
Source record: 93079

Thanks Peter,
I will try and find something on schematic drawing conventions... I have been studying from several books over the last few months.... 1997 ARRL Handbook, Getting started in electronic from radio Shack, QRP Classics, W1FB's Design Notebook, W1FB's QRP Notebook, and Transistor Electronics (a highschool text by Gerrish and Dugger) and I have yet to run accross the symbol pictured on the shcematic I was working with. However that is no defense for my ignorance..... I should have trusted intuition.... but being so new to actually applying all of these things I have been reading about is very intimidating. <GRIN>

I have since removed the jumper I had placed between pins 1 & 3. The LM386 survived, however the MPF102 did not! I smoked the drain and it is now acting as a diode detector rather than a transistorized hartley oscillator. I do enjoy listning to those big AM broadcast station.... even all at one time, but tomorrow I am purchasing a new MPF102 and I am going to tune in and try and listen to you talking SSB way down there in Australia <GRIN>

73's

Marty - KF4HTL - Upstate South Carolina USA

On 16 Jun 97 20:24:53 GMT, Peter Parker <parkerp@pcug.org.au> wrote:

>Trapper27@juno.com (KF4HTL) wrote:
>>I am a nebie to homebrewing gear. I am attempting the Regen Rcvr
>>pictured on pg 109 of W1FB's Design Notebook. This is my second
>>project if you count a diode detetor which I built earlier in the
>>week.
>>
>>Pins 1& 3 of the LM386 are jumped to each other.... and there is a
>>small circle there. What is that circle?
>
>Trapper - that circle (or semicircle) is when two leads happen to cross
>one another on a diagram but are NOT connected in actual practice (I
>think that's what you're describing). In no LM386 amplifier are pins 1 &
>3 connected. Pin 1 normally is wired (via a small electrolytic/tantalum
>capacitor) to Pin 8 (for more gain). Pin 3 is the audio input (from the
>preceding audio amplifier or regen detector).
>
>
> Is that where I connect the
>>negative lead from my supply voltage?
>

>No. In an LM386 amplifier you apply 12v to pin 6 (maybe via a 10 ohm
>resistor). Pins 2 & 4 are grounded.
>
>All of the foregoing is critical, and if you don't follow the above, your
>amplifier will not work. I'd suggest you read up on schematic diagram
>drawing conventions, what constitutes a connection, what constitutes a
>crossover, etc. For many years the ARRL handbook has had a page showing
>these conventions as well as the schematic symbols for various
>components.
>

## 420. Re: Vac. Variable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5o54ms$a7o@cletus.bright.net>
Source record: 93080

looks like 0 - 60 pf @ 2kv de Norm N8RGR

## 421. Re: ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <33A61A87.4AF7@pop.removethistomailme.net>
Source record: 93081

Trapper27@juno.com (KF4HTL) wrote:
>

> I will be picking up another MPF102 tomorrow and hopefully the
> regeneration will allow me to tune in some SSB and CW.
>
> Thank again to everyone!
>
> Marty - KF4HTL

Congratulations on your first signal! :) One suggestion you may have missed: never, ever buy only one of anything. Like most small-signal transistors and components, MPF-102s are cheaper by the dozen. It is always better to have plenty of spare parts on hand, unless you know your local Radio Shack manager well enough to get him to unlock the store at 3:00 AM on a Sunday morning!

-- de KE5FX

---
Note: My E-mail address has been altered to avoid spam
---

## 422. Re: 15 yr old wants to design circuts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: nyeda@uwec.EDU
Message-ID: <2.2.16.19970617010439.372f0b4a@uwec.edu>
Source record: 93082

diback@aol.com (Diback) writes:
>I am 15 years old, and I'm realy into radio [....] I want to be able to take
>a pile of commponents and, from memory, build a radio [....] I want to know
>about what each indivdual resistor, capacitor, and IC chip in a radio does,
>just by looking at the schematic. I am lerning about circut components, and
>design in my study guide "Now Your talking", but I feel that it won't have
>nearly all the info I need to achive my goals.

It's great to see a young person with such drive to learn! I'd suggest starting with the ARRL Handbook for Radio Amateurs. It is a lot to read and parts of it are pretty dense but it starts with the math and electronics basics you need to know to accomplish your goal and takes you up through radio theory, with lots of references for further reading and plans for radio projects.

The other thing that will be invaluable is to go to your local ham club's meetings (most will welcome you even if you aren't a ham yet) and make friends with other hams who have built their own equipment. They are usually more than happy to help you learn and may even let you use their equipment, some of which is pretty expensive to buy on your own.

You have set yourself a formidable goal. Guys go to engineering school to learn this stuff, so don't be frustrated if it is slow going. I believe that you can teach yourself a great deal though with the proper motivation and intelligence which you seem to have. Involvement in ham radio and radio electronics experimentation is excellent preparation for a career in engineering and looks good on college applications.

David Nye, KB9PSL * Eau Claire, WI

## 423. ICOM IC-120 acessory plug

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Bill Harwood <harwood@ndti.net>
Message-ID: <33A643FE.4F8E@ndti.net>
Source record: 93083

I have an old IC-120 1.2 GHz radio that I got in a trade. I want to do some fancy playing on 1.2. The manual (and the back of the radio) have a 9 pin plug on the back of the radio with discriminator, s level, PTT and some other connections on it.

The socket (female side on the radio) has what appears to be a center plug (like a vaccuum tube) and 9 pins around a circle. I do not know if other ICOM radios of this vinatage had this plug or just the IC-120.

I need to find a source for these plugs (or a plug) and a proper discription of them.

Thanks in advance,

Bill Harwood
W5WH

## 424. FAX # for JAN Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33a661a0.3254471@news.erols.com>
Source record: 93084

I tried the FAX number in my somewhat dated catalog and it didn't work.

Does anyone have a FAX number of e-mail address for the fine folks at JAN Crystals?

Thanks, 73 Bill N2CQR

## 425. Icom IC24AT FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: jedc@key.net.au
Message-ID: <MPG.e111c77c29560f4989683@news.key.net.au>
Source record: 93085

```
Icom dual band handie IC24AT , with charger $280.00
```

## 426. COMMUNITY UHF REPEATER FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: icepick@aol.com
Message-ID: <19970617130901.JAA15218@ladder02.news.aol.com>
Source record: 93086

90 WATT,TX RX DUPLEXER,GASFET PREAMP,TX CLEANUP CAVITY,18 TONE PANEL.
THANKS,DENNIS

## 427. Looking for a Motorola MRF492 RF Power Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Daryl Wicker <dwicker@lilly.com>
Message-ID: <33A68ECF.3470@lilly.com>
Source record: 93087

Greetings,
I am building a 6 Meter amp from a dated magazine article (early 1980s)
. It calls for a Motorola MRF492 transistor . Is this transistor still
available ? Any info would be appreciated .

Daryl
N9YIW
dwicker@lilly.com

## 428. ANTENNA RELAY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: "Peter F. Christensen" <christep@mail.cadvision.com>
Message-ID: <33A6B392.66A1@mail.cadvision.com>
Source record: 93088

I am building a T.R.-Switch for one of my boat anchors. I would like to get information on a DPDT relay i can use. It should handle at least 500 watts. The coil can run on 115v AC or 12v DC Thank you. Peter Christensen VE6LP. christep@cadvision.com

## 429. Homebrew homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5o6ee9$lf2$1@pommac.tninet.se>
Source record: 93089

Hi All,

This weekend my homepage went off-line, it went off at 15:55
on Friday the 13th. I think the last person to leave the
offices of Telenordia switched off more than just the electric
lights.

Well, it is back on again.

http://user.tninet.se/~acz732k/

Next week I will begin inserting an all valve General Coverage
receiver, stage-by-stage whilst it is under construction. If I
can persuade the boss at work to turn a blind eye I will see if
I can get one of the illustrators to photograph each stage.

Best regards

Harry

## 430. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <AnnjDDAzbrpzEwv2@ifwtech.demon.co.uk>
Source record: 93090

Tom Rauch wrote:
>On Mon, 16 Jun 1997 08:00:39 +0100, "Ian White, G3SEK"
><G3SEK@ifwtech.demon.co.uk> wrote:
>
>>Almost anything that can go wrong with a tetrode amplifier can be
>>detected by monitoring the screen current, and automatically switching
>>the amp back to standby if the screen current goes too far positive or
>>negative. Screen currents approaching the power dissipation limit are
>>usually way out of line for normal operation, so the alarm circuit can
>>be set to operate some way inside the dissipation limit.
>
>But if the screen shunt regulator is fed from ANY supply voltage at
>least 2X the screen operating voltage, the screen will NEVER be over
>dissipated. That includes if you power up the screen with NO bias and
>anode voltage.
>
That's perfectly true, but the use of a screen-current trip makes it
less necessary to provide 'passive' potection against over-dissipation.

>The only chance for excessive dissipation is if the screen grid is
>receiving high values of negative current. While that condition is a
>rare operating parameter, negative screen current protection can be
>accomplished by measuring the screen regulator return current if you
>use a separate supply.

Unfortunately, excessive negative screen current is not a rare event
with some tetrodes because it can easily happen with incorrect loading
(rather like incorrect grid current in a triode).

>
>>This isn't theory - it's all proven technology. European hams continued
>>to use tetrodes throughout the years when USers were almost exclusively
>>using triodes. We did a lot of design work on power supply and control
>>circuits, and have been using highly stabilized screen supplies with
>>electronic protection for 10-15 years now.
>
>So recently? ;-)
>
>Perhaps you are confused Ian. Good designs were popular here when
>tetrode were commonly used (in the 60's and early 70's), but back then
>more US Hams understood electronics.
>
I think I have most of the published references from QST and HR of that
era, but unfortunately the effective screen voltage regulators all used
tubes, and were abandoned in favor of passive designs using zeners that

probably perform less well.

There seem to be very few designs published in the USA for tetrode power supplies using modern active devices. In fact I can only think of two: the one by KN5S/K5AM in QEX last year and the one published by Rich on his web pages (and maybe elsewhere in print?). If there are any more, I'd really like to see them!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

# 431. RDF DDDF 3.5-148 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <866567595@infoway.com>
Source record: 93091

Advice and ideas sought:

I want to do Radio Direction Finding for:

1) 3.5-7-14-21 MHz to find the power line interference RFI at my
QTH. (It peaks about 21 Mhz)

2.) 147 MHz to compete in our MARC transmitter hunt, which is on foot in
a fairly small area, that I will not have a lot of trouble
transporting a reasonable portable array/ht.
They use a strong 2 meter FM signal that is constant while
it transmitts a message at intervals, then is silent.

I have the RDF citations from the 1993 ARRL Handbook.
Are there other good articles I should read?

I have a zero center little meter I would like to use for direction
indication. I have a meter I could use for field strength.

I like the phase shift detection method from the switched antennas
of the DDDF for it's null over a wide frequency response.

It seems to me, that I could phase detect the chopping frequency of the
RDDF to drive the zero center meter, and pull off a field strength
measurement to drive a regular meter.

I've got a 4047 that I am starting to build a circuit for now, and
am curious about ideas.

BTW, I am 6.2" over 200 lbs, so I could carry a few lbs if it
will make the hunting faster and pinpoint the source more accurately.
I have on old beat up back pack that I could outfit as my RDF unit.

I have my HT or 2 meters, and so far, just an old portable radio
that I might rebuild into a more shielded RDF. But I might be
better off building a whole new radio. A direct conversion
unit built arround an old Millen Gird Dip Meter circuit used as
the calibrated frequency tuned tank for noise detection.

But I am probably better off just buying some sort of portable
SWL radio from Radio Shack.

Any advice out there?

After if I win our clubs' hunt, I am interested in considering organizing
a transmitter hunt along the lines of international competition on
80 and 2 meters with multiple transmitters etc.
We are getting a new clubhouse at the base of Mt Tamalpais

a 2650 ft mountain that has wonderful trails and opportunities for
great transmitter hunt.

Thanks in advance for the benefit of your experience and knowledge.
73, Don n6mce

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

## 432. Re: 15 yr old wants to de

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <866567594@infoway.com>
Source record: 93092

I also learned by struggle with the ARRL Handbook, but now, when I read
it, I begin to see how my college education and professional experience
fill in the gaps and spot the errors. When it comes to actually
designing things and getting them to work, the ARRL Handbook
leaves too many gaps. Even William Orr's Radio Handbook I found
more useful in building my linear. And the manufacturer's data sheets
and books more useful in using a given device.
My recommendation, at 15, build simple circuits, get licensed,
join a local ARC, find the professional engineers who may be
doing club projects, and get them to take you under their wing.

Apply yourself in school, prepare for going to college so you can
spend the years being taught in an organized manner.

And have fun getting into ham radio.

73, Don n6mce

> What want to know is, how can I achieve this nowlage, are there any
> good books out there? I have flipped through Joe Carr's " secrets of
> RF
> circot design" or whatever it's called, but I feel it may be above my
> skill level.
> If any one out there can help me, I would be most appreceative!
>

Ro> Scott,Get a copy of the "Radio Amateur's Handbook" from the ARRL
Ro> (American Radio Relay League). You can find their Web site on line at
Ro> www.arrl.org.
Ro> I'm an RF Engineer by dint of about 25 years of hands on experience,

Ro> Drop me an e-mail and maybe I can steer you onto some things that can
Ro> lead to a career path. Good luck.

Ro> Joe
Ro> WA3CMQ

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

# 433. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc7aee$92a19780$f5915cc1@dummy.forthnet.gr>
Source record: 93093

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO
31/October/97. FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA
EMAIL OR FAX AT ++30 81 761382.

## 434. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1706970446330001@news.vcnet.com>
Source record: 93094

In article <33a48fc7.655949@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Sun, 15 Jun 1997 08:13:33 -0700, measures@mail.vcnet.com (R. L.
> Measures ) wrote:
>
> >Agreed. However, why go to the expense and trouble of designing and
> >building a separate 2x screen voltage supply so we can use a smaller R to
> >supply the zener-string regulator? The anode supply is already there. Why
> >not use it? If the anode V goes away, the screen V goes too. This is
> >good.
>
> I didn't suggest a separate supply.

Not directly, but typically the only game in town is the anode supply. If
you don't take the zener current from there, it has to come from
elsewhere--i.e., another supply.

> I said:
> >>With a shunt regulator you don't need a bleeder, but the
> >> screen supply voltage has to be twice the screen operating voltage to
> >> limit screen dissipation in the case of abnormal conditions.
>
> You said:
> >True enough. More R would be better. The most logical source is the
> >positive HV supply, which is typically about six times the screen v.
>
> More R is not "better". The only thing more R adds is more heat.

Is it better to put up with a bit more heat, or to build a separate supply?

> With small tube I use a center tapped transformer for the HV, and run
> the screen from the HV supply center tap.

a good choice, methinks.

>That saves heat. With big
> tubes (4CX5000's and up) I use a separate transformer winding on the
> plate transformer.

One problem with adding an approx. 1250Vrms winding for a 8170/8171/8281
screen supply is that an uncheap/uncommon 1.5kV-rated fuse is needed for
screen protection. However, if a separate transformer is used, screen
protection can be a garden-variety 250v-rated fast-acting circuit breaker
or fuse in the screen transformer primary. .
Rich---

--
--Rich-- ---805-386-3734, ag6k

# 435. HELP WITH THE ICOM 706

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <33a7045a.3423288@noticias.mundivia.es>
Source record: 93095
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.HOMEBREW

Dear friends:

I would like all of you to help me with a problem that I have with my ICOM 706.
Though it works perfectly on VHF, the problem is that on HF it does not receive neither transmit.
With my power meter I have measured only 2,5 watts at full power on AM-FM-SSB, and on my power supply i have tested a consumption of 11-12 amperes.
Though it does not TX and RX, I have put another rig with an another antenna (I have two rigs and two antennas in the roof so I have made this test at home) and when I transmit with the 706 I can hear my voice OK in the other rig, and viceversa, when I transmit with the other rig, I can hear my voice and signal in the 706.
At first time I thought it could be the final power transistors that were damaged, but as it works OK on VHF and I do not know if it shares the power transistors for VHF and HF, I have guess nothing....
I hear nothing in all the HF bands, but I do hear the 1.296 mhz AM (160 meters broadcast band) local broadcasting signal, though not as strong as it used to be.
What it can be the problem?
How can it be solved?
I thing that maybe something has got burned, but What exactly?
PLEASE ANY HELP OR COMMENTS WILL BE VERY KIND OF YOU AS I AM VERY WORRIED ABOUT MY RIG.

/|\
@ @
-----oOO-(_)-OOo----------
Francisco Garcia
e-mail: jorgegc@mundivia.es

# 436. Re: Reduced output on Kenwood TS-570D HF tranceiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: thompson@mindspring.com
Message-ID: <5o72nc$3s0@camel4.mindspring.com>
Source record: 93096
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.digital

Bjarke <bjmko@tdk.dk> wrote:

>Hello radio amateur freak

>I have a Kenwood TS-570D HF tranceiver and like to use it in combination
>with a transverter for going SSB on 144MHz.

>My home build transverter want an input signal of max. 100mW for
>transmitting but my TS-570D deliver min. 5000 mW (5W).

>Do you know if it is possible to reduce the output signal of the TS-570D
>transceiver to 100mW - by push any buttons on startup or something like
>that?

>What else can I do - 34 dB attenuation is quite a lot.

Years ago with AB1 amps and 100W exciters we used swamping networks.
Use a chassis box putting Coax connectors on each side and a large
group of resistors to cut the power. We went from 100W to less than 1
watt (reduction of 100). Description was in the W6SAI ands RSGB
handbooks.

Dave K4JRB

## 437. HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.e11000fd8fb44fe9896a0@news.infoave.net>
Source record: 93097
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

I'm a ham operator, and I use relatively high power levels (>1500 watts) on many different frequencies. My television set is not being interfered with, only when my wife wants to watch a video tape does my hobby begin to cause problems. No neighbors complain, so the problem is extremely local. The VCR is a Fisher, and I've been to thier website looking for an e-mail address to write to a technician, but there are none published. I know that many electronic manufacturers try to get by with the least amount of parts, but have available modification kits just for my problem. Any idea how to get 'hold of a Fisher factory tech on the internet? Anybody ever have this problem and fix it? Thanks -Web
kr4wm@sccoast.net

# 438. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33A73C92.7EC9@erols.com>
Source record: 93098
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

Web Williams wrote:
>
> I'm a ham operator, and I use relatively high power levels (>1500 watts)
> on many different frequencies. My television set is not being interfered
> with, only when my wife wants to watch a video tape does my hobby begin
> to cause problems. No neighbors complain, so the problem is extremely
> local. The VCR is a Fisher, and I've been to thier website looking for an
> e-mail address to write to a technician, but there are none published. I
> know that many electronic manufacturers try to get by with the least
> amount of parts, but have available modification kits just for my
> problem. Any idea how to get 'hold of a Fisher factory tech on the
> internet? Anybody ever have this problem and fix it? Thanks -Web
> kr4wm@sccoast.net

I had that problem on 40 meters only. I found that with the antenna
disconnected from the VCR the problem went away. As soon as I connected
the shield of the antenna to the VCR, the problem came back. I ended up
coiling about 20 turns of the VCR antenna cable (RG59) to make a choke
about 10 inches in diameter. This fixed the problem.

I suggest you first determine how the RF is getting into the VCR
(antenna, power leads, or direct through the VCR case). Stop the RF from
entering the VCR with chokes and/or shielding.

# 439. Re: Reduced output on Kenwood TS-570D HF tranceiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Mark&Sher N8REZ <Mcast@flash.net>
Message-ID: <33A75599.1101@flash.net>
Source record: 93099
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.digital

Bjarke wrote:
>
> Hello radio amateur freak
>
> I have a Kenwood TS-570D HF tranceiver and like to use it in combination
> with a transverter for going SSB on 144MHz.
>
> My home build transverter want an input signal of max. 100mW for
> transmitting but my TS-570D deliver min. 5000 mW (5W).
>
> Do you know if it is possible to reduce the output signal of the TS-570D
> transceiver to 100mW - by push any buttons on startup or something like
> that?
>
> What else can I do - 34 dB attenuation is quite a lot.
>
> Yours faithfully
>
> OZ2BKK /Bjarke
It seems that I heard of a way of using a 9 volt battery and pot to put
a negative voltage on a pin on the back of a Kenwood 140 to reduce the
voltage all the way down to zero, to use a tranverter. I'll look for the
notes on it. 73 Mark

## 440. identify CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: Dave Bullock <daveb@ihr.mrc.ac.uk>
Message-ID: <33A634A1.1FFC@ihr.mrc.ac.uk>
Source record: 93100

Can anyone identify the pinout, voltages of a CRT made by Thomas
Electronics in the USA?
The CRT has a 3" face, is about 6" long and has a B9A type base.
The type no is as follows:- 3M108P43M
Please help if you can...or tell me where I can find the info.
Thanks .... Dave Bullock G6UWO
daveb@ihr.mrc.ac.uk

# 441. Re: Reduced output on Kenwood TS-570D HF tranceiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <33A6887A.2E9E@delphi.com>
Source record: 93101
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.digital

Bjarke wrote:
> What else can I do - 34 dB attenuation is quite a lot.

Hi Bjarke, you can build an attenuator. My ARRL Handbook has 50 ohm pi and 'T' attenuators ranging from 1 to 60dB. Also, your dB calculation seems to be for voltage yet you gave the requirements in watts. 10*log 5000/100 gives me 17dB. For 5w in and 0.1w out, the two parallel resistors in a pi attenuator should be 66.4 ohms and the series one should be 173.4 ohms, non-inductive. The first parallel one needs to have a 5w rating. Five 330 ohm 2w carbon resistors should do the trick.

73, Cecil, W6RCA, OOTC

# 442. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-17 00:00:00 UTC
From: James O'Brien <kd4cdb@bellsouth.net>
Message-ID: <33A75CB6.178F8529@bellsouth.net>
Source record: 93102
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

Web Williams wrote:

> I'm a ham operator, and I use relatively high power levels (>1500
> watts)
> on many different frequencies. My television set is not being
> interfered
> with, only when my wife wants to watch a video tape does my hobby
> begin
> to cause problems. No neighbors complain, so the problem is extremely
> local. The VCR is a Fisher, and I've been to thier website looking for
> an
> e-mail address to write to a technician, but there are none published.
> I
> know that many electronic manufacturers try to get by with the least
> amount of parts, but have available modification kits just for my
> problem. Any idea how to get 'hold of a Fisher factory tech on the
> internet? Anybody ever have this problem and fix it? Thanks -Web
> kr4wm@sccoast.net

Try some round torriods around the line running between the vcr and the television. Most rfi sees a length of wire as an antenna and the signal will enter at that point. Some times it can come in through the ac line as well. A solid ground for the rig ,amp,and tuner is a must. A good low pass filter will help also. You can usually get torroids at a hamfest for a buck. If one does'nt do it try 2. Hope this helps. Jim

## 443. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <33a72cc1.48541148@news.flash.net>
Source record: 93103

On 15 Jun 1997 23:27:07 GMT, diback@aol.com (Diback) wrote:

> I am 15 years old, and I'm realy into radio. I got started with
>C.B., I then progressed to scanners, then to short wave utilety stations,
>and I'm currently studeing for my HAM radio liceance. Another field I
>wish to get into to is RF circut design. I want to be able to take a pile
>of commponents and, from memory, build a radio.

Scott,
Other than Bill Orr's books and the ARRL Handbooks, try the little
Engineer's Notebooks from Radio Shack. They won't teach you a lot of
theory, but they will have some very simple schematics to start out
your building career. The books are only a buck or two each, and you
can find all the parts right there at Rat Shack so you don't have to
do a lot of scrounging. I started when I was about your age, and I
remember that it was sure tough parting with that yard-mowing money
for those high-dollar books! They might be a good thing to ask your
parents to get you for birthdays, Christmas, etc. I still do that
when somebody asks what I want!
Good Luck, watch that the solder blobs don't roll off on your leg!
Kerry
WD5ABC

## 444. Re: 15 yr old wants to de

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <866608527@infoway.com>
Source record: 93104

I forgot a couple parts of my post. Any high school student may
take classes at the local community college and earn college credit.
So after you take your math and science and get good grades so
you can go to college and complete a career prep, consider taking
the classes at the community college in electronics, circuit design,
etc. Their library and texts are what you want to be studying.
And the units of college credit will be moving you closer to
an actual career.
Apply yourself in school, prepare for going to college so you can
spend the years being taught in an organized manner.

And have fun getting into ham radio.

73, Don n6mce

> What want to know is, how can I achieve this nowlage, are there any
> good books out there? I have flipped through Joe Carr's " secrets of
> RF
> circot design" or whatever it's called, but I feel it may be above my
> skill level.
> If any one out there can help me, I would be most appreceative!

# 445. ! FREE MASTER PSYCHIC READINGS 1-800-682-8057

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: lov@interport.net
Message-ID: <5o79e3$m8t$4613@broadway.interport.net>
Source record: 93105

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-682-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-682-8057

# 446. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <33a79b6b.4118331@news.lin.foa.se>
Source record: 93106
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

VCR sucks!
If your problems are when transmitting on 1.8 or 3.5 MHz, it is very
likely your RF goes straight into the video amp. This amp has 100 dB
of gain on these frequecies.

Solution could be to put the vcr in a well-screened box, or just dump
the vcr and tell the yf to start clean up the house instead.

James O'Brien <kd4cdb@bellsouth.net> wrote:

>Web Williams wrote:
>
>> I'm a ham operator, and I use relatively high power levels (>1500
>> watts)
>> on many different frequencies. My television set is not being
>> interfered
>> with, only when my wife wants to watch a video tape does my hobby
>> begin
>> to cause problems. No neighbors complain, so the problem is extremely
>> local. The VCR is a Fisher, and I've been to thier website looking for
>> an
>> e-mail address to write to a technician, but there are none published.
>> I
>> know that many electronic manufacturers try to get by with the least
>> amount of parts, but have available modification kits just for my
>> problem. Any idea how to get 'hold of a Fisher factory tech on the
>> internet? Anybody ever have this problem and fix it? Thanks -Web
>> kr4wm@sccoast.net
>
>Try some round torriods around the line running between the vcr and the
>television. Most rfi sees a length of wire as an antenna and the signal
>will enter at that point. Some times it can come in through the ac line
>as well. A solid ground for the rig ,amp,and tuner is a must. A good low
>pass filter will help also. You can usually get torroids at a hamfest
>for a buck. If one does'nt do it try 2. Hope this helps. Jim
>
>

# 447. Re: FAX # for JAN Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: n1rkt@dekalb.Net
Message-ID: <5o8bh8$d80@news1.infoave.net>
Source record: 93157

Hey Bill,

I used to be faithfull to Jan Xtal, but give Century Manf. a try a whole lot cheaper and I have had no problems to date.

405-224-6780

'73 Tracy N1RKT/4

In article <33a661a0.3254471@news.erols.com>, wmeara@erols.com (Bill Meara ) wrote:
>I tried the FAX number in my somewhat dated catalog and it didn't
>work.
>
>Does anyone have a FAX number of e-mail address for the fine folks at
>JAN Crystals?
>
>Thanks, 73 Bill N2CQR
>

## 448. ! FREE PSYCHIC READINGS! FREE!! 1-800-677-8048

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: lov@interport.net
Message-ID: <5o8cbq$9dt$4613@broadway.interport.net>
Source record: 93158

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

## 449. QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: Steve Ford <sford@arrl.org>
Message-ID: <33A7E816.447@arrl.org>
Source record: 93159

If you have a project that you would like to share,
QST wants to hear from you!

We're looking for project articles ranging from the simple
to the complex--antennas, antenna tuners, amplifiers (HF,
VHF, UHF), microwave components, receivers, transmitters,
power supplies, test equipment, remote control, digital--the
list is almost endless!

Not only will your article appear in the America's most
popular Amateur Radio magazine (read by over 176,000
worldwide) you'll receive $65 for each published page.

To submit an article for consideration, simply send it to:

ARRL
Attn: Paul Pagel
225 Main St
Newington, CT 06111

If you have an *idea* for an article, but you're not sure
if it's what we're looking for, send a brief description
to Paul Pagel at:

ppagel@arrl.org

You'll find a complete QST author's guide on the Web at:

http://www.arrl.org/qst/aguide/#QST

And we're always interested in seeing candidates for
QST cover photography. Before you send your photos,
however, see our requirements on the Web at:

http://www.arrl.org/qst/cover_photo.html

73 . . . Steve Ford, WB8IMY
QST Managing Editor

## 450. FS:Weller DS-100 Vacuum Desolder/Solder Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970618144101.KAA09371@ladder01.news.aol.com>
Source record: 93160

I have a Weller DS-100 Vacuum Desolder/Solder workstation for sale--in very good condition and recently reconditioned by Genesee Electronics. Vacuum pump runs on compressed air. Perfect for high-volume repair shop or low-volume production operation (but a bit much for my small prototype bench). New price is $1100+. Get mine for $285 shipped UPS. Contact Rick Littelfield (K1BQT) at Communications Quarterly Magazine (603) 664-2515 or at K1BQT@AOL.COM.

## 451. Where to find air core capacitors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: Adam Harriman <adam@FC20.flashcomm.com>
Message-ID: <33A7EF7F.37C28823@FC20.flashcomm.com>
Source record: 93161

I am looking for some variable air core capacitors like the ones used in antenna tuners. Can anyone tell me who makes these componets and were I can get them? I have been looking for them on the net for an hour and haven't seen anything.

Thanks.

Adam N4ZSM

## 452. RF PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: Bjorn Soderholm <sm2gxn.soederholm@boden.mail.telia.com>
Message-ID: <33A836A1.30C3@boden.mail.telia.com>
Source record: 93162

Hi!

Does anyone know if RF PARTS in San Marcos/CA got any home page??

Bjorn/sm2gxn

## 453. Forsale....QRP rig and MFJ tuner.....LOOK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: George <george@sky.net>
Message-ID: <01bc7c25$197d2f80$a8a5e6ce@george.sky.net>
Source record: 93163
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Hello

Heatkit model HW-7 with macthing power supply.
covers 40m 20m15m of the cw band.
1 vfo and 1 place to but crystals
In good order but power supply needs new filters
$100

Mfj 949e Antenna tuner
New
covers 160m to 10m
handles 200 watts
built in dummy load
much more too it just look in MFJ catalog
$120

Add $15 for shipping Add other $15 if you would like C.O.D

kb0mai george@sky.net

# 454. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: Jim Amos <jamos@aironet.com>
Message-ID: <33A842EE.164B@aironet.com>
Source record: 93164
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

Web Williams wrote:
>
> I'm a ham operator, and I use relatively high power levels (>1500 watts)
> on many different frequencies. My television set is not being interfered
> with, only when my wife wants to watch a video tape does my hobby begin
> to cause problems. No neighbors complain, so the problem is extremely
> local. The VCR is a Fisher, and I've been to thier website looking for an
> e-mail address to write to a technician, but there are none published. I
> know that many electronic manufacturers try to get by with the least
> amount of parts, but have available modification kits just for my
> problem. Any idea how to get 'hold of a Fisher factory tech on the
> internet? Anybody ever have this problem and fix it? Thanks -Web
> kr4wm@sccoast.net

I have the same problem with a $500 Sony 4 Head Stereo VCR.

I run a Drake C-Line barefoot into a Vertical, not a high powered
station. When it happened to the VCR, it was actually playing a tape
(IE, not the tuner). This surprised me greatly and I'm not sure that
there is a magic fix for you.

A couple of thoughts though, remove the Antenna connection to the VCR an
check. RF could be be getting in through here and coupling in a odd
places. Put ferrite beads on all the connections going into and out of
the VCR. If neither of these things help then it could be coupling
directly into the VCR head.

Good Luck!
Jim N8CAH

## 455. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970618211900.RAA01222@ladder01.news.aol.com>
Source record: 93165

How the mighty have fallen.

W4ZCB

## 456. Re: Where to find air core capacitors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <33A8350A.CEA@HP.com>
Source record: 93166

Adam Harriman wrote:
>
> I am looking for some variable air core capacitors like the ones used in
> antenna tuners. Can anyone tell me who makes these componets and were I
> can get them? I have been looking for them on the net for an hour and
> haven't seen anything.
>
> Thanks.
>
> Adam N4ZSM

Hi Adam OM,

Instead of just looking in the Internet, I suggest you look in any
issue of CQ or QST magazine. There you will find
advertisements for places that have the components you are looking for.
An example is Fair Radio Sales, in Lima,
Ohio, which advertises regularly. Magazines which are focused on
particular interests, like ham radio, are always
a good source for suppliers of parts. Today's Internet is not a
substitute for reading publications which target
the area you are interested in.
Just a note on semantics and common usage: "air core" refers to
inductors, not capacitors. Inductors have cores,
(which can be nothing more than air), capacitors have dielectric, which
can also be air, or even a vacuum. For example,
variable capacitors with air as the dielectric (space between the
plates) are referred to as "air variables",
not "air core variables".

Good luck with your antenna tuner project. A very worthwhile item to
have in the hamshack; I use mine daily. Incidentally,
the size of your variable depends greatly on the power level you are
transmitting with. 100 watts or less requires only a variable
capacitor with small spacing, such as a "broadcast receiver" variable,
not a huge transmitting variable. The inductor,
likewise, does not have to be made of large diameter wire for this power
level. If you haven't already, check the ARRL
Handbook and Antenna book for proven designs.

73,
Don, W6JL

## 457. *ICOM* Mailing List (and others)...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33A85E85.55E0@primenet.com>
Source record: 93167

*ICOM* Mailing List (and others)...

Icom is a mailing list (reflector) devoted entirely
to equipment manufactured and distributed by Icom
America, Inc. of Bellevue, WA.

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe icom

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe icom

To post items to the reflector, send email as follows:
TO: icom@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Kenwood is a mailing list (reflector) devoted entirely
to equipment manufactured by the Kenwood Communications
Corporation (Amateur Radio Products Group).

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe kenwood

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe kenwood

To post items to the reflector, send email as follows:
TO: kenwood@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Fox_Tango is a mailing list (reflector) devoted entirely
to "vintage" and "classic" equipment manufactured by the
Yaesu Musen Co., Ltd. of Tokyo Japan.

* equipment, accessories
* collecting, restoring, refurbishing
* buy, sell, trade, swap
* repairs, modifications, enhancements
* questions, discussions, etc
* just plain operating old Yaesu stuff

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe fox_tango

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe fox_tango

To post items to the reflector, send email as follows:
TO: fox_tango@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP, QRP, APRS
-Packet, Pactor, GTOR, Clover, AMTOR, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
-homebrew, modifications, interfacing, widgets, etc

To subscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: SUBSCRIBE bitbucket

To unsubscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: UNSUBSCRIBE bitbucket

As we encourage the free exchange of ideas, if you pay for email service by the byte you may want to consider carefully before subscribing.

To submit materials:
TO: bitbucket@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

bit bucket /n./

1. The universal data sink (originally, the mythical receptacle used to catch bits when they fall off the end of a register during a shift instruction). Discarded, lost, or destroyed data is said to have `gone to the bit bucket'. On Unix, often used for /dev/null. Sometimes amplified as `the Great Bit Bucket in the Sky'.

2. The place where all lost mail and news messages eventually go. The selection is performed according to Finagle's Law; important mail is much more likely to end up in the bit bucket than junk mail, which has an almost 100% probability of getting delivered. Routing to the bit bucket is automatically performed by mail-transfer agents, news systems, and the lower layers of the network.

3. The ideal location for all unwanted mail responses: "Flames about this article to the bit bucket." Such a request is guaranteed to overflow one's mailbox with flames.

4. Excuse for all mail that has not been sent. "I mailed you those figures last week; they must have landed in the bitbucket." Compare black hole.

This term is used purely in jest. It is based on the fanciful notion that bits are objects that are not destroyed but only misplaced. This appears to have been a mutation of an earlier term `bit box', about which the same legend was current; old-time hackers also report that trainees used to be told that when the CPU stored bits into memory it was actually pulling them `out of the bit box'. See also chad box.

Another variant of this legend has it that, as a consequence of the `parity preservation law', the number of 1 bits that go to the bit bucket must equal the number of 0 bits. Any imbalance results in bits filling up the bit bucket. A qualified computer technician can empty a full bit bucket as part of scheduled maintenance.

-Brian
shortckt@primenet.com

# 458. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: "Jeffrey H. Hill" <GTE/hipiket@gte.net>
Message-ID: <5o9osi$6hh$1@news12.gte.net>
Source record: 93168
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

I've a few suggestions, I used to service video equipment.

1) Try first the steps mentioned in the ARRL handbook in the interference chapter. Apply rf chokes to the power cords of both the TV and VCR and a trap (high-pass filter) to the RF cable to the TV set.

2) Check the resistor/capacitor network which grounds the chassis of the VCR for RF. Alternatively, you may want to remove these and strap the VCR chassis to a good RF ground. Also, make sure there are no missing screws from the VCR cabinet, some of these provide a ground contact.

3) If the problem is in playback only, the trouble may be that RF is getting into the rotary head preamp. This is particularly acute as its bandpass overlaps 80 M and comes close to 160 M. If your machine is an older, more expensive model (such as the FVH-575) there is a shield over the drum assy but if yours is one of those newer, lightweight models shielding of the drum is helpful. Check under the drum too. If there is a flexible PWB (a "ribbon cable") for connecting the rotary transformer to the preamp IC you may wish to install a shielded cable. Also, you may wish to install bypass caps on all DC leads going to the preamplifier, especially Vcc and Rec/PB switching lines. Shielding the little preamp PWB worked for me once.

4) If your machine is one of the new lightweight all-plastic sets a radical cure may be indicated. You may try removing the top cabinet, front panel, tape transport, and PWB's and line the pastic base you have left with aluminum foil, providing for a ground connection. Reassemble and your modern VCR will be RF tight.

-Jeff/ac4aq

# 459. SCHLUMBERGER/STABILOCK SERVICE MONITOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-18 00:00:00 UTC
From: Arthur Garabedian <westernmobiletel@worldnet.att.net>
Message-ID: <33A8691C.3C79@worldnet.att.net>
Source record: 93169
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair,sci.environment

I need, a service manual, operators manual for:

Schlumberger/Stabilock 4040 service monitior and
4922 Radio code analyzer, I also ame looking for a
Wide Band module: #229039
Service Manual for 4040: #291025
Operators Manual for 4922: #290031
Operators manual for 4040: #290025

I am in Anaheim, CA. 714 978 9999. Best Regards, ARTHUR . . .

## 460. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33a80317.9667723@netnews.worldnet.att.net>
Source record: 93170

On Tue, 17 Jun 1997 04:46:33 -0700, measures@mail.vcnet.com (R. L.
Measures ) wrote:

>One problem with adding an approx. 1250Vrms winding for a 8170/8171/8281
>screen supply is that an uncheap/uncommon 1.5kV-rated fuse is needed for
>screen protection. However, if a separate transformer is used, screen
>protection can be a garden-variety 250v-rated fast-acting circuit breaker
>or fuse in the screen transformer primary. .

Fuses are next to worthless for protection of grids. Fuses are great
for preventing house fires.

IMHO, anyone depending on fuses to protect grids needs to read some
fuse catalogs, and pay attention to the specs.

73 Tom

## 461. Re: Where to find air core capacitors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33a8c30e.8850614@nntp.infoave.com>
Source record: 93171

On Wed, 18 Jun 1997 10:23:59 -0400, Adam Harriman
<adam@FC20.flashcomm.com> wrote:

>I am looking for some variable air core capacitors like the ones used in
>antenna tuners. Can anyone tell me who makes these componets and were I
>can get them? I have been looking for them on the net for an hour and
>haven't seen anything.
>
>
>Thanks.
>
>Adam N4ZSM

Get on Search Engine and look for : Dan's Small Parts

However ,I have always gotten Air Variables from hamfest. They seem
to be very cheap at fest. Just carry a VOM with you to make sure
plates are not shorting.

# 462. Re: Looking for a Motorola MRF492 RF Power Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33a89691.0@lightning.ica.net>
Source record: 93172

Daryl Wicker <dwicker@lilly.com> wrote:

>Greetings,
>I am building a 6 Meter amp from a dated magazine article (early 1980s)
>. It calls for a Motorola MRF492 transistor . Is this transistor still
>available ? Any info would be appreciated .

>Daryl
>N9YIW
>dwicker@lilly.com

The MRF492 is available from RF Parts in California.
Look 'em up in one of the Ham magazines' advertisers index
or they may even be on the net.
Cheers, Hugh VA3TO

# 463. Re: Looking for a Motorola MRF492 RF Power Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33a90d65.2684294@news.mnsinc.com>
Source record: 93173

On Thu, 19 Jun 1997 02:07:21 GMT, hduff@ica.net (Hugh Duff) wrote:

>Daryl Wicker <dwicker@lilly.com> wrote:
>
>>Greetings,
>>I am building a 6 Meter amp from a dated magazine article (early 1980s)
>>. It calls for a Motorola MRF492 transistor . Is this transistor still
>>available ? Any info would be appreciated .
>
>>Daryl
>>N9YIW
>>dwicker@lilly.com
>
>
>
>The MRF492 is available from RF Parts in California.
>Look 'em up in one of the Ham magazines' advertisers index
>or they may even be on the net.
>Cheers, Hugh VA3TO

Address available at:

http://www.mnsinc.com/bry/mega/partsupp.htm

ENJOY!

# 464. Re: Where to find air core capacitors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33a90da3.2746030@news.mnsinc.com>
Source record: 93174

On Thu, 19 Jun 1997 05:29:47 GMT, Trapper27@juno.com (KF4HTL) wrote:

>On Wed, 18 Jun 1997 10:23:59 -0400, Adam Harriman
><adam@FC20.flashcomm.com> wrote:
>
>>I am looking for some variable air core capacitors like the ones used in
>>antenna tuners. Can anyone tell me who makes these componets and were I
>>can get them? I have been looking for them on the net for an hour and
>>haven't seen anything.
>
>Get on Search Engine and look for : Dan's Small Parts

Adam, Dan's address is available at:

http://www.mnsinc.com/bry/mega/partsupp.htm

ENJOY! - 73 de AF4K

# 465. New 800/888 Service That will blow you away!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: ulkjhlk@poikjgewrwtrq.com
Message-ID: <5ob6ld$dm@mtinsc04.worldnet.att.net>
Source record: 93175

ONLY AVAILABLE IN THE:
U.S.A, CANADA VIRGIN ISLANDS, AND PUERTO RICO

BE SURE TO GO TO OUR SITE AND CHECK OUT OUR FREE TRIAL.

Call everyone and tell them to throw away all of your old home, office, fax, pager, voice-mail, and cellular numbers and give them your New "Virtual Office" 800/888 number! The only number any one will ever need.

Are you tired of giving out all of your different phone numbers to everyone? Wouldn't it be nice to be able to give everyone just ONE phone number that will find you anywhere you are? Even out of town, or in a restaurant, or even on the golf course.

Now you can.

We have the answer to all your communication needs. It's called the "Virtual Office".

And this new service is loaded. It comes with features like:

An automated Call Attendant, Live Call Connect (in real time), Fax Sending, Fax Receiving, Even without a fax machine! E-Mail Notification and Delivery, Without a PC!, Outbound calling, Low Cost Long Distance Service, Inbound/Outbound 800/888 Number, Worldwide Call Transfer, Call Forwarding, Call Screening, Full Service Voice Mail, Nation Wide Pager Notification, Conference Calling, Speed Dialing, Auto Dial, Auto Messaging, Temporary Greeting, Unavailable Greeting, Password Protection, Pager Notification, and No Equipment or Software to buy, "Ever".

Priced from $9.95* per month, Plus 10.9 cents per minute per event.

That's less than one phone line would cost per month.

For more information please visit our web sight:
http://www.mynumber.com

* Based on our best priced plan.

# 466. Re: SCHLUMBERGER/STABILOCK SERVICE MONITOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: Glenn Watkins <blueribb@mail.comcat.com>
Message-ID: <33A93A42.1F709DC7@mail.comcat.com>
Source record: 93176
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair,sci.environment

Arthur Garabedian wrote:

> I need, a service manual, operators manual for:
>
> Schlumberger/Stabilock 4040 service monitior and
> 4922 Radio code analyzer, I also ame looking for a
> Wide Band module: #229039
> Service Manual for 4040: #291025
> Operators Manual for 4922: #290031
> Operators manual for 4040: #290025
>
> I am in Anaheim, CA. 714 978 9999. Best Regards, ARTHUR . . .

Try one of these two places:

http://www.wavetek.com/wtcomm.html
http://www.global.com.my/cnn/4040.htm

Good Luck,
Glenn
Blue Ribbon TV Service

## 467. Re: The NorCal 38 Special/such a deal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: urolab@ix.netcom.com
Message-ID: <5obdov$gi9@dfw-ixnews4.ix.netcom.com>
Source record: 93177

In <5nrtdt$a0i$1@news1.rmi.net> jonz@shell.rmii.com (Bea and Marvin Jones) writes:
>
>: travis@vgernet.net wrote:
>
>: >Jerry, I've had mine for 2 months now, love it but I'm having problems
>: >finding a power supply other than a battery that won't cause problems.
>: >(unit is 5w mod) My HB regulated PS (mc1463 + 2n3055) introduces some
>: >MCW (buzz) I put a big filter cap (4700 uF) after it and the buzz went
>: >away but a chirp developed. I've tried puting an RF choke in the battery
>: >leads but made things worse. What seems to work? Unregulated supply
>: >maybe?
>
>PMFJI -- but, at those voltages, "...a big filter cap" is NOT "(4700 uF)".
>A Big Filter Cap would be more like 47,000 uF.
>
>And, as for the chirp -- with a better regulated and smoothed supply,
>you may want to re-visit the transmitter alignment discussions found
>in the original article and many of the mod's articles.
>
>--
>73
>Jonesy - W3DHJ
>jonz@rmi.net
>Gunnison, Colorado
>__
>SK

I recently bought a used 38 spl (5w) and found, unlike the label on the back indicated, it liked 12v and works well at that level, with no components feeling vy warm. Attempts at using <11v produced buzz.

WB4DTC P.S. does anyone out there have a 40m model they would like to

part with?

## 468. Need 3SK97 mosfet help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: paul@pachena.ca
Message-ID: <866733710.7929@dejanews.com>
Source record: 93178
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hello,
I have an ICOM VHF radio that is in need of a 3SK97 dual gate MOSFET.
Does anybody know who makes this part, where I might find one, or have
specs on it so I might find an alternate. Your help would be appreciated.
Thanks
Paul Wende
VE7KHZ

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 469. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <33aa590e.6178128@news.gv.net>
Source record: 93179

Steve Ford <sford@arrl.org>
shared these priceless pearls of wisdom:

->QST wants to hear from you!
->worldwide) you'll receive $65 for each published page.
^^^^^^^^^^^^^^^^^^^^^^
Which explains a lot, given that the going rate in the industry is about
$150 a published page.

Jim
25 years as an author

## 470. 6mtr antenna plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: houwer@dds.nl
Message-ID: <efc57b41.3223694@news.euronet.nl>
Source record: 93180

Hi,

I am looking for 6 meter (50mc) antenna plans both directional and none directional antennas.

If you have something please mail it to houwer@dds.nl or put it in this newsgroup.

tnx, 73's Edwin (PE1PWF)

## 471. Huh? Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EC1Ax3.BGE@world.std.com>
Source record: 93181

WRTo Steve's call-for-authors for QST's UHF/VHF homebrew,
JohnsonHE W4ZCB <johnsonhe@aol.com> wrote:
> How the mighty have fallen.

What's your point, Harold?
Are you objecting to
* QST in general
* QST covering anything above 10m other than "weak signal"?
* QST having to solicit for authors for construction articles instead
of taking what comes over the transom
* Doing so on the internet (where better than in r.r.a.homebrew?)
* QST offering to pay per page (hey, lots of mags soliciting design
articles try to charge the author's employer per page, this is great)
* Steve because he's one of those suspicious AMSAT guys?
* just being an irrascible o.f.?

Getting articles from people who haven't been reading QST lately
would probably be good. The most interesting construction article
lately came from some west-coast grad students.

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

## 472. repeater group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: "Ron, N7TAW" <rh@pcez.com>
Message-ID: <33A97815.38DF@pcez.com>
Source record: 93182

I used to subscribe to the repeater discussion group, but when I changed ISP's I lost the address.

Can someone please send me the "subscribe address" again.

Thanks,

Ron, N7TAW

## 473. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33A9192C.23A7@taxes.net>
Source record: 93183

"Payment will be made on publication."

"All rights to the published material are reserved to ARRL."

"$65 per published page"

That sure fires ME up to write for QST!!

## 474. alinco DJ191e

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: ugly55@aol.com
Message-ID: <19970619195000.PAA04046@ladder01.news.aol.com>
Source record: 93184

PLEASE HELP
CAN ANYONE TELL ME HOW TO EXTEND THE FREQUENCY ON MY
ALENCO DJ191E
IT USED TO BE 130-173.995 MHZ TX/RX UNTILL I PRESSED THE [F] BUTTON
WHILE POWERING UP NOW IT IS 144-146MHZ
PLAESE HELP
G8JDS

## 475. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: stevem@vax.area.com
Message-ID: <5oc1h4$i9u$1@nixon.area.com>
Source record: 93185

In article <01bc774d$bf790da0$25f135ce@hammer.stonewest.com>,
Dave VanHorn <dvanhorn@127.0.0.1> wrote:
>
>
>> There is a yahoo in Las Vegas who claims 5KW and he uses a phased array
>> pointed right at the cab of his pickup truck. The real fun is this guy
>> is an Amateur Extra. That darn code filter failed again.
>
>
>Nothing's perfect..
>
>I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
>Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..
>Using a radio shack discone with a CB, amp and tuner.. (Talk about
>an interference generator!)
>
>I might go ahead and do it.
>

I've seen several CB Ground Plane antennas with rotators on them.

Why don't we get a "can you top this" going in this thread and
someone can pick the archive off of DejaNews.

Steve WF6R

## 476. DIGITAL 800 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: rdgrantii@aol.com
Message-ID: <19970619200500.QAA01345@ladder02.news.aol.com>
Source record: 93186

Is there a way to decode DIGITAL coomunications on 800 Mhz????

The local PD and FD in Memphis, TN has switched and would like to receive it...

Thanks

E-mail me with any responce RDGRANTII@AOL.COM

## 477. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5oc6jl$pnr$1@newsserver.dircon.co.uk>
Source record: 93187

Electronics magazines such as Electronics and Wireless World.
Public Libraries (I remember books like Practical Electronics
and Radio Modelling (?) by R. H. Warring being very instructive).
University libraries tend to have publications like the
Art of Electronics; if you can't get in, get to know someone
at a University.
Older books are good for things like basic theory, tubes,
discrete circuits.
You need to look out for up to date publications for
the integrated stuff though.
Second hand books at junk sales, boot sales, and mobile
rallies. Older electronics texts in 2nd hand book shops-
I have found a few interesting books in antique fairs.
Charity shops- look for ones near Universities, you
can pick up surprisingly modern text books that students
have disposed of after they've done their finals.
Free Application notes for devices from component distributors
and IC manufacturers... if you explain you are learning they
will probably help, you may become an engineer using their devices
later. That's if they haven't gone to the wall by then.
==========
Colin Seymour G4NNA
1Mb/s 2.45 GHz spread spectrum radio modems & digital video:
http://www.users.dircon.co.uk/~netking/spread.htm

# 478. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33a8e419.4056282@news.atl.bellsouth.net>
Source record: 93188
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

On Tue, 17 Jun 1997 21:12:34 -0400, kr4wm@sccoast.net (Web Williams) wrote:
>I'm a ham operator, and I use relatively high power levels (>1500 watts)
>on many different frequencies. My television set is not being interfered
>with, only when my wife wants to watch a video tape does my hobby begin
>to cause problems. No neighbors complain, so the problem is extremely
>local. The VCR is a Fisher, and I've been to thier website looking for an
>e-mail address to write to a technician, but there are none published. I
>know that many electronic manufacturers try to get by with the least
>amount of parts, but have available modification kits just for my
>problem. Any idea how to get 'hold of a Fisher factory tech on the
>internet? Anybody ever have this problem and fix it? Thanks -Web
>kr4wm@sccoast.net

Well, the first step is to quit using illegal power. The second step is to
get your antenna as far away from the VCR as possible. The third step
would be to improve the shielding of the VCR. VCRs use frequencies
in the range of 2.5 to 8 MHz to record video on tape (the recording is
FM). The heads will respond to the H field of any RF source in this
frequency range. The head preamps are very high gain, and intended
to amplify the weak signal recovered from the tape. You have to keep
the field strength from your transmissions low enough at the video heads
so that they don't override the signal off the tape. The demodulated FM
signal off the tape goes to video amplifiers with response from DC to 4 MHz,
so 75m signals can be directly amplified by these amps too. The only way
to prevent this is to make sure there is enough shielding to stop signal ingress.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 479. ! FREE PSYCHIC ADVICE/SPECIAL SAMPLES LINE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5occ0r$rtn@news.intercall.com>
Source record: 93189

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-682-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-682-8057

## 480. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc7d03$581e83e0$b795f5ce@wa6vse.fast.net>
Source record: 93190

Jim <jstrohm@taxes.net> wrote in article <33A9192C.23A7@taxes.net>...
> "Payment will be made on publication."
>
> "All rights to the published material are reserved to ARRL."
>
> "$65 per published page"
>
> That sure fires ME up to write for QST!!
>

Right ... well, they get what they pay for ...

Carl - wa6vse
wa6vse@fast.net

## 481. Ham Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <33AA0431.3BCE@mailhost.cyberramp.net>
Source record: 93191

http://www.cyberramp.net/~johnf

## 482. calculating_coil_power

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: Marta D Lyall <mlyall+@andrew.cmu.edu>
Message-ID: <MneTTAW00iV_07WJo0@andrew.cmu.edu>
Source record: 93192

Hello,

Can someone please give a simple formula for determining the strength of
the magenetic pull of a coil for a linear motor or solenoid?

something which considers:

the diam of coil
the diam of the wire itself
the number of turns
the length of the wire

thanks,

M.D Lyall

## 483. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33A913DC.5A27@taxes.net>
Source record: 93193

JohnsonHE wrote:
>
> How the mighty have fallen.

I wonder if they've fallen enough to ask Rich Measures for an article.

N6OTQ

## 484. Re: ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: maf00861@maf.mobile.al.us
Message-ID: <5oakk4$qgr@municipal.maf.mobile.al.us>
Source record: 93194

KF4HTL (Trapper27@juno.com) wrote:
:
: 2) On the schematic pins 1 & 3 of the LM386 are
: jumped together and at that connection is a small circle similar to
: the +12V connection pictured elsewhere on the Schematic! Only
: difference is that the circle stemming from pins 1 and 3 doesn't have
: "+12V" printed next to it, that the other circle does. In fact it
: doesn't have anything except that little empty circle! I assumed it
: was the counter part of my source voltage.... so I put a jumper
: between pins 1 & 3 and the negative terminal of the battery.
:
Usually pin 3 of the LM386 is connected to the wiper of a 10K
variable resister, with one end of the resister grounded and the
other recieving the audio input. Pin 2 is grounded in this
configuration.
Pin 1 sets the gain and is usually left open, but connecting
a 10 microfarad capacitor between it and pin 8 increases gain by
a factor of 200.
However, pin 1 and 3 might be connected to the coil that provides the
regenerative feedback to the tuning coil. But I'm just guessing.
You'll know if you fried the chip because it gets hot and smells
like burning plastic. It was made to source or sink a lot of
current and will withstand a fair amount of abuse.

# 485. ! PROVEN PSYCHICS / FREE PREDICTIONS 800-677-8039

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: jln@tnp.com
Message-ID: <5obu9e$fbc@news-in.tnp.com>
Source record: 93195

Curious about psychics? Now you can try a psychic reading free, just dial 1-800-677-8039 - our free samples line where master psychics will amaze you with their knowledge and forsight. Try it now - see for yourself. adults over 18 only

Dial 1-800-677-8039

## 486. Audio of Mars Landing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-19 00:00:00 UTC
From: Brian Webb <102670.1206@CompuServe.COM>
Message-ID: <5oaaul$o0a$1@mhadf.production.compuserve.com>
Source record: 93196

Does anyone know of any 2-meter, 220 MHz, or 440 MHz repeaters in
southern California that will be rebroadcasting NASA Select audio
during the July 4th Mars landing?

I'm a columnist for a large circulation newspaper in the region;
right now I'm trying to put together an article on the Mars landing
and where to find information the mission.

73

Brian Webb, KD6NRP

## 487. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33AA3CE8.2EFF@taxes.net>
Source record: 93107

Jim Weir wrote:
>
> Steve Ford <sford@arrl.org> shared these priceless pearls of wisdom:
> ->QST wants to hear from you!
> ->worldwide) you'll receive $65 for each published page.
> ^^^^^^^^^^^^^^^^^^^^^
> Which explains a lot, given that the going rate in the industry is about
> $150 a published page.

Which reminds me --

There was this guy who went to New York City to find work. After weeks and weeks, the only job he could get was sweeping out a theater on Broadway. It paid minimum wage, and he could barely earn enough to eat, much less have a place to live. So sometimes he stayed at the Salvation Army, sometimes at a church mission, sometimes in a box in an alley. He wound up sweeping out the theater for 10 years.

One day, a theater-goer who'd noticed he'd been in the same sad job for a decade went up to him and said, "You know, you look like a pretty smart guy. And you're a very dependable, steady worker. Why don't you quit this, and get a better job?"

"WHAT?!?!?" he responded. "And give up SHOW BUSINESS??!?!"

I guess it's something about the cachet of being published in QST, along with the outdated concept that "Amateur" radio means you can't have ANY financial interest in it, that keeps the Newington gang offering such pitiful pay and such draconian terms for publishable work. Nowadays, VERY FEW legitimate magazines offer "payment on publication" and buy all rights. I don't think that any magazines with QST's circulation and significant reputation pay so low -- I'd certainly like to hear about some.

And -- in the writer's guidelines, I saw no mention whatsoever about kill fees. So basically, that means that every piece they solicit is a spec piece. (For those of you not in the know in magazine writing, that means "speculation." The writer is gambling that the magazine that has already expressed significant interest in the article WILL actually pay for the finished piece -- or else he's writing it blind, hoping for an over-the-transom sale -- which means he hopes to sell it by throwing the article over the transom at the magazine's front door.)

And I quit writing on spec in college. And -- nowadays with the WWW, there's no reason to write for spec publication when you can

web-publish on your own, and reach 10 times the audience.

C'mon, ARRL. Wise up. Bring your editorial policy into the 20th century. While it still is the 20th century.

N6OTQ

## 488. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5oe58c$954_001@leeds.ac.uk>
Source record: 93108

In article <19970615232701.TAA06661@ladder02.news.aol.com>,
diback@aol.com (Diback) wrote:
> I am 15 years old, and I'm realy into radio. I got started with
>C.B., I then progressed to scanners, then to short wave utilety stations,
>and I'm currently studeing for my HAM radio liceance. Another field I
>wish to get into to is RF circut design. I want to be able to take a pile
>of commponents and, from memory, build a radio. I want to be able to
>design radios to recieve any freq. I want. ( no, I don't plan to breech
>the ECPA laws, although I do believe they are wrong, but thats another
>post!) You know, I want to know about what each indivdual resistor,
>capacitor, and IC chip in a radio does, just by looking at the schematic.
>
> I am lerning about circut components, and design in my study guide
>"Now Your talking", but I feel that it won't have nearly all the info I
>need to achive my goals. Are there
> What want to know is, how can I achieve this nowlage, are there any
>good books out there? I have flipped through Joe Carr's " secrets of RF
>circot design" or whatever it's called, but I feel it may be above my
>skill level.
> If any one out there can help me, I would be most appreceative!
> Thanx,
>Scott
>Diback @AOL.com

I'm 19 and have a similar desire... just got Solid State Design through the post yesterday, it seems like quite a good book with a couple of good circuit ideas. For an introduction to electronics in general I recently looked at "The Art of Electronics" by Horowitz et al 2nd ed. It's a super book, lucidly written and available in most university libs.
Now everyone just has to wait for my 10,20 & 80M superhet (got to think up a catchy name as well)! I'm warming up the (valved) test equipment already!

73 de Laurens RS171840 (waiting for exam results)

# 489. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33AAA587.A93@crpl.cedar-rapids.lib.ia.us>
Source record: 93109

Tom Rauch wrote:

> Why don't you critics try to help, if you think they need help, by
> contacting them about areas you think need improvement. We need
> quality articles that are properly reviewed for accuracy by panels of
> skilled amateurs and engineers, not unreviewed voo doo.

The review process is not infallible and we should not think of it as a guarantee. Reviewers are not always the final authorities and sometimes not objective regarding what is right and what is wrong. Quite often the author is the one best informed about the topic that he is writing about because of the effort he has put into it. And differences of opinion do exist even on technical matters, despite the common belief that there can be only one *right* answer. However, reviewers can provide perspectives and ask questions that help the author to write a better article. That is very often a more valuable input. A good reviewer also provides civility in his review.

Bill W0IYH

# 490. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33AAA930.248A@crpl.cedar-rapids.lib.ia.us>
Source record: 93110

Jim wrote:

> I guess it's something about the cachet of being published in QST,
> along with the outdated concept that "Amateur" radio means you can't
> have ANY financial interest in it, that keeps the Newington gang
> offering such pitiful pay and such draconian terms for publishable
> work.

For many years, 1962 to 1983, I had quite a few articles published in QST and didn't get a dime for them. It didn't bother me a bit. Reason: I was doing what I wanted to do because I wanted to do it, and not for the money. Amateur radio was then and is now an avocation. The payment that I get these days helps to meet the expenses incurred and that is about it. I am not in the *business* of writing articles. It is not true that everything that we put our efforts into has a dollar equivalent.

Bill W0IYH

## 491. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: gsparks@ix.netcom.com
Message-ID: <33aaa99a.8588209@nntp.ix.netcom.com>
Source record: 93111

On 19 Jun 1997 19:32:52 GMT, stevem@vax.area.com (Stephen E. Muther)
wrote:

>In article <01bc774d$bf790da0$25f135ce@hammer.stonewest.com>,
>Dave VanHorn <dvanhorn@127.0.0.1> wrote:
>>
>>
>>> There is a yahoo in Las Vegas who claims 5KW and he uses a phased array
>>> pointed right at the cab of his pickup truck. The real fun is this guy
>>> is an Amateur Extra. That darn code filter failed again.
>>
>>
>>Nothing's perfect..
>>
>>I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
>>Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..
>>Using a radio shack discone with a CB, amp and tuner.. (Talk about
>>an interference generator!)
>>
>>I might go ahead and do it.
>>
>
>
>I've seen several CB Ground Plane antennas with rotators on them.
>
>Why don't we get a "can you top this" going in this thread and
>someone can pick the archive off of DejaNews.
>
>Steve WF6R
>

Of course I heard a bunch of Hams making fun of CB'ers putting Tennis
balls on their antenna's to make them transmit better. I told them I
used a tennis ball on my bugcatcher, and they wanted to know how much
it increased the power.

When I told them it was to keep the antenna from grounding against the
body and scratching the paint when I hit trees or bumps, I was greeted
with dead silence.

Sometimes people make the wrong assumption on why these things are
done, find out the facts first, it will keep your foot out of your
mouth.

KI5GY

## 492. Re: WTB: VHF PWR Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: "Michael Masterson"
Message-ID: <5oed8h$7al@mtinsc05.worldnet.att.net>
Source record: 93112
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Woody:
I don't have anything in that power class, but was just
wondering if you know of any Price/Availability of the
Motorola LDMOS series? They should be reasonably priced and
very VSWR tolerant if I read the Preliminary Releases correctly.

73's de Mike, WN2A>>>

## 493. 2m/70cm homebrew duplexor wanted?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: Kerry Morris <kerry@elcontrol.demon.co.uk>
Message-ID: <kYgiUAAoeuqzEwAq@elcontrol.demon.co.uk>
Source record: 93113

Hi There,

Does anyone have a design for a 2m/70cm duplexor? None of the handbooks I own seem to contain such a thing! Having peeked inside a commercial unit I can see that it is little more than a pair of low-pass and high pass LC filters, and I can see no reason to pay (typically) 25 u.k. pounds for one when I estimate that the parts cost (even with new parts!) is probably less than 5 pounds!
Can anyone point me to a proven design, preferably on the Web, with capacitance values, coil winding info, and setting up tips?

Thanks in anticipation,
--
Kerry Morris (G1WIK)
Portland Amateur Radio Club, England

## 494. Tek 465B Service Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: stevem@vax.area.com
Message-ID: <5oepk8$t44$1@nixon.area.com>
Source record: 93114
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

I recently purchased a fixer-upper Tek 465B scope. I have fixed most of the problems (mechanical / connector related) but the one problem remaining is my inability to use the Focus and Astig adjustments on the front panel to obtain a sharp trace, or dot in the case of no sweep. The dot seems to have a fuzzy or dim halo around it. I have ruled out input channel noise and power supply ripple by various methods.

Intuitively, it seems like the focus and astig controls are working OK, but there might be some other adjustment in the unit which can further clarify the focus. I see no sub-focus or astig adjustents inside though. I also thought it could be some kind of yoke alignment problem, but this scope seems to use only deflection plates.

I'm working without a manual at this point, so I'm wondering if anyone out there who is familiar with this specific instrument might have any ideas on how to fix the problem.

Thanks

Steve Muther WF6R

## 495. Original HF Radio Power Connectors Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: toms@inconnect.inconnect.com
Message-ID: <5oese3$s3u$1@news.inconnect.com>
Source record: 93115
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

These connectors are now available from ICOM America. The cist of the connector is $1.22 each + $2.00 handling & about $2.00 US Mail. I ordered 10 so this comes out to 1.62 per connector. The connectors come with the pins and will work with Yaesu, Kenwood, or Icom. These are the REAL thing. No longer do we have to buy look-alike connectors from the Hudson River Valley that do not really fit. You can get these from Icom America Parts Division by calling (425) 454-7619. At the prompt, press 3 for parts.

Note that since the handling charge goes down as the order goes up, this may be a good item to ask how many at a club want one. The club could add a dollar for each connector to buy code tapes, etc for new hams.

BTW, I am using Anderson power poles for all my radios but it is still great to have the original soldered to the wire from the power supply. With the power pole, we could forget the power pole to JST (HF Radio) connector.

-- Best Regards,

Tom Schaefer
Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I

## 496. Re: Mega Power Mobiles! (

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <866841526@infoway.com>
Source record: 93116

I'd like to see politeness and style of gentle people used in
amateur radio, and a welcome extended to CB operators to upgrade
to the licensed amateur radio service.
Therefore I would recommend a name of homebrew follies or some such,
and be sure to include ourselves in the group that we are smiling at.

>> There is a yahoo in Las Vegas who claims 5KW and he uses a phased array
>> pointed right at the cab of his pickup truck. The real fun is this guy
>> is an Amateur Extra. That darn code filter failed again.
>
>Nothing's perfect..
>
>I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
>Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..
>Using a radio shack discone with a CB, amp and tuner.. (Talk about
>an interference generator!)
>
>I might go ahead and do it.
>

St> I've seen several CB Ground Plane antennas with rotators on them.

St> Why don't we get a "can you top this" going in this thread and
St> someone can pick the archive off of DejaNews.

St> Steve WF6R

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

## 497. AC pwr xformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: Lee <ab7on@paclink.com>
Message-ID: <33AB1719.7D71@paclink.com>
Source record: 93117

I am in need of AC step down power transformer 125-125 primary 60hz to
18-20 vac secondary at minimum of 15 amps. Can be surplus, used or new.
I need at least 3 of these.

Lee / AB7ON
ab7on@paclink.com

## 498. Subject: *ALINCO* Mailing List (and others)...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33AB1C80.7EA1@primenet.com>
Source record: 93118

Subject: *ALINCO* Mailing List (and others)...

Alinco is a mailing list (reflector) devoted entirely
to equipment manufactured and distributed by Alinco, Inc.
of Torrance, Ca 90501.

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe alinco

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe alinco

To post items to the reflector, send email as follows:
TO: alinco@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Icom is a mailing list (reflector) devoted entirely
to equipment manufactured and distributed by Icom
America, Inc. of Bellevue, WA.

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe icom

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe icom

To post items to the reflector, send email as follows:
TO: icom@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Kenwood is a mailing list (reflector) devoted entirely
to equipment manufactured by the Kenwood Communications
Corporation (Amateur Radio Products Group).

* equipment, accessories
* repairs, modifications, enhancements
* questions, discussions, etc
* buy, sell, trade, swap

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe kenwood

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe kenwood

To post items to the reflector, send email as follows:
TO: kenwood@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Fox_Tango is a mailing list (reflector) devoted entirely
to "vintage" and "classic" equipment manufactured by the
Yaesu Musen Co., Ltd. of Tokyo Japan.

* equipment, accessories
* collecting, restoring, refurbishing
* buy, sell, trade, swap
* repairs, modifications, enhancements
* questions, discussions, etc
* just plain operating old Yaesu stuff

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe fox_tango

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe fox_tango

To post items to the reflector, send email as follows:
TO: fox_tango@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP, QRP, APRS
-Packet, Pactor, GTOR, Clover, AMTOR, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
-homebrew, modifications, interfacing, widgets, etc

To subscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: SUBSCRIBE bitbucket

To unsubscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: UNSUBSCRIBE bitbucket

As we encourage the free exchange of ideas, if you pay for
email service by the byte you may want to consider carefully
before subscribing.

To submit materials:
TO: bitbucket@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

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## 499. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <5of3as$jt9@news.asu.edu>
Source record: 93119

Jim Weir (jim@rst-engr.com) wrote:
: Steve Ford <sford@arrl.org>
: shared these priceless pearls of wisdom:

: ->QST wants to hear from you!
: ->worldwide) you'll receive $65 for each published page.
: ^^^^^^^^^^^^^^^^^^^^^^
: Which explains a lot, given that the going rate in the industry is about
: $150 a published page.

: Jim
: 25 years as an author

I guess it depends on where you publish. For example, to publish in the IEEE Transactions on Antennas and Propagation, you are "requested" to pay them $110 per page. If your article runs over 8 pages there is a mandatory "excessive page length" charge of $200 per page. Many scientific journals also expect to be paid page charges from the author's institution.

73 Kevin w9cf@ptolemy.la.asu.edu

## 500. HAM SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: Jerry <jnewland@rapidramp.com>
Message-ID: <33AB4295.563514B2@rapidramp.com>
Source record: 93120
Body handling: HTML body converted to readable text

http://www.geocities.com/Colosseum/7859/

## 501. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33AB5258.5168@calweb.com>
Source record: 93121

Jim wrote:
>
> Jim Weir wrote:
> >
> > Steve Ford <sford@arrl.org> shared these priceless pearls of wisdom:
> > ->QST wants to hear from you!
> > ->worldwide) you'll receive $65 for each published page.
> > ^^^^^^^^^^^^^^^^^^^^^
> > Which explains a lot, given that the going rate in the industry is about
> > $150 a published page.
>

I would sure like to see an amateur publication that paid even 1/3 of
the
$150 a published page rate you cite. Having written for CQ and Comm
Quarterly recently, I can tell you the even 40 dollars a printed page is
a miracle. I think 73 pays around 30-40 a page also. Many of the
vanity trade publications don't pay diddle squat for an article.
If you want to right for a living, do queries on ideas and sell to
Lady's magazines, in-flight magazines, AARP, and Cosmo if you can
break into those venues. And if you can do your own shots then do so as
you will get a lot more for a pic that 100 column inches of your best
words. Given that a few years ago QST didn't pay a nickel for an
article, $65 a published page is not bad and should cover your paper and
toner costs. What price that 15 minutes of fame.

Bob Miller, KE6F

snip
>

## 502. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc7d12$d0112880$061810d1@dale>
Source record: 93197

Shouldn't limit it to CB'ers...Hamdom has lots of sources, too...

How about the guy at the convention (just about any convention)
with the rotating beam and flashing LED's on a tower on a hardhat?

or

the guy at the convention (just about any convention) with the
rubber duckie mounted on top of a hardhat? (I waiting to see
a phased array....I just know it will happen)

:-)

hmmm.....I wonder if there's a market for either/both of them?

73,

--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Stephen E. Muther <stevem@vax.area.com> wrote in article
<5oc1h4$i9u$1@nixon.area.com>...
> In article <01bc774d$bf790da0$25f135ce@hammer.stonewest.com>,
> Dave VanHorn <dvanhorn@127.0.0.1> wrote:
> >
> >
> >> There is a yahoo in Las Vegas who claims 5KW and he uses a phased
array
> >> pointed right at the cab of his pickup truck. The real fun is this guy
> >> is an Amateur Extra. That darn code filter failed again.
> >
> >
> >Nothing's perfect..
> >
> >I've been tossing up the idea of a page dedicated to "Stupid CB Tricks",
> >Antenna add-ons that don't work.. "Dual Truckers" mounted 6' apart..
> >Using a radio shack discone with a CB, amp and tuner.. (Talk about
> >an interference generator!)
> >
> >I might go ahead and do it.
> >
>
>
> I've seen several CB Ground Plane antennas with rotators on them.
>

> Why don't we get a "can you top this" going in this thread and
> someone can pick the archive off of DejaNews.
>
> Steve WF6R
>
>

## 503. ANTENNA TUNER PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: labenz@ix.netcom.com
Message-ID: <5ockoi$251@dfw-ixnews6.ix.netcom.com>
Source record: 93198

assorted capacitors, rotary inductors and fixed coils..also some bc610 tank coils that are good for link coupled tuners. I have built all the tuners that I need so i want to sell the rest...ARC 5 tuning capacitors to construct dula differential capacitors are available..Email me your needs

73 Dave WA1UUD

## 504. FS: HP608E VHF Signal Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <5ocqcf$mv6@news1.hlc.net>
Source record: 93199
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

This generator looks new, operates on all bands and comes with an
original manual. Located in Northern VA. Make offer.
Thanks,
Dale

# 505. ! SAMPLE OUR PSYCHICS TOLL FREE!! 1-800-683-3733

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5octc4$8ip@news.intercall.com>
Source record: 93200

Dial 1-800-683-3733 and sample amazing psychic advice -
it's free. You will be startled and amazed!
Adults over 18 only

Dial now 1-800-683-3733

# 506. ! FREE PSYCHIC READINGS!! FREE!! 1-800-677-8048

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: jann@intercall.net
Message-ID: <5od3rt$dbl@news.intercall.com>
Source record: 93201

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

## 507. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970620103801.GAA14219@ladder02.news.aol.com>
Source record: 93202

God I hope not, I wouldn't mind him leaving the news groups for a more productive endeavor, but I really don't think they could afford him. They darned near lost all their advertising from amp manufacturers with his last blast.

W4ZCB

Skip Tenney where are you, now that we REALLY really need you? RIP

## 508. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: "L.Mark Pilant" <pilant@star.enet.dec.com>
Message-ID: <33AA8019.447C@star.enet.dec.com>
Source record: 93203

JohnsonHE wrote:
>
> How the mighty have fallen.
>
> W4ZCB

Or...

How to provide an opportunity, and encourage others to share their experiences and talents. And at the same time, providing recognition of their efforts.

- Mark N1VQW

## 509. Re: FS SELSYN motors/trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <33AA82B1.1B737535@acsu.buffalo.edu>
Source record: 93204

jskalski@acsu.buffalo.edu wrote:
>
> I have a box of selsyn motors for sale.
> They are miniature 1.5" long x 1" diameter
> (excluding the shaft which is 0.5"long x .125" diameter
>
> Manufactured by Scot inc. P/N 5007cw0708/s07/1524
>
> Theses are new in original boxes.
>
> Price is $10 per pair plus $3 for 2nd day priority mail..
>
> Thanks, Jim (N2GO)

Hello,

I have about 100 of these motors left.
Will trade for set of 1/4 watt 5% carbon film resistors......
200 each of all the standard values (161 standard values) as listed in
Digikey catalog.....I am tired of scrounging for parts.
BTW they must be separated by values :-)
So much to do....so little time.

Or will sell for $275 outright.

Any takers?

Thanks for reading this,
Jim

## 510. Re: repeater group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33AA6792.4935@ix.netcom.com>
Source record: 93205

Ron, N7TAW wrote:
>
> I used to subscribe to the repeater discussion group, but when I changed
> ISP's I lost the address.
>
> Can someone please send me the "subscribe address" again.
>
> Thanks,
>
> Ron, N7TAW
---
Howdy Ron --- 100 plus Mail Lists/Reflectors at URL:
http://pw2.netcom.com/~ac6v/pageae.html
includes two on repeaters.

73
Rod in San Diego
--
AC6V's Guide To DX and Ham Radio
1277 Links and 60 Pages
Home Page http://pw2.netcom.com/~ac6v/index.html
Master Index http://pw2.netcom.com/~ac6v/pageas.html

## 511. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-20 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33aa7f88.5837476@netnews.worldnet.att.net>
Source record: 93206

On 20 Jun 1997 10:38:45 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>God I hope not, I wouldn't mind him leaving the news groups for a more
>productive endeavor, but I really don't think they could afford him. They
>darned near lost all their advertising from amp manufacturers with his
>last blast.
>
>W4ZCB
>
>Skip Tenney where are you, now that we REALLY really need you? RIP

I agree QST handled the matter poorly, they should have just said they made a mistake and explained what it was. Instead they printed exerpts from some of the letters they received (including mine), making it "look like" it was a gang after Rich.

Not that it does any good to say it (minds are probably made up already), but there was never any threat to "pull advertising" because of Rich. Manufacturers largely just ignored him. He didn't affect anyone's sales or market with his constant insults, but pulling an advertisement certainly would have.

The objections to Rich's material came mostly from amateurs, not from manufacturers. One staff member told me after one of his articles they got a stack of letters an inch high pointing out error. When I asked how many letters they got agreeing with him they said "almost none".

When they finally sent his stuff out for review (NOT to people in the industry, but to independent engineers) they did not receive one favorable comment.

QST may be less than perfect, I certainly don't like the way they "handle" some things. But they are NOT dishonest. They are by far the most honest and amateur OPERATOR oriented publication I've seen.

Why don't you critics try to help, if you think they need help, by contacting them about areas you think need improvement. We need quality articles that are properly reviewed for accuracy by panels of skilled amateurs and engineers, not unreviewed voo doo.

## 512. Need slim 2m vertical ideas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: mmss@mmss.sdi.agate.net
Message-ID: <33ab2c90.50502274@news.agate.net>
Source record: 93122
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi,

I need an antenna design for our new 2 meter repeater. It is to be a remote solar powered machine on a mountain which is not noted for nice weather. The requirements are: It must completely fit inside 4" PVC pipe (it would be nice if it would fit inside 3" PVC pipe); it should be at least a half wave, but if we could get more gain that would be great; I would prefer it not be more than about 10 feet long, but we might be able to do a bit more. Any ideas out there?

Paul N1BUG

## 513. Re: RF PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Rick Pemble <pemble@ix.netcom.com>
Message-ID: <01bc7dee$28d271a0$2cd1bbcd@pemble.ix.netcom.com>
Source record: 93123

They will send you a catalog by e-mail request. Their
address is rfp@rfparts.com -- just got one last week.
Haven't found a home page for em.

Cheers

Rick W4RP

Bjorn Soderholm <sm2gxn.soederholm@boden.mail.telia.com> wrote in article
<33A836A1.30C3@boden.mail.telia.com>...
> Hi!
>
> Does anyone know if RF PARTS in San Marcos/CA got any home page??
>
> Bjorn/sm2gxn
>

## 514. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970621030501.XAA05013@ladder01.news.aol.com>
Source record: 93124

Hi Jim--

In your post you said:

"Which explains a lot, given that the going rate in the industry is about $150 a published page."

Which ham magazine (or industrial magazine such as RF Design) are you refering to, Jim? I think you'll find that most ham magazines pay the ARRL rate or LESS. Few popular writers I know in amateur or commercial radio do it soley for the money, although a little extra cash is always nice to have. Radio publications aren't exactly "cash cows" in the publishing industry these days, and most simply can't afford to pay big author fees. If money is your only motivation for sharing information with other members of our hobby, then--you're right--it probably isn't worth it.

73

Rick Littlefield K1BQT

## 515. F.S. - Tubes, radios, books, etc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970621050800.BAA08678@ladder02.news.aol.com>
Source record: 93125

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #620-T.

## 516. Re: Need 3SK97 mosfet help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: k9opo@no.netusa1.net
Message-ID: <5ofnn8$3ou$1@news.netusa1.net>
Source record: 93126
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

paul@pachena.ca wrote:

>Hello,
>I have an ICOM VHF radio that is in need of a 3SK97 dual gate MOSFET.
>Does anybody know who makes this part, where I might find one, or have
>specs on it so I might find an alternate. Your help would be appreciated.

Have you tried Icom? Seems to me they had that part when I needed one
last year. RF Parts (1-800-737-2787) listed it in their 95 catalog -
latest one I have.

Roger Grady k9opo@no.netusa1.net
Note: To reply by email, remove "no." from address

## 517. TX Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: "David W. Vanderberg" <van4@pilot.infi.net>
Message-ID: <01bc7e26$069c60e0$95a983d0@default>
Source record: 93127

Hello,

I bought a TX that only had a built-in antenna. I am attempting to put it in a new chasis.
I want to add a S0-239 on the new box for an External antenna. My question is what should the "ground" part of the connector should be connected to. As I see it... Im thinking that I'll remove the antenna and and a solder in a jumper from the antenna to the center of the connector. Then should I solder the ground of the connecter to the Negative or ground of the circuit. Like at the point where the negative power wire is put in. Another question is that I noticed in many TX's a capacitor or resistor before it hits the antenna. I figured that was for protecting the TX. What are they used for? Thanks again for your time.
Sorry if it seems like such a novice question.

Victor V.

## 518. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33abb62f.35444695@news.erols.com>
Source record: 93128

I've had a couple of articles published in QST and a few others in some of the other ham mags. While the money isn't great, there's another form of compensation that hasn't been mentioned yet in this thread: fan mail! I'm not kidding. I got many, very satisfying notes, e-mails and letters from those two little articles. And occassionally I'll be talking to someone on the air and he'll say, "Hey, weren't you the guy who wrote..." Lots of fun! I recommend it!

73 de N2CQR Bill

## 519. Storno Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: gatsby@dircon.co.uk
Message-ID: <5ogeb3$l3e$1@newsserver.dircon.co.uk>
Source record: 93129

Wanted Storno programming software for pc or info on how to program it from the front panel

Sean

# 520. Re: ! PROVEN PSYCHICS / FREE PREDICTIONS 800-677-8039

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: jwilliam@nothnbut.net
Message-ID: <33abd4f5.1523547@news.nothnbut.net>
Source record: 93130

This company lies and cheats customes.
They must be kept out of these newsgroups.

73 de Jerry
ax.25: wb9eiu@k0pfx.#stl.mo.usa.noam
internet: jwilliam@nothnbut.net or jwilliamson@webtv.net
http://www.nothnbut.net/~jwilliam

## 521. CB to SIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: bry@hardknox.edu
Message-ID: <33abd560.8033714@news.mnsinc.com>
Source record: 93131

If anyone is still having trouble finding this set of articles, you
can get them at:

http://www.mnsinc.com/bry/ham/cb2six.zip

Regards - AF4K

To reply to this message, you MUST IGNORE my shown address.
It is there to fool those annoying unsolicited e-mail advertising idiots!
Send replies ONLY to: bry AT mnsinc 'DOT' com
Bulk e-mail robot food:
root@localhost, abuse@cyberpromo.com, postmaster@bstgrlsss.com,
removetif@answerme.com, hostmaster@solnet.co.uk,
postmaster@potters.com, postmaster@rovers.com, postmaster@www.goldnet.co.uk,
postmaster@goldnet.co.uk, postmaster@rovers.com,
postmaster@www.goldnet.co.uk,
postmaster@summerfun.com, postmaster@goldnet.co.uk
postmaster@cyberpromo.com, mgiwer99@primenet.com,
constance@strutyourstuff.com, postmaster@carbow.com,
burt@rocketmail.com, cleanair@spica.net,
gige@global-merchants.com,brutus@stbbs.com,
wallace@cyberpromo.com,abuse@cyberpromo.com,
sales@agis.net

SEND US SOME E-MAIL ADS!!!

## 522. Re: 6mtr antenna plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: bry@hardknox.edu
Message-ID: <33abd617.8217054@news.mnsinc.com>
Source record: 93132

On 19 Jun 1997 17:10:48 GMT, houwer@dds.nl (Edwin) wrote:

>Hi,
>
>I am looking for 6 meter (50mc) antenna plans both directional and
>none directional antennas.
>
>If you have something please mail it to houwer@dds.nl or put it in
>this newsgroup.
>
>tnx, 73's Edwin (PE1PWF)

Just make a half-wave dipole!

1.5 metres on each leg!

Can we count on hearing you pop up on 50.4 Mhz AM soon
for a trans-atlantic AM test??

Bry, AF4K

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

## 523. NEEDED: 811A tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: bry@hardknox.edu
Message-ID: <33abd5c4.8133568@news.mnsinc.com>
Source record: 93133

I would like some 811A tubes if anyone has some extra ones!

Bry, AF4K

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

## 524. Perth radio experimenters group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Tony Steele <tsteel@btinternet.com>
Message-ID: <33AB8B75.2F35@btinternet.com>
Source record: 93134

Hi, anyone know the url or email address for the Perth radio
experimenters group, or have any info on the pic based frequency synth
that they did, the address that most people link to does not seem to be
valid.
Thanks to anyone who replies..

# 525. Re: 2m/70cm homebrew duplexor wanted?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33ABE08F.28BB@earthlink.net>
Source record: 93135

Kerry Morris wrote:
>
> Hi There,
>
> Does anyone have a design for a 2m/70cm duplexor? None of the handbooks
> I own seem to contain such a thing! Having peeked inside a commercial
> unit I can see that it is little more than a pair of low-pass and high
> pass LC filters, and I can see no reason to pay (typically) 25 u.k.
> pounds for one when I estimate that the parts cost (even with new
> parts!) is probably less than 5 pounds!
> Can anyone point me to a proven design, preferably on the Web, with
> capacitance values, coil winding info, and setting up tips?

You are correct in your observation....the 2mtr side is a LP filter
with a cutoff about 170 Mhz or so...the UHF side is a HP filter with
a cutoff of about 400mhz or so....that way they have MAX isolation
(attenuation) on the opposite band....any ARRL or RSGB handbook
will likely give you the LC values for the filters...3 sections
each band is all you need (each section being one cap and inductor)
The Larsen dualband coupler is a JOKE!!! I opened one up and found
POOR construction for a COMMERCIAL piece of gear...long leads on
the caps, NO interband shielding (which could be done easily with
PC Board soldered in a vertical position between the LP and HP
filters so they dont see each other), and the caps were cheap
ceramic disk instead of higher quality....also the freq response
SUCKED...it did NOT have the range they advertise and the LP side
on 2 mtrs was extremely poor.....loss was more than they advertsied.
I cleaned the board off, added NEW parts (using better caps with
SHORT leads) and got the tuning to cover up to 220 on the low side
and 440 -up on the high side with .3 db MAX loss....now I want to
get rid of the UHF connectors and use Ns or BNCs...

I may have a parts listing of the schematic of an easy 2/UHF
crossband somewhere...I'll see if I can dig it up for ya..

Chris
WB5ITT
>
> Thanks in anticipation,
> --
> Kerry Morris (G1WIK)
> Portland Amateur Radio Club, England

# 526. Re: Plans for 33cm Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33ABE180.754B@earthlink.net>
Source record: 93136
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Stephen Lui wrote:
>
> Does anyone have plans to construct a 33cm (902-928 MHz) duplexer, or plans
> that can be scaled to this band? This is for a 25 MHz split voice repeater
> project.
>
> Stephen
> KY6K

You may want to look at the duplexers out of the older cellphones..
they can be retuned (some have been used at 1.2Ghz) and they should
be able to handle maybe 10-25watts with little problem....
BEWARE the connector on a lot of them is a PLASTIC TNC connector..
it is plastic but chrome plated for RF use....they tend to break easily
and cannot be soldered to!!!
Also used 800/900 Mhz duplexers may be retuned for the 902 band with
25 Mhz split (why not a 21.4 split?? thats easier to work with...)
(I would replace it with a true TNC or N)

Chris
WB5ITT

# 527. Re: ! PROVEN PSYCHICS / FREE PREDICTIONS 800-677-8039

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Steve <semann@nr.infi.net>
Message-ID: <33ABF1AA.572D@nr.infi.net>
Source record: 93137

jerry williamson wrote:

> They must be kept out of these newsgroups.

Send them a mental message! If they're as good as they claim
they should get it!

# 528. ! PSYCHIC PREDICTIONS/ TRY IT FREE 1-800-676-3733

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: jln@tnp.com
Message-ID: <5ogufh$29k@news-in.tnp.com>
Source record: 93138

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

## 529. OPC-589 Mic Adapter Cable icom 706

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Scott Gordon <gsenter@m5.sprynet.com>
Message-ID: <33ABFFAE.6B8F@m5.sprynet.com>
Source record: 93139

Does any one have a pin to pin wiring info on the OPC-589 Mic adapter cable?? Going to hookup and Icom SM-8 to a 706.

Thanks
Scott

## 530. Re: Power Tetrode questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2106970856300001@news.vcnet.com>
Source record: 93140

In article <33a80317.9667723@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Tue, 17 Jun 1997 04:46:33 -0700, measures@mail.vcnet.com (R. L.
> Measures ) wrote:
>
> >One problem with adding an approx. 1250Vrms winding for a 8170/8171/8281
> >screen supply is that an uncheap/uncommon 1.5kV-rated fuse is needed for
> >screen protection. However, if a separate transformer is used, screen
> >protection can be a garden-variety 250v-rated fast-acting circuit breaker
> >or fuse in the screen transformer primary. .
>
> Fuses are next to worthless for protection of grids. Fuses are great
> for preventing house fires.
>
> IMHO, anyone depending on fuses to protect grids needs to read some
> fuse catalogs, and pay attention to the specs.
>
> 73 Tom

The screen of an 8171 is rated at 250w continuous. When tuned up with a
33% duty-cycle tuning pulser, the screen dissipation is 1500v x 0.12a x
0.33 = 60w. I used a fast acting fuse in the primary of the screen supply
that would open when the average screen dissipation was roughly 180w. At
first, I blew fuses pretty regularly. After I got the hang of tuning up an
AB1 amplifier, I rarely blew a screen fuse. I never blew a screen.

--
--Rich-- ---805-386-3734, ag6k

## 531. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2106970918000001@news.vcnet.com>
Source record: 93141

In article <33A7E816.447@arrl.org>, Steve Ford <sford@arrl.org> wrote:

> If you have a project that you would like to share,
> QST wants to hear from you!
>
> We're looking for project articles ranging from the simple
> to the complex--antennas, antenna tuners, amplifiers (HF,
> VHF, UHF), microwave components, receivers, transmitters,
> power supplies, test equipment, remote control, digital--the
> list is almost endless!
>
> Not only will your article appear in the America's most
> popular Amateur Radio magazine (read by over 176,000
> worldwide) you'll receive $65 for each published page.
>
> To submit an article for consideration, simply send it to:
>
> ARRL
> Attn: Paul Pagel
> 225 Main St
> Newington, CT 06111
>
> If you have an *idea* for an article, but you're not sure
> if it's what we're looking for, send a brief description
> to Paul Pagel at:
>
> ppagel@arrl.org
>
> You'll find a complete QST author's guide on the Web at:
>
> http://www.arrl.org/qst/aguide/#QST
>
> And we're always interested in seeing candidates for
> QST cover photography. Before you send your photos,
> however, see our requirements on the Web at:
>
> http://www.arrl.org/qst/cover_photo.html
>
> 73 . . . Steve Ford, WB8IMY
> QST Managing Editor

beware.

--
--Rich-- ---805-386-3734, ag6k

## 532. Re: www.hamradio-online.com: Photo of Yaesu's pager-sized HT available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <33ac0a2c.8653671@news.fastlink.com.au>
Source record: 93142
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

vbook@vbook-nospam.com (Ed Mitchell) wrote:

:Ham Radio Online is a free online web "magazine" about ham radio. No ads. Its
:run by volunteers. We have nothing to sell. Come enjoy our web site at
:http://hamradio-online.com
:
:------------------------
:Ed (KF7VY) and Kim (N7VPL) Mitchell
:SEND email replies to vbook@vbook.com
:Visit Ham Radio Online, it's free! at
:http://www.hamradio-online.com

There are a great many errors in the information provided. It's obviously
written by people who have an inflated idea of their knowledge.

==========
To reply via email please remove the XX from my
return address.

## 533. FS: Drake 8 kc AM filter for TR-7/R-7 <<<

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970621181300.OAA10588@ladder01.news.aol.com>
Source record: 93143

Have a new, never installed 8 kc AM filter for the Drake TR-7 or R-7.
Shipped priority mail to your door CONUS, for $50.

Evan
K9SQG@AOL.com

## 534. Scanner modification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Markos@webtv.net
Message-ID: <5ohahr$n2q$1@newsd-106.bryant.webtv.net>
Source record: 93144

I own a radio shack pro-34 scanner, which is FM reception only and I am looking to add AM receive capability to it. Does any one have a suggestion on how?

Markos@webtv.net.

# 535. TROUBLE WITH LOVE? TRY A PSYCHIC FOR FREE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: may@smartec.com
Message-ID: <5ohh1a$c52@newsfeed.ingress.net>
Source record: 93145

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

## 536. Refurbished Electronic Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: smcone@ma.ultranet.com
Message-ID: <729195.64846@news.ma.ultranet.com>
Source record: 93146

```
X-Newsreader: Binary Newsreader for OS/2 - Version 1.25 - UNREGISTERED

New and refurbished electronics at very low prices.
Merchandise includes...

Computer monitors
Computer motherboards
Computer add-in cards
SIMMS
Computer controlled MIDI keyboards
Pocket computers and accessories
PDA (electronic diaries) and accessories
Televisions

..and much more, new merchandise added weekly.

Please visit our WEB page at:

http://www.ultranet.com/~smcone/

or E-Mail us at:

smcone@ma.ultranet.com

for an E-Mail catalog.

***************
SMC Electronics

Quality Sales and Service since 1975.
```

## 537. Help: Heathkit Tube Checker (old)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: karl@olympus.net
Message-ID: <karl-2106971505050001@papm044.olympus.net>
Source record: 93147
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Got it at a garage sale.
But no chart.
It is a Model IT-17.
Does anybody have a chart???
--
Best of Luck
Jim Nichols
"Now is the accepted time"

## 538. Re: The NorCal 38 Special/such a deal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: travis@vgernet.net
Message-ID: <33AC5EA6.4426@vgernet.net>
Source record: 93148

David Weinstein wrote:
>
> In <5nrtdt$a0i$1@news1.rmi.net> jonz@shell.rmii.com (Bea and Marvin
> Jones) writes:
> >
> >: travis@vgernet.net wrote:
> >
> >: >Jerry, I've had mine for 2 months now, love it but I'm having
> problems
> >: >finding a power supply other than a battery that won't cause
> problems.
> >: >(unit is 5w mod) My HB regulated PS (mc1463 + 2n3055) introduces
> some
> >: >MCW (buzz) I put a big filter cap (4700 uF) after it and the buzz
> went
> >: >away but a chirp developed. I've tried puting an RF choke in the
> battery
> >: >leads but made things worse. What seems to work? Unregulated supply
> >: >maybe?
> >
> >PMFJI -- but, at those voltages, "...a big filter cap" is NOT "(4700
> uF)".
> >A Big Filter Cap would be more like 47,000 uF.
> >
> >And, as for the chirp -- with a better regulated and smoothed supply,
> >you may want to re-visit the transmitter alignment discussions found
> >in the original article and many of the mod's articles.
> >
> >--
> >73
> >Jonesy - W3DHJ
> >jonz@rmi.net
> >Gunnison, Colorado
> >__
> >SK
> I recently bought a used 38 spl (5w) and found, unlike the label on the
> back indicated, it liked 12v and works well at that level, with no
> components feeling vy warm. Attempts at using <11v produced buzz.
>
> WB4DTC P.S. does anyone out there have a 40m model they would like to
>
> part with?
The 38 special is supposed to take 12v. 12v for the 5w mod (IRF511) and
there is an 8 volt regulator on board for the rest. I've since corrected

my problems by increasing the size of the filter capacitor BEFORE the regulator. The smaller cap discharged within the 120Hz charge time and gave me a "buzz" (no pun intended") , with a large cap AFTER the regulator the 120 Hz was filtered but slowly discharged from the unloaded potential and gave me the chirp. Now it sounds great on my reciever and consistently get good reports. It's a great rig.
Travis WA2JJF

# 539. Re: FS: HP608E VHF Signal Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Mike <NoSpam@Today.Thanks>
Message-ID: <33AC8F2E.4A0B@Today.Thanks>
Source record: 93149
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

Dale B. Allen wrote:
>
> This generator looks new, operates on all bands and comes with an
> original manual. Located in Northern VA. Make offer.
> Thanks,
> Dale

Where do you get tubes for it - like the oscillator?

Mike

# 540. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2106971637520001@news.vcnet.com>
Source record: 93150

In article <19970620103801.GAA14219@ladder02.news.aol.com>,
johnsonhe@aol.com (JohnsonHE) wrote:

> God I hope not, I wouldn't mind him leaving the news groups for a more
> productive endeavor, but I really don't think they could afford him. They
> darned near lost all their advertising from amp manufacturers with his
> last blast.
>
> W4ZCB
>
> Skip Tenney where are you, now that we REALLY really need you? RIP

Amen, H.E.
- In my opinion: QST never came close to losing advertising from amplifier manufacturers. Advertisers realize that QST is the only credible ad game in town. The powers that be at QST don't. Based entirely on circumstantial evidence, I'm guessing that about two months after "The Nearly Perfect Amplifier" was published in the January, 1994 issue, Mark and Dave caved in to orchestrated sabre-rattling from some of the advertisers who manufacture amplifiers.
... It seems that the folks who ought to know better have been strangling the Grammerian goose that laid golden eggs .

• How many pages of Alpha and MFJ/Ameritron advertising are in the October 1994 issue of QST?

--
--Rich-- ---805-386-3734, ag6k

--
--Rich-- ---805-386-3734, ag6k

## 541. Re: Tek 465B Service Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Richard Hager <rhager@millcomm.com>
Message-ID: <33AC945A.3CF8@millcomm.com>
Source record: 93151
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

You -definitely- want to get the service manual for it. They can be had for around $35 and are very well worth it.

There is a full procedure for calibrating the operating point of the CRT, and you really must follow it if you hope to have a good-looking trace and an accurate deflection-factor. The svc manual will give you the procedure.

First, the pwr supplies must be right-on, then you put the CRT bias adjustment at the specified point. This can vary depending on serial number range of the instrument. Then you do the Geometry adjustments, etc., etc., etc....

Try Linda Perkins for the manual. I don't have her addr handy, but a search of this newsgroup with Dejanews should pop up an old msg from her.

Good luck! It's a great scope.

Richard
--

Richard Hager

+ Ah-ha! Design Group, Inc. -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681 -
+ "I like to make things" If you need info -
+ on CNC, please call Ah-ha! directly. -
+ http://www.ahha.com sales@ahha.com -

## 542. Re: www.hamradio-online.com: Photo of Yaesu's pager-sized HT available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <33ac0631.7633611@news.fastlink.com.au>
Source record: 93152
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

vbook@vbook-nospam.com (Ed Mitchell) wrote:

:I've just uploaded a photo of Yaesu's new pager-sized dual-band "micro-HT".
:That's right, the size of pager... 1/2 watt on internal battery or 1 watt with
:external supplied power. Yaesu was showing this radio at the SeaPac Ham Radio
:Convention and ARRL NW Div. Convention at Seaside, Oregon on 6/14 and 6/15. The
:radio is said to go on sale on July 1st.

What does "6/14 and 6/15" mean?

:Ham Radio Online is a free online web "magazine" about ham radio. No ads. Its
:run by volunteers. We have nothing to sell. Come enjoy our web site at
:http://hamradio-online.com
:
:------------------------
:Ed (KF7VY) and Kim (N7VPL) Mitchell
:SEND email replies to vbook@vbook.com
:Visit Ham Radio Online, it's free! at
:http://www.hamradio-online.com
:

==========
To reply via email please remove the XX from my
return address.

## 543. HAM SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33ACA50D.6F31329B@cyberramp.net>
Source record: 93153

http://www.cyberramp.net/~rnewland

## 544. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2106972243360001@news.vcnet.com>
Source record: 93154

In article <33aa7f88.5837476@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On 20 Jun 1997 10:38:45 GMT, johnsonhe@aol.com (JohnsonHE) wrote:
>
> >God I hope not, I wouldn't mind him leaving the news groups for a more
> >productive endeavor, but I really don't think they could afford him. They
> >darned near lost all their advertising from amp manufacturers with his
> >last blast.
> >W4ZCB
> >Skip Tenney where are you, now that we REALLY really need you? RIP
>
> I agree QST handled the matter poorly, they should have just said they
> made a mistake and explained what it was.

The Probable Mistakes in "The Nearly Perfect Amplifier" List:
1. Saying that some amplifiers have excessive filament/heater V. (they do)
2. Recommending that folks measure the filament/heater V in their amplifier.
3. Saying that some 3-500Z amplifiers have filament inrush I that exceeds Eimac specifications. (they do)
4. Recommendation of using a rheostat to control filament V (like the Collins Radio Co. KWS-1 and 30S-1).
5. Providing information on a ridiculously simple, relatively inexpensive, high speed (2mS) switching circuit that is virtually immune to the problems associated with PIN diode switching.
6. Saying that VHF-lossy conductors make better VHF suppressors. (like the 1926 and 1927 Handbooks)
7. Saying that rectifier "equalization" unequalizes the reverse currents in a series rectifier string. (as stated in the new ARRL Handbooks)

Related Mistakes:

1. Removing Paul Pagel from the loop for the 9/94 issue's Technical Correspondence column.
2. The explanation in the Feb. 1996 issue did not wash. a/ My point-by-point 9/94 rebuttal was not a 'rehash'. b/ The allegation of technical errata in "The Nearly Perfect Amplifier" was not backed up by one specific example.
3. Allowing persons who, by their own statements, either did not fully read--or did not fully understand--a QST article to comment about it.
4. Allowing a person who, by his own statements, does not understand AC Circuit Analysis, to perform an "expert" analysis of how much current flows in each branch of a VHF suppressor.
5. The mail filter.
6. Stonewalling.

7. Devoting 1200 words of QST space to ridiculing my comment about the weakness of rectifier "equalization" whilst the new ARRL Handbook was being printed, which agreed with my comment.

>..... there was never any threat to "pull advertising" because
> of Rich. Manufacturers largely just ignored him. He didn't affect
> anyone's sales or market with his constant insults, ...snip... ....

It seems that the boys on Main St. folded even though they held the winning hand.
RE: "constant insults" in "The Nearly Perfect Amplifier"? HELLO.

A personal comment about Charles Thomas Rauch, Jr., W8JI:
One of the most curious phenomena about Mr. Rauch is that once he makes his mind up, he is seldom disuaded. Two examples: To this day, he remains convinced that in one of the QST articles about intermittent VHF parasitic oscillations, I stated that 'parasitics bend grids'. // Mr. Rauch holds tight to his oft'-stated belief that virtually no VHF current flows in a VHF suppressor's inductor, even though AC Circuit Analysis indicates otherwise.
-Rich---

--
--Rich-- ---805-386-3734, ag6k

## 545. Re: Need 3SK97 mosfet help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Arthur Kloc <klocworx@v-wave.com>
Message-ID: <01bc7e17$edc6af20$c7016c18@k7x5r9.v-wave.com>
Source record: 93155
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

paul@pachena.ca wrote in article <866733710.7929@dejanews.com>...
> Hello,
> I have an ICOM VHF radio that is in need of a 3SK97 dual gate MOSFET.

In my old ECG replacement book it equivalent to ECG222 and data are as follows:
dual gate MOSFET, N-channel, transconductance 12000, NF 6dB at 200MHz, Vgs(gate to source cut off voltage) 4V, Idss 5 to 35mA, Gate to source breakdown voltage 20V, input capacitance 6pF,transfer capacitance 0.03pF, Pd 330mW.
Package TO-72 and terminals (looking from the bottom, cw, starting at the tab): D,G2,G1,S/case.
As a replacement you can use BF981 , BF982, 3SK122L, 40673 do not have my Motorola RF Hnadbook handy, so don't know any modern devices that you can use. If you need more info, e-mail me directly,
73,
Arthur, VE6BOE
play: artkloc@freenet.edmonton.ab.ca
work: klocworx@v-wave.com

## 546. HAM SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-21 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33ACA50DCANCELLED@cyberramp.net>
Source record: 93156

http://www.cyberramp.net/~rnewland

## 547. FAQ? www-Links? Antenna-resources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Daniel@full-moon.com
Message-ID: <5ohq6o$nd7$1@rzsun02.rrz.uni-hamburg.de>
Source record: 93007

Hello to you all,

I was just wondering whether there is a FAQ for
rec.radio.amateur.homebrew or an interesting www-link collection?

I am particular interested in building antennas on my own... Any good
links?

Thanks for your help,
Daniel.

## 548. Re: ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33ac75b6.0@cheese.pcug.org.au>
Source record: 93008

maf00861@maf.mobile.al.us (Chris Jones) wrote:

> However, pin 1 and 3 might be connected to the coil that provides the
> regenerative feedback to the tuning coil. But I'm just guessing.

The LM386 is an audio chip only. No pin of it would be connected to any coil. However, in some regen receiver designs Pin 3 is connected (through a coupling capacitor) to the collector/drain of the regenerative detector. This stage does operate at RF and there will be a connection from the collector to the feedback coil.

Your other comments are correct.

73,

Peter
--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

## 549. Re: www.hamradio-online.com: Photo of Yaesu's pager-sized HT available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Steve Sampson <xssampson@oklahoma.net>
Message-ID: <01bc7ec0$ed63e9e0$e2f157cc@chalice.site.net>
Source record: 93009
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

Barry O'Grady <barryoXX@fastlink.com.au> wrote

> What does "6/14 and 6/15" mean?

This is a tough one...

How about June 14th and June 15th? Yea, cool, that'll work...

Steve
"Decrypt God before he Decrypts you" - Vellmont

## 550. Re: calculating_coil_power

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5oie6p$95e$2@news3.microserve.net>
Source record: 93010

In article <MneTTAW00iV_07WJo0@andrew.cmu.edu>, mlyall+@andrew.cmu.edu says...
>
>
>Hello,
>
>Can someone please give a simple formula for determining the strength of
>the magenetic pull of a coil for a linear motor or solenoid?
>
>something which considers:
>
>the diam of coil
>the diam of the wire itself
>the number of turns
>the length of the wire
>
>thanks,
>
>M.D Lyall
>
I will see if I can find the formula as I once used it often.

A few tips
Length of wire, unimportant
diameter of wire, unimportant

Ampere turns very important
permeability of core and plunger very important

## 551. !!!PSYCHIC SAMPLES LINE/ TRY IT FREE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5oj2b1$9hm@newsfeed.ingress.net>
Source record: 93011

Curious about your future? Try a psychic and
see for yourself. Get free advice on life and
love on 1-800-688-1584. Adults over 18 only

Call now 1-800-688-1584

## 552. Sell: DEM Mode S downconverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33ac823d.0@lightning.ica.net>
Source record: 93012

For Sale:
I have an UNBUILT DownEast Microwaves 2400K downconverter kit
plus the SHF-LO local oscillator kit still in the original packaging
Kits include pc boards and all board mounted parts with instructions.

Trade for DEM 1296 transverter parts/ 1296 brick PA parts/
1296 RX pre-amp parts
OR sell for best offer.

Hugh Duff VA3TO
hduff@ica.net

# 553. !!!PSYCHIC PREDICTIONS/TRY IT FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5oj7nr$d0u@newsfeed.ingress.net>
Source record: 93013

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

## 554. WTB: Cellphone/accys

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <01bc7eca$3f2341a0$32faaec7@node2>
Source record: 93014
Cross-posted to:
alt.cellular,alt.cellular-phone-tech,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.swap

Hi,

I am looking for the following:

Connector for Motorola Ultra Classic (Attaches to back
of phone around antenna connector; 12 pin)

Connector for NEC P-300 (double row-plugs in bottom
of phone; has coax connnector integrated)

Novatel 8301 Cellular phone in working order

OKI 900 or AT&T 3730 Cellular phone in working
order.

Reply via E-Mail please.....

Thanks for reading,

--
David Little - Brunswick, GA
KD4NUE dalite01@sprynet.com

## 555. Yaesu 757 Spectrum Analzyer/Rig Control

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: dthimm@unix.newnorth.net
Message-ID: <33ad2fd1.560407@news.newnorth.net>
Source record: 93015

For those who have been patiently waiting,
The N9IPV Spectrum Analyzer for Yaesu FT757 style
Transceivers is ready for download at the following
URL:
www.newnorth.net\~dthimm

The intention is to release versions of this software in the future
to include most any rig with a computer interface..

Thank you.

Dan T.
(N9IPV)
73

# 556. FS: 6AZ8 NOS Phillips-USA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: rh3333@aol.com
Message-ID: <19970622154901.LAA05147@ladder01.news.aol.com>
Source record: 93016

6AZ8 TUBES FOR SALE-NOS PHILLIPS-Made in USA
1-9 each - $7.00 each
10-24 each - $6..00each
25-49 each - $5.00 each
50-100 each - $4.00 each
+$5 per order shipping +$4.75 per order if shipped COD
For Larger Quanity Discounts Please Email me for special quotes
Richard Hale THE TUBE MAN 904/386-2729 phone 904/386-2560 FAX]
RH3333@aol.com

HOW TO ORDER TUBES

If interested in ordering please include the price of the tubes and $5
per order
to cover
shipping and handling (in continental USA) to the following:

Richard Hale
902 Lothian Dr.
Tallahassee, FL 32312

904 386-2729
904 386-2560 FAX
RH3333@aol.com

1. Payment can be either money order-I'll ship the same day
OR
2. I can ship UPS COD which will cost of the tubes + $5 shipping and
handling + and
additional $4.75 for the UPS COD fee.

Thank you for your interest.

Richard Hale
THE TUBE MAN

# 557. !!!TROUBLE WITH LOVE??? TRY A PSYCHIC FOR FREE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5ojh5v$jco@newsfeed.ingress.net>
Source record: 93017

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

## 558. Re: repeater group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33AD3CFB.2D16@earthlink.net>
Source record: 93018

Ron, N7TAW wrote:
>
> I used to subscribe to the repeater discussion group, but when I changed
> ISP's I lost the address.
>
> Can someone please send me the "subscribe address" again.
>
> Thanks,
>
> Ron, N7TAW

If you are talking about the Rptr Owners remailer,
it is rptrown@clarc.org
BUT to join or leave the remailer,
its MAJORDOMO@clarc.org. and send a msg with the command

"subscribe rptrown"

in the msg body (without the quotes of course)

## 559. 6 mt amp wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: swm332@earthlink.net
Message-ID: <33AD75A1.1139@earthlink.net>
Source record: 93019

Looking for 6 meter amp single 3 500 4 400 etc no solid state

e mail swm332@earthlink.net

## 560. Yaesu 757 Spectrum Analzyer/Rig Control URL CORRECTION

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: dthimm@newnorth.net
Message-ID: <33ad5d5a.12219169@news.newnorth.net>
Source record: 93020

For those who have been patiently waiting,
The N9IPV Spectrum Analyzer for Yaesu FT757 style
Transceivers is ready for download at the following
URL:
http://www.newnorth.net/~dthimm

The intention is to release versions of this software in the future
to include most any rig with a computer interface..

Thank you.

Dan T.
(N9IPV)
73

## 561. Re: Where to find air core capacitors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2206970937050001@news.vcnet.com>
Source record: 93021

In article <33A7EF7F.37C28823@FC20.flashcomm.com>, Adam Harriman
<adam@FC20.flashcomm.com> wrote:

> I am looking for some variable air core capacitors like the ones used in
> antenna tuners. Can anyone tell me who makes these componets and were I
> can get them? ...
...
Variable inductors up to 40 Amperes; fixed inductors; air-dielectric
variable capacitors; right-angle drives for vertically mounting
vacuum-dielectric variable capacitors, et cetera: Multronics-Cardwell,
516-957-7200, 80 East Montauk Highway, Lindenhurst, Long Island, N.Y.
11757.

Oren Elliott Products, Inc. Variable capacitors. They also make roller
inductors, however, the coil form material is RF-lossy Delrin, so such
inductors should probably be avoided in applications where the power level
exceeds two hundred watts.
- P.O. Box 838, Edgerton OH, 43517. 419-298-2306

--
--Rich-- ---805-386-3734, ag6k

# 562. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2206970953580001@news.vcnet.com>
Source record: 93022

In article <33AAA930.248A@crpl.cedar-rapids.lib.ia.us>,
sabinw@crpl.cedar-rapids.lib.ia.us wrote:

> Jim wrote:
>
> > I guess it's something about the cachet of being published in QST,
> > along with the outdated concept that "Amateur" radio means you can't
> > have ANY financial interest in it, that keeps the Newington gang
> > offering such pitiful pay and such draconian terms for publishable
> > work.
>
> For many years, 1962 to 1983, I had quite a few articles published in
> QST and didn't get a dime for them. ... ...

The most money I made in one year writing QST articles was c.$1200 (1990).
Was it worth it? At one point I was receiving 25+ letters per day and over
a half dozen telephone calls per day, some of which had to be returned. I
was a busy boy. Counting return postage and returned calls, I probably
broke even. However, the 15 Directors are reportedly collecting up to 17.5
kilobucks EACH in 'shakin' hands money'.

>... It didn't bother me a bit. Reason: I
> was doing what I wanted to do ...snip...

Amen, Bill.

RE: "Draconian terms": To me, this is the rub.
• Example One: The first article I submitted to the powers-that-be at QST was about circuit improvements for the TL-922". (1988). The article was rejected like a hot potato. Since Trio/Kenwood was currently advertising the TL-922 in QST, I put 2 and 2 together and rewrote the article. I removed the parts about lethargic T/R switching, filament-inrush overcurrent, mains-inrush overcurrent, filament over-voltage and improving input SWR---which left only the part about intermittent parasitic oscillations at 130MHz. I expanded on the parasitics problem and removed the identity of the subject amplifier. The article was accepted and published in the October 1988 issue. The photograph of the parasitic-arced TL-922 bandswitch subsequently appeared in "Parasitics Revisited" (9/90 - 10/90). IMO, most TL-922 owners would have liked to have had the opportunity to read about the other problems in the TL-922, but they apparently could not because some rich people in Japan didn't want them to.
Note: the article on circuit improvements for the 922 is currently available on my Web site at:
http://www.vcnet.com/measures

• Example Two: When I signed the contract to write Chapter 13 for the 1995 ARRL Handbook, there was a gentlemen's agreement that the copy-editor was going to be Bob Schetgen. However, about a month before the due date on the contract, the telephone rang. It was Newington. The voice said: Rich: Stop writing. The copy-editor mysteriously turned out to be Dick Erhorn and, crouching in the bushes, Mr. Rauch who wished not to be identified.

From my experiences, there are at least three Newingtonian bureaucrats who are somewhat less than gentlemen. Paul Pagel is not one of them. Unfortunately, Paul is not at the helm--nor are the 15 "Directors". ..... Recommended reading: Orwell's *Animal Farm*.
-Rich---

--
--Rich-- ---805-386-3734, ag6k

## 563. Beginners to homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5ojtfj$a2$1@pepsi.tninet.se>
Source record: 93023

Hi all,

I have today added more information for the absolute
beginner, to my homepage. This is as a result of some
of the E-mail I have received after my postings to
this newsgroup.

If you have any suggestions or additional information
you would like to see then send me that info to me
at:

lythall@ebox.tninet.se

or klick on the 'E.mail me' at the foot of my homepage.
Constructive suggestions are always welcome.

best 73s de Harry (SM0VPO)

http://user.tninet.se/~acz732k/

## 564. transverter 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Dimitris Koystravas <sv2dsu@med.auth.gr>
Message-ID: <33AD88F2.C9BA8266@med.auth.gr>
Source record: 93024

hello out there...from greece
i wnat to ask if there is someone how have any schematic to make a
transverter for the 2m band?

## 565. WTB: Homebrew CW only transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: n3bj@aol.com
Message-ID: <19970622204901.QAA17513@ladder02.news.aol.com>
Source record: 93025

Anyone have any homebrew CW only transmitters, VFO preferred, laying around unused ?? Would like to put them on the air.

Appreciate any responses.

Alan, N3BJ

## 566. FS: Drake PS for L4B and L7 linears <<<

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970622210300.RAA21945@ladder01.news.aol.com>
Source record: 93026

Have an upgraded power supply Drake model L4PS that will work with the Drake L4B and L7 linears. Capacitors were replaced with units having 10% more capacity for improved regulation. Diodes were upgraded from 600 PIV 1 A to 1000 PIV 3A for improved reserve capacity. R11 upgraded from 7 watt to 20 watt rating. Bleeder resistors replaced. Weighs in at 43 lbs without (two) shipping containers. Shipping and insurance alone cost close to $50. Shipped to your door for $200.

Evan
K9SQG@AOL.com

## 567. FT-901 as transverter driver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Mackay <smackay@epix.net>
Message-ID: <33AD933E.3EA8@epix.net>
Source record: 93027
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I would like to use my "901 as a tuneable IF for my VHF/UHF station.
Plan to use Down East Microwave modules. Does any one have experience
using the '901 this way? Also, does anyone have connection info for the
'901-FTV-xxx transverter interface produced by YAESU? I want to know
how they used the accessory plug and the switching.
73
Scott
--
G. Scott Mackay W7GSM
1973 240Z

## 568. Re: FAQ? www-Links? Antenna-resources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33AD332E.258F@ix.netcom.com>
Source record: 93028

Daniel Dobert wrote:
>
> Hello to you all,
>
> I was just wondering whether there is a FAQ for
> rec.radio.amateur.homebrew or an interesting www-link collection?
>
> I am particular interested in building antennas on my own... Any good
> links?
>
> Thanks for your help,
> Daniel.
------
Yo Daniel
Lots of antenna projects and stuff on Ham Pages -- go to Master Index
below click on antenna projects.

Good Browsing
73
Rod in San Diego
--
AC6V's Guide To DX and Ham Radio
1277 Links and 60 Pages
Home Page http://pw2.netcom.com/~ac6v/index.html
Master Index http://pw2.netcom.com/~ac6v/pageas.html

# 569. !!! SAMPLEOUR PSYCHICS TOLL FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: may@smartec.com
Message-ID: <5ok92p$a4k@newsfeed.ingress.net>
Source record: 93029

```
Dial 1-800-683-3733 and sample amazing psychic advice -
it's free. You will be startled and amazed!
Adults over 18 only

Dial now 1-800-683-3733
```

## 570. FS: ARC 5 variable capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: labenz@ix.netcom.com
Message-ID: <5ojnd4$7is@dfw-ixnews6.ix.netcom.com>
Source record: 93030

I have ARC 5 variable capacitors for sale. They are very good for barefoot and QRP tuners...I wouldn't use them over 250W output, but for the barefoot op who wants to build a nice little tuner they are very nice, and you will have a tuner better then the MFJ stuff!!!.

Reasonable prices...

73 Dave

## 571. Yaesu Freq Display YC-601

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: d.NOrdquest@juno.COM
Message-ID: <19970622.142929.4919.0.d.nordquest@juno.com>
Source record: 93031

A friend of mine just purchased the above unit from an estate & it is not reading the freq from his FT101. The front end may well be damaged or, perhaps, it is not be set up properly. We have checked part of the circuit and it looks ok. Anyway, he would be grateful for a copy of the manual or schematic (for which he would be happy to reimburse the sender) or for advice.
He can be reached at

woodbridge@juno.com

His name is Woody and his call is WA3ANA.

Thanks!
Dave KE9ED

## 572. Headset intercoms with noise cancelling mic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Craig Blome <craig.blome@a-m-d.c-o-m.removethedashes>
Message-ID: <33ADB676.366A@a-m-d.c-o-m.removethedashes>
Source record: 93032
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Forgive the newbie question, but...I belong to a local sports car club that puts on autocross events. The starter communicates with the timing van right now using a pair of Radio Shack 49MHz intercoms, which aren't ideal for this task as they don't seem to have noise cancelling microphones, and so the starter's voice is often drowned out by very loud engines. I'd like to find something with a better mic, but can't justify the expense for a David Clark pit headset or the like. Is there anything out there that doesn't require a license? Might the cellphone headsets now available work with a CB, or maybe one of the new FRS radios?

TIA,
Craig Blome
--
---

_______
\ ___ | Craig A. Blome email: craig.blome@amd.com
/| | | DSP Design Engineer voice: (512)602-9027
| |___| | Communications Products Division FAX: (512)602-0301
|____/ \| Vocoder Products

Advanced Micro Devices
5900 E. Ben White Blvd.
Mail Stop 622
Austin, TX 78741-7599

---

## 573. FS: Porcelain Coil Forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: labenz@ix.netcom.com
Message-ID: <5ojng6$7kg@dfw-ixnews6.ix.netcom.com>
Source record: 93033

I have a few porcelain coil forms...some have a Johnson Decal on
them..Reasonable with shipping from CT

73 Dave

## 574. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: GVZY06C@prodigy.com
Message-ID: <5okc8k$4vpm@newssvr02-int.news.prodigy.com>
Source record: 93034

You can contack Bill Owens of 73 Magazine, available at bookstores.
good luck

## 575. Re: 15 yr old wants to design circuts-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: GVZY06C@prodigy.com
Message-ID: <5okc6j$1n0q@newssvr02-int.news.prodigy.com>
Source record: 93035

You can contack Bill Owens of 73 Magazine, available at bookstores.
good luck

## 576. Regenerative Receiver in Electronics Now

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Kin <kng@pacbell.net>
Message-ID: <01bc7ed0$41789490$8701aace@kinsnt>
Source record: 93036

Hi All,

I just read the Electronics Now, July 97 Q&A column about a Regenerative Receiver and am very interested in building one. As I was trying to gather the parts and trying to understand how it works, I found 2 problems.

1. The 2N3094 is drawn an a PNP, but its a NPN. Which one is right?

2. The coil is a 36 TURNS, 4" DIA. It didn't mention the guage of the wire. Does anybody know what the assumed guage is? And also what's the coil's inductance? I want to know the value so I can enter into my Electronics Workbench to see how it works.

Thanks for any help.

Kin Ng

# 577. Re: www.hamradio-online.com: Photo of Yaesu's pager-sized HT available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-22 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5ojrqq$2cg$1@news.mhv.net>
Source record: 93037
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

In article <33ac0a2c.8653671@news.fastlink.com.au>, barryoXX@fastlink.com.au wrote:
>vbook@vbook-nospam.com (Ed Mitchell) wrote:
>
>:Ham Radio Online is a free online web "magazine" about ham radio. No ads. Its
>:run by volunteers. We have nothing to sell. Come enjoy our web site at
>:http://hamradio-online.com
>:
>:------------------------
>:Ed (KF7VY) and Kim (N7VPL) Mitchell
>:SEND email replies to vbook@vbook.com
>:Visit Ham Radio Online, it's free! at
>:http://www.hamradio-online.com
>
>There are a great many errors in the information provided. It's obviously
>written by people who have an inflated idea of their knowledge.

Want to elaborate on that? Just what are you talking about? The site is
just fine.

Tom

E-mail me at the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio site: http://www1.mhv.net/~trandall/welcome.html
Saturn: 97SLm Si/Gr AC AU+ SW NG ML

Opinions herein are mine and may not be that of MHV.NET!

# 578. Re: Scanner modification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: "Dan P. Dillon" <ddillon@engr.csulb.edu>
Message-ID: <33AEF5DC.BE5C93A@engr.csulb.edu>
Source record: 92907
Body handling: HTML body converted to readable text

Mark Satterfield wrote:

> I own a radio shack pro-34 scanner, which is FM reception only and I
> am
> looking to add AM receive capability to it. Does any one have a
> suggestion on how?
>
> Markos@webtv.net.

That particular model of Radio Shack scanner IS am capable in the aircraft band, however modifying that to received AM elsewhere in the scanner's receive bandwidth would be quite a task. The best suggestion that I could come up with for you is to tap the IF frequency from the scanner internally with a piece of coax. (You should be able to find a test point with the IF output on a board somewhere in there. THere are two layers of boards in that particular model. Disassembly is fairly straightforward, but you can find details on it in some of the scanner books.) Once you have soldered coax to the IF section, you need to run that coax out of the scanner and put some kind of convenient connector on it .. i.e. BNC.

This output can be sent to your HF rig, tuned for the IF frequency of the scanner. 455KHz is my assumption. Now, you can receive in any mode that the HF rig is capable of, and you can do it on any frequency that the scanner is capable of. Additionally, you will have all of the fancy dsp, and filtering of the hf rig.

I have not done what I describe, so proceed at your own risk. You will have to do your own research/studies/whatever to make sure that this will both work and (more importantly) not do harm to your equipment. I hope that my suggestions are found to be helpful. Maybe someone else has experience with this kind of thing. What I have described is something that I fully intend to do with my Pro 2006 with the os4566 board installed. I think that this kind of mod is better suited for a base model scanner.

One last note: that pro34 can be cellular capable with a simple modification. THat really doesn't add any value to the scanner because cellular is pretty un-interesting except during the occasional LA riot, and when you want to show your non-radio type friends something 'gee whiz'.

Dan
KD6FPX
http://www.engr.csulb.edu~ddillon

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of thing. What I have described is something
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during the occasional

LA riot, and when you want to show your non-radio
type friends

something 'gee whiz'.

Dan

KD6FPX

http://www.engr.csulb.edu~ddillon

# 579. Re: App: 6CD6GA sweep tubes (DuKane amps_

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: TMI Engineering <"no_spam tmi"@idt.net>
Message-ID: <33AF0CE9.67C6@idt.net>
Source record: 92908
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

Rick Francis wrote:
>
> > Hey Rick
> > Can't do newsgroups at wk but am doing laundry at a friend's place;
> > I've got a pair of DuKanes that use a quad of 8417's and nuvistor
> > pre-drivers and want to use the iron off 'em to make an EL509 triode
> > connected amp-ciao- rbtr@snds.com
>
> There's a store in St. Louis, on Big Bend, called something like
> Alpha-Tech. The store owner has a pair of these same 8417 DuKanes and
> was talking about a rebuild of some sort. I thought I had the schematic
> for him but no luck. Send him one and make a friend.
>
> Rick

Check that 8417 before you get rid of it. It's not that bad.

## 580. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Jim Strohm <jstrohm@texas.net>
Message-ID: <33AEF27A.7F5E@texas.net>
Source record: 92909

K1BQT wrote:
>
> In your post you said:
>
> "Which explains a lot, given that the going rate in the industry is about
> $150 a published page."
>
> Which ham magazine (or industrial magazine such as RF Design) are you
> refering to, Jim?

Actually, Rick, I was quoting another poster (I believe it was Steve Ford).
Since I can't feed my wife and make my mortgage payment on $65/page, paid on
publication, I have to write for a more generous publisher. I haven't recently researched the field of writing for amateur radio in about a decade
because I've lacked the most significant resource -- time -- to adequately
research, tinker, innovate, evaluate, and write. As Rich Measures noted,
there's a lot more to writing an article than just writing the article.

My publisher pays me by the week -- as it turns out, my per-page rate is actually lower than for QST. Except it's for LOTS of pages.

atkes@imap1.asu.edu (Kevin w9cf@ptolemy.la.asu.edu) wrote:
>
> I guess it depends on where you publish. For example, to publish in the
> IEEE Transactions on Antennas and Propagation, you are "requested" to
> pay them $110 per page. If your article runs over 8 pages there is a
> mandatory "excessive page length" charge of $200 per page. Many
> scientific journals also expect to be paid page charges from the
> author's institution.

I don't know whether IEEE counts as a "vanity" press -- I get a tremendous
kick out of how IEEE makes you pay a dollar every time you say their name.
You pay membership dues, you pay for pubs and standards, you pay to publish.
In return, you are BUYING prestige. You are buying your career. From what I've
seen, each article you pay IEEE to publish -- I mean, each article accepted for

publication -- is worth about $10K in raises, bonuses, and stock
options.

Maybe it all evens out.

Here's what I'd really like to see.

I'd like to see everybody in amateur radio publishing ditch their
colossal
personal, organizational, and corporate egos, and do some positive
things both
for the hobby and for the books and magazines we publish. A long time
ago,
we hams used to invent practically every electronic thing that ever came
off
an American assembly line. We used to have magazines that transferred
that
technology into the hands of fellow hams. Patents, licensing, and
intellectual
property issues aside, we need to be doing that again.

Think we can?

I invented something this morning. Did you?

If you did, can you freely give it to amateur radio? That's the mindset
we
all need to have.

## 581. DEM 2304 downconverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33ae6da8.0@lightning.ica.net>
Source record: 92910

I have a UNBUILT DownEast Microwaves 2400K downconverter kit and the
SHF-LO local oscillator kit for sale or trade.
Still in original packaging with pc boards, all board mounted
components and documentation.

The new value of these 2 kits is $155
I will trade for 1296 parts (ie..for pre-amps, PA bricks ect..)
or sell for $US 80.

Hugh Duff VA3TO
hduff@ica.net

# 582. Re: ELMERS NEEDED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Houstin Smith <hsmith@sky.net>
Message-ID: <33AF50C0.5F68@sky.net>
Source record: 92911

Chris Jones wrote:
>
> KF4HTL (Trapper27@juno.com) wrote:
> :
> : 2) On the schematic pins 1 & 3 of the LM386 are
> : jumped together and at that connection is a small circle similar to
> : the +12V connection pictured elsewhere on the Schematic! Only
> : difference is that the circle stemming from pins 1 and 3 doesn't have
> : "+12V" printed next to it, that the other circle does. In fact it
> : doesn't have anything except that little empty circle! I assumed it
> : was the counter part of my source voltage.... so I put a jumper
> : between pins 1 & 3 and the negative terminal of the battery.
> :
> Usually pin 3 of the LM386 is connected to the wiper of a 10K
> variable resister, with one end of the resister grounded and the
> other recieving the audio input. Pin 2 is grounded in this
> configuration.
> Pin 1 sets the gain and is usually left open, but connecting
> a 10 microfarad capacitor between it and pin 8 increases gain by
> a factor of 200.
> However, pin 1 and 3 might be connected to the coil that provides the
> regenerative feedback to the tuning coil. But I'm just guessing.
> You'll know if you fried the chip because it gets hot and smells
> like burning plastic. It was made to source or sink a lot of
> current and will withstand a fair amount of abuse.
I pulled my copy of W1FB Design Notebook off the shelf and took a look
at
the schematic. I think I see what the problem is. Compare the audio
amplifier section of the regen receiver with the audio amp schematics
on page 61, and it seems to me that the part marked LM386 in the
receiver
schematic should actually be an LM380. Hope this helps.

73's Houstin KA0HMQ

## 583. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2306972105220001@news.vcnet.com>
Source record: 92912

In article <33AA8019.447C@star.enet.dec.com>, pilant@star.enet.dec.com wrote:

> ...snip...
> Or...
>
> How to provide an opportunity, and encourage others to share their
> experiences and talents. And at the same time, providing recognition
> of their efforts.
>
> - Mark N1VQW

- Here's some possibilities on how it might be accomplished, Mark:
1. Hire a couple of Technical Editors who are about 1/4 as competent as George Grammer.
2. In a *QST* Editorial, essentially state that HENCEFORTH: *QST* could not care less whether folks advertise in *QST* or elsewhere. (let 'em advertise in Wayne 'Cold Fusion' Green's *73*, or advertise along with the Isotron, Max-coN, and semi-combustable schlock tuner ads in other ham rags). ... and state that, HENCEFORTH any and all attempts by an advertiser or their agents to covertly or overtly influence *QST* magazine's content WILL be reported in the magazine.
3. Segregate advertising from articles. (like *National Geographic*)
4. Raise the subscription price to whatever it takes to stop *QST* from morphing into a ham equipment catalog. .
5. Make certain that a product works reasonably before accepting advertising for it. For example #1-: a "3kW" antenna tuner whose Delrin coil-form ignites at 1200w, needs to be fixed by switching to a glass-epoxy (G11), or high-quality ceramic, coil-form. .For example #2-: a 3CX800A7 amplifier that supplies the tube's heaters with 14.8v (see Eimac specs.) needs fixing. For example #3. A 3-500Z amplifier that has a filament inrush current of 48a, needs a step-start circuit.
6. The Editor should acknowledge that a monthly technical correspondence column is too slow for resolving technical issues. USENET Newsgroups seem to be ideal.. No organization or person can censor anyone on a Newsgroup. Sure, cyberschmuck/flamers are bound to show up because they seem to be magnetically-attracted to such forums. However, the good news is that each subscriber to a NG has the choice of killfiling those who flame (blather inflammatorily to hopefully receive attention).
7. Pay authors 3% percent per-page of the per-page ad rate. (let us not forget that it IS the articles which sell a magazine, NOT the advertisements)
8. Recombine *QEX* and *QST*.
9 Require that authors explain things so that the average guy can understand what's happening.
10. Have an annual 'Swimsuit Issue' like *Sports Illustrated*. . . . .

. not.

--
--Rich-- ---805-386-3734, ag6k

## 584. Re: Headset intercoms with noise cancelling mic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: John Nelson <johnn@flatline.com>
Message-ID: <33AF6382.1016FB69@flatline.com>
Source record: 92913
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Craig Blome wrote:

> Forgive the newbie question, but...I belong to a local sports car club
>
> that puts on autocross events. The starter communicates with the
> timing
> van right now using a pair of Radio Shack 49MHz intercoms, which
> aren't
> ideal for this task as they don't seem to have noise cancelling
> microphones, and so the starter's voice is often drowned out by very
> loud engines. I'd like to find something with a better mic, but can't
>
> justify the expense for a David Clark pit headset or the like. Is
> there

David Clark is top-shelf professional gear, and probably worth the money, but the ARE spendy indeed.
You might look into using a less expensive aviation-type headset. The Flightcom line is very reasonably priced (less than $90 for their entry level model) if memory serves. Virtually all such gear aimed at general aviation markets features noise cancelling mikes.

## 585. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5oml8v$r65@lace.colorado.edu>
Source record: 92914

QST also has the extremely irritating position of being entirely mum about antenna performances. The ads aren't allowed to even MENTION gain, and the "technical" product reviews are technically vacuous. For the page of IMD, noise floor, composite noise testing, etc. etc. that they give amps, radios, and other accesories, they give height, weight, and SWR for antennas. I wrote them a letter, "If you say the antenna's the thing, then why don't you give more info on them."

Reply - "The ARRL lab is not equipped to handle antenna gain measurements." Notice that in the current issue, there is a review of a whole bunch of HTs. With their antennas disconnected. Any mention of their performance?

"The antenna's the thing!" They could even stoop to MODEL the performance of various antennas, and state what the calculated performance is, but instead there's just silence.

Does anyone out there have an idea how this might be changed?

Bruce
N6URH

## 586. Re: 2m/70cm homebrew duplexor wanted?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM>
Message-ID: <5om601$5ga$2@mhafn.production.compuserve.com>
Source record: 92915

there was a QST article a few years back, I built it with OK results, not great
you really need a spectrum analyser/tracking generator to do it right, getting
the passband loss and impedance match correct, if you don't have these then cheaper to buy
the premade unit
73 steve kz1x/4
--
73 de Steve
KZ1X/4 Chapel Hill, NC

## 587. Re: advice on repairing traces in rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33AF0868.3E22@qsl.net>
Source record: 92916

First: Never, ever use solder to provide the connection.
Solder is only to merge two metals.

It used to be my job to repair commercially viable
multi-layer PCB's. Each task requires its own solution.

But basically, always bridge with a conductive trace material.
There are flat, pre-cut trace repair kits available. But
90 percent of the time just use a pretinned wire, hold in
place and carefully solder. For RF Circuits, obtain good
solder whetting, and no more. Cover joint with 5 minute
epoxy and it will last forever....

But, never bridge a gap, any gap, with solder alone.

Good Luck!
-Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

# 588. EASY MONEY FOR ALL!!!!!!!!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: nairb357@aol.com
Message-ID: <19970623010100.VAA01740@ladder02.news.aol.com>
Source record: 93038

THIS OPORTUNITY IS 100% LEGAL AND CAN BRING YOU SOME SERIOUS MONEY IN THE NEXT COUPLE OF MONTHS. PLEASE READ THIS TO THE END, YOU WILL BE GLAD YOU DID. THIS PROGRAM REALLY WORKS!!!!!!

I am sure you have seen these postings all over the internet:"Make 50,000 from a small investment of $5.00. And I am sure that, like me, you have from time to time considered doing this well you can believe that this program works and it is 100% legal.

If you are worried about the legal aspects of it all you can check it out with the U.S. Post Office (1-800-725-2161) and they will confirm that it is indeed leagal!!

Let me tell you how this works and most importantly, why it works....also make sure you print a copy of this article now, so you can get the information off of it as you need it. The process is very simple and consists of 3 easy steps.

STEP 1: Get 5 pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." Now get 5 $1.00 bills and place one inside each of the 5 pieces of paper so the bill wont be seen through the envelop to prevent thievery. Next place one paper in each of the 5 envelops, each stating the above phrase and a $1.00 bill. What you are doing is creating a service by this. THIS IS PERFECTLY LEGAL!!

Mail the 5 envelops to the following addresses:

#1. Suzy Sanders
120 North 800 East, Bsmt.
Hyrum, Utah 84319

#2. KM King
P.O. Box 773
Pflugerville, TX 78691-0773

#3. M.J. Sarginson
3913 Herrick St.
Flint, MI 48532

#4. M. Voyes
1327 Crosby St.
Rockford, IL 61107

#5. B Lent
7222 West Marine Drive
Milwaukee, WI 53223

STEP 2. Now take the #`1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, ect...) and add your name as #5 on the list.

STEP 3. Change anything you need to, but keep this article as close to the orignal as possible. Now, post your amended aritcle to at least 200 newsgroups. (I think there are close to 18,000 groups) All you need is 200, but remember, the more you post , the more you make.

Don't know how to post in the newsgroups? Well do exactly the following:
FOR INTESCAPE USERS,

1) Click on any news group, like normal. Then click on to news, which is in the top left corner of the noewsgroup page. This will bring up a message box.

2) Fill in the subject with a flashy ytitle, like the one that i used, something to catch the eye!!

3) Now go to the message part of the box and retype this letter exactly as it is here, with the exception of your few changes. (remember to add your name to the #5 and move the rest up).

4) When you are done typing the whole letter, click on file above the send button. Then save AS. DO NOT SEND YOUR ARTICLE UNTIL YOU SAVE IT. ( so you dont have to type it 200 times)

5) Now you have saved the letter, go ahead and send your first copy! (click the send button in the top left corner)

6) This is where you post all 200! OK, go to any newsgroup article and click the to the news button again. Type in your flashy subject in the subject box, then go to the message and place your cursor here. Now click on ATTACHMENT which is right below the SUBJECT. Click on Attach File then find your letter wherever you saved it. Click once on your file then click OPEN then click OK. If you did this right, you should see your file name in the ATTACHMENT BOX and it will be shadded.

NOW POST AWAY!!!!!!!!!!!!!!!

IF YOU ARE USING INTERNET EXPLORER:
Its just as easy, holding down the left mouse button, highlight this entire article, the press the CTRL key and C key at the same time to copy this article.Then print the article for your records to have the names of those you will be sending $1.00 to.

NEXT
Go to the newsgroup and press post an article, type in your flashey subject and click the large window below Press CTRL and V and the article will appear in the message window.***BE SURE TO MAKE YOUR ADDRESS CHANGES TO THE 5 NAMES.Now re-highlight the article and re-copy it so you have the changes , then all you have to do for each newsgroup is CTRL and V and press POST. It's that easy.

THAT"S IT!! All you have to do is jump to differant newsgroups and post away, after you get the hang of it it takes about 30 seconds for each newsgroup!

***REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200**

That's it!! You will start recieving money from around the world within a few days! You may eventually want to rent a P.O. Box due to the large amount of mail you will recieve.

NOW THE WHY PART!!!!!!!!!!

Out of 200 postings, say i recieve only 5 replies ( a very low example). So the i made $5.00 with my name an #5 on the letter. Now, each of the 5 persons who sent me $1.00 make the minimum 200 postings, each with my name at #4 and only 5 persons respond to each of the original 5, that is another $25.00 foe me, now those 25 each make 200 postings with my name at #3 and only 5 replies each, i will bring in an additional $125.00!! Now those 125 persons turn around and post the minimum 200 with my name at #2 and recieve only 5 replies each, i will make an additional $626.00!!! OK, now is the fun part, each of those 625 persons post the 200 minimum with my at #1 and they recieve only 5 replies, that just made me $3,125.00!! With an original investment of only $5.00! AMAZING!!!!!! And as i said 5 reponses is actually very low. Average is probably 20 to 30! So lets put those figures at just 15 responses per person.

Here is what it looks like:
at #5 $15.00

at #4 $225.00

at #3 $3,375.00

at #2 $50,625.00

at #1 $759,375.00

when your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $5.00 to names on the list,putting your name at #5 again. And start posting again. The thing to remember is, do you realize that thousands of people all over the world are joining the internet and reading articles like this everyday, just like you are now!! So can you afford $5.00 and see if it really works?? I think so... People have said what if the plan is played out and no one sends you money? So what! What are the chances of that happening when there are tons of new honest people who are joining the internet and newsgroups everyday and are willing to give it a try. Estimates are at 20,000 to 50,000 new users everyday with thousands of those joining the actual internet. Remember, play FAIR and HONEST and this will work. You just have to be honest. MAke sure you print this aritcle out now, also try to keep a list of everyone who sends you and always make sure that everyone is playing fairly.

Remember, you don't need to cheat the basic idea to make money!! The more you post the more you win!!!!

GOOD LUCK to all and please play fairly and reap huge rewards from this, which is tons of cash.

This is the fairest way i have seen to share the wealth of the world without costing yourself anything but your time!! You may want to buy mailing and e-mail lists for future dollars.

Please remember to declare extra income. Thanks once again and GOOD LUCK!!!!!!!!!!

## 589. ! PSYCHIC PREDICTIONS TRY-IT-FREE! IT'S FREE!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: may@ingress.com
Message-ID: <5oklo1$9sm@newsfeed.ingress.net>
Source record: 93039

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

## 590. FS: RF Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: brahn@ibm.net
Message-ID: <33add73d.0@news1.ibm.net>
Source record: 93040

I have a quantity of RF parts in excess of my personal needs.
Some items are available in large (>50) quantities.

Here's what I have and asking price:

ITEM PRICE
(each)

Johanson 8054 1.5 to 20 pf Capacitors $1.50
(Piston Style)

Piston Style 0.7 to 15 pf Capacitors $1.25

MCL TFM-150 Mixers $5.50
(LO/RF: 10-2000MHz, IF: DC-1000MHz, +10dBm LO)

MCL LPS-109 Power Dividers $2.50
(2 way, 0 degree, 10-500MHz)

MCL MAT-3 3dB Attenuators $1.25
(DC-1500MHz)

MCL MAT-9 9dB Attenuators $1.25
(DC-1500MHz)

AVANTEK VTO-8090 0.9 to 1.6 GHz Voltage $10.00
Controlled Oscillator, 50 ohm, +13dBm output,
TO-8 Case, with mounting hardware.

Cablewave Systems FXA 12-50 NM N Male $15.00
Coax Connector for 1/2" Hard Line
New, In the box!

Pictures and specifications (where available) on the above items may be found on my web page at:
http://members.tripod.com/~Sky_Writer

All parts are unused. Shipping is extra.

73 -- Bruce, WB9ANQ

## 591. Homebrew baluns... Help for a ZL special antenna.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: kiprc@tenet.edu
Message-ID: <33add9a1.1801187@news.swbell.net>
Source record: 93041

I have two zl special antennas and would like to feed them with coax.

Is there a web page or can someone tell me how to make a balun to go
from 300 ohm twinlead feed to 50ohm coax.

Reason. I have a coax switch and would like to be able to utilize it
to change directions of the zl special antennas.
BTW I am operating on 10 meters.

Please respond via email.

kip
kiprc@tenet.edu

## 592. FS: Microwave Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: rnelson@se-iowa.net
Message-ID: <33adf8ed.948280@news.lisco.com>
Source record: 93042

I have for sale 4 Microwave Associates 11 GHz transceivers.

Perfect for a super high speed data link or ATV video link.

They were taken out of service approx. 3 years ago in working condition.

It should not be too hard to move them to the 10 GHz hamband.
I do have service manuals.

The equipment is rackmounted with built-in power supplies. From what I can tell the transmitters are 1 watt output. Each rackmounted unit contains a receiver and transmitter which a coupled together via wave-guide. There is a notch filter in each receiver waveguide to filter out the transmitter.

These units were originally used for video transmission and have a 6.2 and 6.8 MHz subcarrier modulator/demodulator assembles. There is a video input BNC and video output BNC on each receiver and transmitter.

I am wanting to sell all of the units together since some of the current operating freqs. are paired.

Best cash offer takes all!!
Please respond via e-mail and not this newsgroup.

Randy.

## 593. ! FREE PSYCHIC READINGS! 1-800-677-8048 FREE!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: may@smarttec.net
Message-ID: <5ol0ig$g0n@newsfeed.ingress.net>
Source record: 93043

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

## 594. Regenerative Receiver in Electronics Now

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Kin <kng@pacbell.net>
Message-ID: <01bc7f94$d30be230$8601aace@kinsnt>
Source record: 93044

The Q&A column of July issue of Electronics Now has a Regenerative Receiver schematic and I have a few questions regarding the circuit and am wondering if anybody can help me.

1. There is a coil described as ' 36 TURNS, 4" DIA.'. Does anybody know what is the assume gauge of the wire? How do you calculate the inductance? I want the inductance so I can enter it into my Electronics Workbench to test it out.

2. The 2N3904 is an NPN transistor but its drawn as an PNP. Its it wrong what the part number is wrong?

Thanks for any help.

Kin Ng

## 595. advice on repairing traces in rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: akrol29b@aol.com
Message-ID: <19970623062901.CAA23849@ladder01.news.aol.com>
Source record: 93045

I have a 2 meter amp whose pa transistor failed and took out a small area
of trace where dc is applied and output goes to the relay.
what is best to bridge this area? solder bridges add pf's I am told and
the output caps are fixed
I cut the gold plated wings off the mrf247,would those be any good?

## 596. ! PROVEN PSYCHICS! TRY-IT-FREE!! 1-800-677-8063

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: may@smarttec.net
Message-ID: <5olf3i$n0e@newsfeed.ingress.net>
Source record: 93046

The Live Psychic Calling Center invites you to enjoy
a complete fifteen minute, live psychic reading with
no credit card charges. Try it Free on
1-800-677-8063. Adults over 18 only.

Dial now 1-800-677-8063

# 597. IC MC3359P

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: phoa@astoria.pc.my
Message-ID: <259@astoria.pc.my>
Source record: 93047

Trying to purchase the OSC/Mixer IC MC3359P.
Not avaliable from Dan Small Parts.

Can anyone help, furnished me a supplier for the said IC.

Thanks
Phoa

# 598. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5oltnj$521$85@news.internetmci.com>
Source record: 93048

Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $1.00
6AH6 $0.50
6AL5 $0.50
6AN8A $1.00
6AU6A $0.50
6CL6 $1.00
6X4 $1.00
12AT7 $2.00
12AU7A $3.00
12AX7A $3.00
5651A $0.75
5963/12AU7A $3.00
6080 $3.00
6201/12AT7 $2.00
8068 $14.00
8136 $0.75
8532W $1.00

Shipping in the USA: 1 - 6 tubes $4.00, 6 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
---
TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIOCOMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!

## 599. Boonton RF millivolt meter(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <33AE3F34.683@atl.org>
Source record: 93049
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna

I picked up some surplus Boonton 92A RF millivoltmeters today.
No accesories or manual.
1, 3, 10, 30, 100, 300, 1000, 3000 mv ranges.
Swap for ????
I like older tube type homebrew gear (dead or alive
or in a box rattling around) but try anything.

Use for QRP SWR or wattmeter project or...

-bob
wb4mnf

# 600. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <olDFkLAhQlrzEw7a@two-way.demon.co.uk>
Source record: 93050

Re Rick's amp' article.
I only know the general outline of the politics surrounding this episode but in my experience, just maybe it's like trying to convince a qualified med student that alternative medicine produces better results, he's going to stick up for what he's been taught for the past five years, or trying to tell an astronomer that UFO's really exist even though he's never seen one.
One just has to be receptive to fresh ideas, and if you dissagree then you're free to carry out your own research to find out one way or the other.
Alternatively, it really could be that the amp manufacturers had ploughed all there hard earned bucks into 'their' design and that they were going to stamp on anyone that got in the way of their profit.
Personally I know which way I think.

Regarding QST articles.

I put forward a suggestion a few years back about doing a back to back tech review of the various HF mobile amplifiers available on the market.
At the time we had: Metron, Ten Tec, Tokyo Hi-Power, and several others, of course we now have units from Henry, KLM, MFJ, SGC etc.
The answer I received was that if they don't advertise in QST, there's not much chance of a review.
Oh well, Life goes on.

Phil G4ZOW/Xtreme mobile.

Homebrew 8 X 2SC2879's = 14.6V @ 150A =....

# 601. Re: FS: ARC 5 variable capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: tsimonds@icanect.net
Message-ID: <5om65m$kaa$2@news.icanect.net>
Source record: 93051

labenz@ix.netcom.com(David M. Arruzza) wrote:

->I have ARC 5 variable capacitors for sale. They are very good for
->barefoot and QRP tuners...I wouldn't use them over 250W output, but
for
->the barefoot op who wants to build a nice little tuner they are very
->nice, and you will have a tuner better then the MFJ stuff!!!.

->Reasonable prices...

->73 Dave

Along the lines of an ARC-5 tuner project, there was an article in 73
by Bob Engle K9QLL showing how to do it. I think the article was in a
late-1970's issue. I have a copy here, but it doesn't show the issue
of 73. Bummer. Looks like a nice tuner, however. Probably good for
several hundred watts.

73--Terry/WB4FXD in Ft. Lauderdale, FL
***Use this for reply: fsimonds@icanect.net
Address in header is SPAM filter

## 602. Re: transverter 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Arthur Kloc <klocworx@v-wave.com>
Message-ID: <01bc7fa1$87245a20$c7016c18@k7x5r9.v-wave.com>
Source record: 93052

Dimitris Koystravas <sv2dsu@med.auth.gr> wrote in article
<33AD88F2.C9BA8266@med.auth.gr>...
> hello out there...from greece
> i wnat to ask if there is someone how have any schematic to make a
> transverter for the 2m band?
In 1985 ARRL handbook Chapter 31 you can find two circuits: one "easy" and the other high performance (in that era). If you'll have problem locating a copy, let me know and I will try to scan couple of pages and e-mail them to you.

73, Arthur, VE6BOE
play: artkloc@freenet.edmonton.ab.ca
work: klocworx@v-wave.com

## 603. New Programming Info For Motorola MCX 100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Dave Burniston <davidgb@nortel.ca>
Message-ID: <33AEB841.454@nortel.ca>
Source record: 93053
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi,

I've received a Motorola MCX 100 with 32 memory PROM. I want to change the programmed frequencies to match my local repeaters (it currently uses repeater frequencies from another area). I have the equipment to program a new PROM but need to know how to generate the appropriate data.

Anyone have this info and could e-mail it to me?

Thanks,

... Dave

## 604. Help - Need Programming Info...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Dave Burniston <davidgb@nortel.ca>
Message-ID: <33AECBC5.2C3E@nortel.ca>
Source record: 93054
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi,

I've received a Motorola MCX 100 with 32 memory PROM. I want to change the programmed frequencies to match my local repeaters (it currently uses repeater frequencies from another area). I have the equipment to program a new PROM but need to know how to generate the appropriate data.

Anyone have this info and could e-mail it to me?

Thanks,

... Dave
davidgb@nortel.com

# 605. Re: Regenerative Receiver in Electronics Now

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Jim Strohm <jstrohm@texas.net>
Message-ID: <33AEF777.48AD@texas.net>
Source record: 93055

Kin wrote:
>
> The Q&A column of July issue of Electronics Now has a Regenerative Receiver
> schematic and I have a few questions.
>
> 1. There is a coil described as ' 36 TURNS, 4" DIA.'. Does anybody know
> what is the assume gauge of the wire? How do you calculate the inductance?

There's a standardized formula for inductance in the ARRL Handbook.
It's for single-layer, air-core, solenoid-wound coils. That's what
this is. Your job is to program a simple spreadsheet and experiment
with wire gauge and winding spacing. The starting point is -- big
enough wire gauge to handle the circuit current, small enough that the
coil is shorter than 2 x diameter. Use close spacing (spacing =
wire gauge), normal spacing (spacing = 2 x wire gauge) and wide spacing
(spacing = 4 x wire gauge). See how the wire gauge and coil
length affect inductance. Look at the difference in inductance when
d = the coil inner diameter, the coil outer diameter, and the midpoint
between those diameters.

Here's the formula from Bill Orr's 23rd Ed., p. 2-9
(I seem to have misplaced all my ARRL handbooks, hihi).

L = (d^2 * n^2)/(18d + 40l)

L = inductance (microhenries)
d = diameter of coil (inches)
n = number of turns
l = coil length (inches)

Also --

n = (10L+/- [sqrt(100L^2 + 36a^3 * t^2L)/(2a^2 * t)]

n = number of turns
L = inductance (microhenries)
a = radius of coil (inches)
t = turns per inch

Your SECOND job is to verify these equations through independent
research before you use them.

> 2. The 2N3904 is an NPN transistor but its drawn as an PNP. Its it wrong
> what the part number is wrong?

There's a 2N3906 that's a PNP (hope I didn't just stick my foot
in my mouth there). On inspection of the circuit, it should be

obvious whether the transistor should be NPN or PNP -- your final job is to call the magazine and/or the author and find out!

N6OTQ

## 606. Re: advice on repairing traces in rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-23 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <33AF057A.2A22@popd.ix.netcom.com>
Source record: 93056

It's hard to say without seeing it, but the chances are that it is more
than just a cicuit trace, it's probably a transmission line of
particular impedance and electrical length,which gives this type of amp
it's broad-band characteristic. Given that you have to replace the
transistor(s?) would it be that difficult to change the board as well?
Like I say it's hard to give advice blind. If the board is not that
badly damaged, you could try laying down some copper foil to the
original dimensions and see how it works. Most of these amps have very
low Q tuning and are pretty broad-band so it might just work!
Good luck
73 Dan AC6AO

## 607. Re: App: 6CD6GA sweep tubes (DuKane amps_

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Rick Francis <rfranci@uoft03.utoledo.edu>
Message-ID: <33AF1C88.2C2B@uoft03.utoledo.edu>
Source record: 92917
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

> Hey Rick
> Can't do newsgroups at wk but am doing laundry at a friend's place;
> I've got a pair of DuKanes that use a quad of 8417's and nuvistor
> pre-drivers and want to use the iron off 'em to make an EL509 triode
> connected amp-ciao- rbtr@snds.com

There's a store in St. Louis, on Big Bend, called something like Alpha-Tech. The store owner has a pair of these same 8417 DuKanes and was talking about a rebuild of some sort. I thought I had the schematic for him but no luck. Send him one and make a friend.

Rick

## 608. HamRadio to car stereo interface!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: kovar@zeus.ia.net
Message-ID: <5on304$roh@composer.inav.net>
Source record: 92918

I just thought I would share a nice idea with everyone.

I was playing with the stereo out of my Toyota and found a pigtail plug

exiting radio. This plug allows external audio equipment to be routed into

radios audio amp.

Two shorten the story a bit: I have my Handheld wimpy audio routed into

stereo and overriding music when squelch opens. VERY NICE COPY NOW!

Out of the right speaker I interfaced my radar detector.

This is realy neat!

When nothing is going on just nice music.

Jack K0VAR

Iowa

# 609. Dan's Small Parts and Kits Announces BIG SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5on5oe$oog$4@zinger.callamer.com>
Source record: 92919

Dan's has announced a big Sale beginning July 1st.

Dan is putting his already low prices even lower by allowing an

additional 25% OFF on the Internet Catalog Prices for Parts AND

10% OFF on all Kits.

Check it out at:

http://www.fix.net/dans.html

You must mention you are ordering from his Internet Catalog #5
to get the discount.

Enjoy,,,Jerry...K

ps..Oh yes, Sale ends 31 August

## 610. Measurements Corp Model 801A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970624013701.VAA11887@ladder01.news.aol.com>
Source record: 92920

Need manual, either original or xerox for above

W4ZCB

## 611. Home Digital Audio Editing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: thfawb@iglou.com
Message-ID: <EC9AIv.Mx@iglou.com>
Source record: 92921

Hi,

I am looking to purchase some audio editing software to use on my home PC. I am presently hosting a radio program and I want to edit liners, cut commercials, and other simple editing tasks from my home. I have a limited budget. I understand that there is software out there ready to install that will convert most pentium level PC's into 2 or 4 track record/editer providing you have enough Harddrive and RAM. Is there software that is capable of taking an off the shelf PC, using a sound blaster card, to edit in a low price range that you are are aware of? Any help would greatly be appreciated.

Tom

## 612. Re: advice on repairing traces in rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: wdmilner@nospam.atcon.com
Message-ID: <5onk5j$ip7$3@thor.atcon.com>
Source record: 92922

akrol29b@aol.com (AKrol29b) wrote:
>I have a 2 meter amp whose pa transistor failed and took out a small area
>of trace where dc is applied and output goes to the relay.
>what is best to bridge this area? solder bridges add pf's I am told and
>the output caps are fixed

You can buy copper trace repair tape at many electronics supply houses
and it is fairly inexpensive. It is usually self adhesive and a small
amount of tining at the seams will complete the circuit.

>I cut the gold plated wings off the mrf247,would those be any good?

You need to use silver solder to effectively solder to gold. The extra
heat needed might further damage the circuit board.

---
Dean, VE1CBF VE1CBF@qsl.net
10-X 31826 FN96VC

- - ... ... - -

! remove nospam from domain name above

## 613. digital voice keyers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: "Kenneth E. Harker" <kharker@cs.utexas.edu>
Message-ID: <33AF6EEE.168AF0F9@cs.utexas.edu>
Source record: 92923

I may not be able to get into this for quite a while, but I'm thinking eventually I'd like to build a digital voice keyer, primarily to work the rocks on VHF ssb without going hoarse. I've been reading the 1993 ARRL Handbook's article on the "Chiptalker" keyer, but I'm wondering if there're any other kits / partial kits / schematics for voice keyers? The big drawbacks I saw to the "chiptalker" design were:

1) The PCB layout is much larger than I would like - if I could find something like 2.25" x 2" (the size of the Super CMOS Keyer III PCB) I could make a matching device, and I really don't need all the experimentation space if I can get it right the first time :-)

2) The soft divisions between the four memories. This isn't a huge deal, but it would be nice to somehow prevent one memory from "bleeding" across boundaries into the next. Perhaps send a beep to the speaker when you goof.

3) 5-second memories are too short. For ssb meteor-scatter work in North America, 15-second memories would be perfect. Of course, four of these would require an IC with at least 60 seconds of digital memory...

4) No obvious provision for stopping a memory playback. Hit the wrong button in the excitement of a burn and you're probably toast. Perhaps use some sort of microphone pass-through where hitting the microphone's PTT button bypasses the keyer altogether and stops playback, a la the Super CMOS Keyer III behavior with the paddles.

Anyway, just some random thoughts... perhaps the state of the art has advanced since the original 1991 article...

## 614. Re: CB to SIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: erwin.cremers@ingram.nl
Message-ID: <5onufl$loe$1@news.Kijfhoek.NL.net>
Source record: 92924

bry@hardknox.edu (Bry Carling) wrote:

>If anyone is still having trouble finding this set of articles, you
>can get them at:

>http://www.mnsinc.com/bry/ham/cb2six.zip

>Regards - AF4K

>To reply to this message, you MUST IGNORE my shown address.
>It is there to fool those annoying unsolicited e-mail advertising idiots!
>Send replies ONLY to: bry AT mnsinc 'DOT' com
>Bulk e-mail robot food:
>root@localhost, abuse@cyberpromo.com, postmaster@bstgrlsss.com,
>removetif@answerme.com, hostmaster@solnet.co.uk,
>postmaster@potters.com, postmaster@rovers.com, postmaster@www.goldnet.co.uk,
>postmaster@goldnet.co.uk, postmaster@rovers.com,
>postmaster@www.goldnet.co.uk,
>postmaster@summerfun.com, postmaster@goldnet.co.uk
>postmaster@cyberpromo.com, mgiwer99@primenet.com,
>constance@strutyourstuff.com, postmaster@carbow.com,
>burt@rocketmail.com, cleanair@spica.net,
>gige@global-merchants.com,brutus@stbbs.com,
>wallace@cyberpromo.com,abuse@cyberpromo.com,
>sales@agis.net

>SEND US SOME E-MAIL ADS!!!

Does any one know if the author of this article is on Internet and
where he can be found : Email adres or homepage ????/

Hope to hear from you,

Erwin


```
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| |
//////////\\\\\\\\\\
| Erwin Cremers |
| PE1MGR |
| Dutch Radio Operator |
\\\\\\\\\\//////////
|____________________|
______|Check my homepage at|________
|www.geocities.com/capecanaveral/4312|
|-----------------------------------|
\-----------------------------------/
```

|_| |_| |_| |_|

## 615. Hot Teen caught Undressing teenund.jpg

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: asdlfj@alskjdfs.com
Message-ID: <5onvc0$st1$2581@news.internetmci.com>
Source record: 92925

Looking for Dirty Schoolgirls Having Sex? Well, then look no further, Nasty-Schoolgirls is your
source for the Nastyiest girls that will Fuck and Suck your Cock.

Are you ready to have a Schoolgirl Suck you Cock?

Then Visit:

http://www.nasty-schoolgirls.com

All Models Represented on Nasty-Schoolgirls are 18 years of age or older.

## 616. Testing MOSFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33af952b.50514302@news.erols.com>
Source record: 92926

Homebrewers:

Tom Sefranek was kind enough to send me some MOSFETS for use in my Bare Bones Superhet project. I've been working on Boatanchors so long that I've forgotten how to test MOSFETS. Tom mentioned that he wasn't sure if all the devices he sent were good. Is there any way of testing these things without destroying them in the process?

TIA
73 Bill N2CQR

## 617. Re: FS: ARC 5 variable capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33afb4c9.2793485@news.mnsinc.com>
Source record: 92927

On Mon, 23 Jun 1997 15:54:18 GMT, tsimonds@icanect.net (Terry Simonds) wrote:

>labenz@ix.netcom.com(David M. Arruzza) wrote:
>
>->I have ARC 5 variable capacitors for sale. They are very good for
>->barefoot and QRP tuners...I wouldn't use them over 250W output, but
>for
>->the barefoot op who wants to build a nice little tuner they are very
>->nice, and you will have a tuner better then the MFJ stuff!!!.
>
>->Reasonable prices...
>
>->73 Dave
>
>Along the lines of an ARC-5 tuner project, there was an article in 73
>by Bob Engle K9QLL showing how to do it. I think the article was in a
>late-1970's issue. I have a copy here, but it doesn't show the issue
>of 73. Bummer. Looks like a nice tuner, however. Probably good for
>several hundred watts.
>
>
>73--Terry/WB4FXD in Ft. Lauderdale, FL
>***Use this for reply: fsimonds@icanect.net
>Address in header is SPAM filter

They look at addresses in the message text too I think!

By the way - does that article say anything about how to attach a shaft to some of those variable caps tat came with nothing to put a knob onto?

I have several of these variable caps I would like to use, but they have no shaft!

# 618. Re: Homebrew baluns... Help for a ZL special antenna.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33afb477.2711317@news.mnsinc.com>
Source record: 92928

On Mon, 23 Jun 1997 03:16:50 GMT, kiprc@tenet.edu (Kip Chatterson)
wrote:

>I have two zl special antennas and would like to feed them with coax.
>
>Is there a web page or can someone tell me how to make a balun to go
>from 300 ohm twinlead feed to 50ohm coax.
>
>Reason. I have a coax switch and would like to be able to utilize it
>to change directions of the zl special antennas.
>BTW I am operating on 10 meters.
>
>Please respond via email.
>
>kip
>kiprc@tenet.edu

Kip - if you or anyone else wants it I have a B&W Balun for a 15 meter
yagi that I will sell for $5.00

Bry

## 619. Need help with RFI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: alchazz*@ix.netcom.com
Message-ID: <33AFD23B.FEE@ix.netcom.com>
Source record: 92929

In my neigborshood there is a new source of RFI. It sounds like a scratchy hiss on the two telephone lines I have. You can ignore it while talking, but it kills the modem. I also can see regular white zap marks on the TV on channel 5 VHF(no cable). Can someone tell me how to snoop out the source? Who should I complain to after I find the source?

Thanks in advance.

Al
--
Remove the * from the address to reply.

# 620. Want manual - Motorola (Measurements) Sig Gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: A Redshirt <occupant@ns.net>
Message-ID: <01bc809f$400731e0$30f277cc@packard-bell>
Source record: 92930
Cross-posted to: rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew,rec.radio.swap

Hello -

Looking for manual or copy for Motorola (manufactured
by Measurements Corp) RF Signal Generator model
S-1320. This generator is the transistorized version
which resembles the older tube model T-1034. The
sig gen would be usually used in the commercial
two way radio trade.

Will pay any and all costs for copying, or will copy
and return at your pleasure. Please check your file
cabinets, and help me get my swap meet treasure
back on the air!

Thanks for reading this.

de John WB6GHA
occupant@ns.net
--

## 621. Re: Headset intercoms with noise cancelling mic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: frussle@erols.com
Message-ID: <33b1c6aa.5776232@news.erols.com>
Source record: 92931
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Sun, 22 Jun 1997 18:34:14 -0500, Craig Blome
<craig.blome@a-m-d.c-o-m.removethedashes> wrote:

>Forgive the newbie question, but...I belong to a local sports car club
>that puts on autocross events. The starter communicates with the timing
>van right now using a pair of Radio Shack 49MHz intercoms, which aren't
>ideal for this task as they don't seem to have noise cancelling
>microphones, and so the starter's voice is often drowned out by very
>loud engines. I'd like to find something with a better mic, but can't
>justify the expense for a David Clark pit headset or the like. Is there
>anything out there that doesn't require a license? Might the cellphone
>headsets now available work with a CB, or maybe one of the new FRS
>radios?

Check the Sporty's Catalog (1-800-LIFTOFF, I think). David Clark
headsets are expensive because they're also designed to protect your
hearing in high noise environments. If hearing protection is not as
much an issue as getting the message through, you may want to look at
some of the lighter weight headsets. Most, if not all, will have
noise canceling mics.

Jake Brodsky, mailto:frussle@erols.com
PP ASEL IA, Cessna Cardinal N30946, Based @ MD24
Amateur Radio Station AB3A

# 622. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33af1d8c.21203549@netnews.worldnet.att.net>
Source record: 92932

On Mon, 23 Jun 1997 11:46:57 +0100, philip de cadenet
<phil@two-way.demon.co.uk> wrote:

>Re Rick's amp' article.
>I only know the general outline of the politics surrounding this episode
>but in my experience, just maybe it's like trying to convince a
>qualified med student that alternative medicine produces better results,
>he's going to stick up for what he's been taught for the past five
>years, or trying to tell an astronomer that UFO's really exist even
>though he's never seen one.
>One just has to be receptive to fresh ideas, and if you dissagree then
>you're free to carry out your own research to find out one way or the
>other.
>Alternatively, it really could be that the amp manufacturers had
>ploughed all there hard earned bucks into 'their' design and that they
>were going to stamp on anyone that got in the way of their profit.
>Personally I know which way I think.

I certainly agree with you. Anyone understanding either physics or
theory would have no problem deciding who was correct. I'm surprised
it got past the ARRL for so long, but at least they attempted to
correct the error. It would have been all avoided if they reviewed the
stuff before publishing it, or back when readers first complained, but
what is done is done.

You are certainly correct, UFO's and voo doo has no place in a
technical publication.

# 623. Re: Testing MOSFETS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970624133501.JAA06662@ladder01.news.aol.com>
Source record: 92933

Sure. If you can identify drain, source and gate. Do you know whether they are N junction or P junction?

First, tie the source and gate together and apply voltage between drain and source-gate. If it draws current, (For god's sake, stick a current limiting resistor in series.) it is not an enhancement mode FET. Then isolate the gate source, and apply a variable voltage (negative) to the gate. When the current is reduced to a microamp, you have identified pinchoff Vp. Bias it for whatever application you want to use it for and go.

If it does not draw current as above, it's an enhancement mode device, and requires a small forward bias (no current required, just voltage) to turn it on.

Conversely, did Tom give you any part numbers that are identifiable? ie, not in-house numbers?

W4ZCB

## 624. add on to make HT louder ( RS 19-901 GMRS ht)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: sofjan@aol.com
Message-ID: <19970624140601.KAA04179@ladder02.news.aol.com>
Source record: 92934

Hi

I just bought two of Radio Shack 10 channel 2 watts GMRS radio for 90 buck each . It was on clearance. The HT worth exactly the price . wimpy audio and no frill .
I vaguely remember several years ago reading ads of something called (sound blaster or sonic blaster ) it is a small circiut that you place inside a HT to boost the sound . I haven't been able to hit the library or major book store to find the company in 73 mag or qst magazines ads .
My question is have anybody used this device in their own HT ? It is easy to install ? What is the company phone #

Thanks bunch in advance .

sofjan

Sofjan@aol.com
Lexington ,Kentucky

## 625. Re: advice on repairing traces in rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Mark&Sher N8REZ <Mcast@flash.net>
Message-ID: <33AFF08E.48A2@flash.net>
Source record: 92935

W. D. Milner wrote:
>
> akrol29b@aol.com (AKrol29b) wrote:
> >I have a 2 meter amp whose pa transistor failed and took out a small area
> >of trace where dc is applied and output goes to the relay.
> >what is best to bridge this area? solder bridges add pf's I am told and
> >the output caps are fixed
>
> You can buy copper trace repair tape at many electronics supply houses
> and it is fairly inexpensive. It is usually self adhesive and a small
> amount of tining at the seams will complete the circuit.
>
> >I cut the gold plated wings off the mrf247,would those be any good?
>
> You need to use silver solder to effectively solder to gold. The extra
> heat needed might further damage the circuit board.
>
You do NOT need silver solder to solder to GOLD!! Gold solders quite
easily....73 N8REZ

# 626. Re: Home Digital Audio Editing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5oosph$fj6@hpcvsnz.cv.hp.com>
Source record: 92936

Tom (thfawb@iglou.com) wrote:

: I am looking to purchase some audio editing software to use on my home
: PC. I am presently hosting a radio program and I want to edit liners,
: cut commercials, and other simple editing tasks from my home. I have
: a limited budget. I understand that there is software out there ready
: to install that will convert most pentium level PC's into 2 or 4 track
: record/editer providing you have enough Harddrive and RAM. Is there
: software that is capable of taking an off the shelf PC, using a sound
: blaster card, to edit in a low price range that you are are aware of?
: Any help would greatly be appreciated.

I use "Cool Edit" from www.syntrillium.com. It's shareware...and IMHO,
the best shareware I've seen for the PC. It's $50 for the full version,
and $25 for the "lite" version. The evaluation version is full-featured,
you just are limited to using only two of ten or so function groups at
each invocation of the program... for what you describe, the "lite"
version is probably plenty. The full version includes noise reduction,
filtering, flanging, ... lots and lots of stuff. The user interface
seems quite easy to me. I have no financial interest in the program
or Syntrillium, just a very happy customer. Download it; when you
register, you get a magic number to enable what you bought. Even has
a very decent manual that prints nicely formatted.

--
Cheers,
Tom
tomb@lsid.hp.com

## 627. FS: MFJ 901B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <33B0007C.311F@apollo.wes.army.mil>
Source record: 92937
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

MFJ 901B for sale, 38.00 shipped conus.

Butch KF5DE

## 628. Re: App: 6CD6GA sweep tubes (DuKane amps_

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: triodeel@ameritech.net
Message-ID: <33b0038d.27708124@news.chicago.il.ameritech.net>
Source record: 92938
Cross-posted to: rec.radio.amateur.boatanchors,rec.audio.tubes,rec.radio.amateur.homebrew

TMI Engineering <"no_spam tmi"@idt.net> wrote:

>
>Check that 8417 before you get rid of it. It's not that bad.

No, but new ones a a bit expensive & hard to find.
Especially good ones, lots of late model 8417
had grid current & bias stabillity problems..
That's more of a problems with some
amplifiers (Dyna Mk6 comes to mind)
than others..

Ned Carlson
Triode Electronics
2225 w. Roscoe St
Chicago, IL 60618 USA
email: triodeel@ameritech.net
ph:773-871-7459
fax:773-871-7938
"Worldwide service,
Neighborhood prices"
since 1985

## 629. Fw: Have Litho Camera for sale.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: K0FF@nemonet.COM
Message-ID: <MAPI.Id.0016.00304646202020203030303430303034@MAPI.to.RFC822>
Source record: 92939

```
> Subject: Have Litho Camera for sale.
>
>
> I have for sale an Eskofot (European made)vertical litho camera with =
2
> Schneider lenses.
> This camera will take copy and film up to 18 x 24 inches.
> It will enlarge or reduce and has vaccuum frame for film and for copy. =
Side
> lights and backlight. Also has a light integrator which is an auto expo=
sure
> control.
> I bought this new about 10 years ago and used it lightly fo making nega=
tives
> for a silk-screen printed circuit board operation which I was doing as =
a side
> business. Health and other considerations prevent me from doing that =
any more.
> I would like to see this go back to making PC boards for someone and =
the price
> is negotiable. I paid 3600.00 for the camera, and the price went up
> considerably since then.
> it is perfect for lifting artwork from magazines, or from 4X hand-laid =
art or
> even 1 to 1 from another board.
> If you have any interest, or know someone who might, drop me a line.
> located in Missouri.
> George Dowell (K0FF)
```

## 630. WTB Freq Synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Jack Albert <jwa@tellabs.com>
Message-ID: <33B02077.5AC5@tellabs.com>
Source record: 92940

I'm looking for a frequency synthesizer kit that covers 13 to 15 MHz
and tunes in 100 Hz steps.

--
Jack Albert WA9FVP (Fellow Radio Hacker)
Tellabs Operations Inc.
1000 Remington Blvd Voice (630) 378-6201
Bolingbrook, IL 60440 FAX (630) 378-5790

## 631. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2406971054030001@news.vcnet.com>
Source record: 92941

In article <5oml8v$r65@lace.colorado.edu>, tiemann@spot.Colorado.EDU (TIEMANN BRUCE) wrote:

> QST also has the extremely irritating position of being entirely mum
> about antenna performances. The ads aren't allowed to even MENTION
> gain,...snip...
> Does anyone out there have an idea how this might be changed?
>
> Bruce
> N6URH

- I used to go to VHF/UHF antenna contests, Bruce. There were consistent discrepancies between the claimed db gain of manufactured antennas and the db gain that was measured on the antenna range. If you guessed that the measured gain was consistenly lower than manufacturers' claimed gain, congrats.

Since there is no antenna range in Newington, accepting antenna manufacturers' claimed gain seems to be the only way this might be changed. However, accepting such would be like having a fishing contest where each fisherman is required to report the size of the fish he caught, instead of bringing the fish in to be measured by a panel of judges.

It seems to me that no db claims in antenna ads is one of the things that QST has right.

--
- Rich - . . . . 805-386-3734, ag6k

## 632. Collect Old Radio Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: bb687@lafn.org
Message-ID: <5opas2$q89$1@orthanc.reference.com>
Source record: 92942

Learn why you should start collecting old radio tubes now.

Visit http://www.i-exposed.com/freehp/tube/

or reply to bb687@lafn.org

--

Posted using Reference.COM http://www.reference.com
Browse, Search and Post Usenet and Mailing list Archive and Catalog.

InReference, Inc. accepts no responsibility for the content of this posting.

## 633. Re: advice on repairing traces in rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33afcb45.3731543@news.atl.bellsouth.net>
Source record: 92943

On 23 Jun 1997 06:29:06 GMT, akrol29b@aol.com (AKrol29b) wrote:
>I have a 2 meter amp whose pa transistor failed and took out a small area
>of trace where dc is applied and output goes to the relay.
>what is best to bridge this area? solder bridges add pf's I am told and
>the output caps are fixed
>I cut the gold plated wings off the mrf247,would those be any good?

The burned traces may have been strip lines. If so, you have to use the same width for the replacement, and bond it down to the substrate. You can get copper foil in various widths with an adhesive backing from the suppliers of prototyping and repair materials. But if the traces are just short interconnect wiring, which is likely,, then you can bridge the burned gap with a piece of bare buss wire laid on the board in place of the burned section and soldered in place.

Just changing the transistor is going to slightly change the tuning, so the slight change in tuning you'll make by repairing the traces isn't likely to be significant at 2m. At upper UHF, it could be significant.

Gary

Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 634. Re: 808's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: John Doe <doe#m#_john@mmac.is.lmsc.lockheed.com>
Message-ID: <33B02D12.2C15@mmac.is.lmsc.lockheed.com>
Source record: 92944

Howard N. Lute wrote:
>
> Hi,
> I have a couple of interesting ol' tubes...one in its original box,
> CRC-808, What are they?
> Thanks!
>
> --
> I am:
> Howard N. Lute
> Electronics Instructor / Terrible Mechanic / Worse Plumber
> Solano County Regional Occupation Program
> Hogan Senior High School
> Room 90, "The Garage"
> Vallejo, CA
> OptCamel@sj.bigger.net
> 8:36 AM 5/25/97
Howard,
the 808 is a small transmitting tube dating from the late 30's
early 40's; triode (3 element) in design. Not used today even in
replacement but makes a nice collector item. Do you want to part with
it/them: Bob
robert.leigh@lmco.com

## 635. 40 year collection of CQ magazines for sale 1946-1987

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: bryan@prodistributors.com
Message-ID: <5op8ps$uqc$1@news.nts-online.net>
Source record: 92945
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

Glenny Hutcherson has a collection of CQ Magazines starting in 1946 running thru 1987 that she needs to sell. These are part of the estate of her late husband W5AYC. They are packaged and wrapped by the year. Sell as a complete set only. She will box and ship to the buyer. Price is $250 ....that is about $6 per year. She will box and ship to the purchaser for postage costs.

Call her directly at 817-834-2127

## 636. Re: Scanner modification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: parnass@marconi.ih.lucent.com
Message-ID: <5ophne$ejd@ssbunews.ih.lucent.com>
Source record: 92946
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.scanner,alt.radio.scanner

In article <5ohahr$n2q$1@newsd-106.bryant.webtv.net>,
Mark Satterfield <Markos@webtv.net> wrote:

>I own a radio shack pro-34 scanner, which is FM reception only
>and I am looking to add AM receive capability to it.
> Does any one have a suggestion on how?
>
> Markos@webtv.net.

The PRO-34 is not FM only. It receives AM in the VHF-air band.

An AM/FM switching modification is pretty simple to perform
in many GRE-made scanners which already contain AM and FM
detectors, e.g., PRO-34, PRO-39. The CPU usually provides a
logic level output line which is connected to base of a
transistor switch or input to a simple IC switch. That
switch selects either the FM or AM detector output to be
routed to the audio amplifier input.

While I don't have a schematic for the PRO-34, I will use
the later PRO-39 as an example. Pin 13 of the CPU (located
on the logic PCB) provides +5 VDC to resistor R227 (on the
AF PCB) in NFM mode and ground (approximate) in AM mode.

One could insert a single pole, three position switch
between CPU pin 13 and R227. The common on contact would
connect to R227. The other 3 contacts could be connected
to:

1. CPU Pin 13
2. 5 VDC
3. ground

When the new switch is in position 1, the scanner would act
normally -- AM in VHF airband, NFM elsewhere. In position
2, the scanner would use NFM mode regardless of frequency.
In position 3, the scanner would use AM mode regardless of
frequency.

I recommend you order a PRO-34 Service Manual from Tandy so
you can determine the relevant components and their
locations specific to that model.
--
==========
Copyright 1997, Bob Parnass, AJ9S parnass@bell-labs.com

Locate & identify transmitters in your area with a color RadioMap(tm)

## 637. WTB: VFO for DX-60B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Jim Phillips <phillips@spacestar.net>
Message-ID: <33B052DA.60ED@spacestar.net>
Source record: 92947

I am looking to buy a Heathkit VFO for their
DX-60 product.

I am looking for a mechanically sound, complete,
unit in good to very good condition.

# 638. ! SAMPLE A FREE PSYCHIC! TRY-IT-FREE!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: user@metrocon.com
Message-ID: <5oof0r$p46$5433@news.metrocon.com>
Source record: 92948

How do you know if you've found a real psychic?
Now you can see for yourself. Listen to our psychics
first, then decide if they know your future and fate.
Try it free on 1-800-677-8061. Adults over 18 only.

Dial now 1-800-677-8061

# 639. Re: WTB Freq Synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <33B061BD.4913@onramp.net>
Source record: 92949

Jack Albert wrote:
>
> I'm looking for a frequency synthesizer kit that covers 13 to 15 MHz
> and tunes in 100 Hz steps.
>
> --
> Jack Albert WA9FVP (Fellow Radio Hacker)
> Tellabs Operations Inc.
> 1000 Remington Blvd Voice (630) 378-6201
> Bolingbrook, IL 60440 FAX (630) 378-5790

QST had an article on one several months back, was controlled by a PC
and covered 1 hz to 20mhz if I remember right. Kits are available from
Concept Kits at http://www.altinet.net/ckits/

Not affiliated just thought I might build one one time..

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

## 640. Re: Need help with RFI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5opijp$hfh@apple.telalink.net>
Source record: 92950

alchazz*@ix.netcom.com wrote:
>In my neigborshood there is a new source of RFI. It sounds like a
>scratchy hiss on the two telephone lines I have. You can ignore it while
>talking, but it kills the modem. I also can see regular white zap marks
>on the TV on channel 5 VHF(no cable). Can someone tell me how to snoop
>out the source? Who should I complain to after I find the source?

It sounds like an arc of some kind. (what other TV channels are in use in your area? Are all other TV channels higher than 5? Arc interference is usually much worse in channels 2-6 than anywhere else.)

You need to start with a bit of detective work.. Is the interference continuous, or does it come and go? Is it on only after dark? Or only during business hours? Only when it's dry? (or wet, or windy?)

Common sources for this kind of thing are cracked or dirty insulators on power lines, defective advertising lights, and electric motors with defective brushes.

If you can associate the noise with a business, you'll need to work with the business to get them to fix it. If it seems to be weather related, you'll need to work with your electric utility.

Doug S.

## 641. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: sales@emodus.com
Message-ID: <33b09896.0@news.cyberannex.com>
Source record: 92951

Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $1.00
6AH6 $0.50
6AL5 $0.50
6AN8A $1.00
6AU6A $0.50
6CL6 $1.00
6X4 $1.00
12AT7 $2.00
12AU7A $3.00
12AX7A $3.00
5651A $0.75
5963/12AU7A $3.00
6080 $3.00
6201/12AT7 $2.00
8068 $14.00
8136 $0.75
8532W $1.00

Shipping in the USA: 1 - 6 tubes $4.00, 6 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
---
TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIOCOMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail:

sales@emodus.com

Thank you!

## 642. Need Audio output transformer Bogen model CHB 50

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: jarad@nbnet.nb.ca
Message-ID: <jarad.331.046A1F93@nbnet.nb.ca>
Source record: 92952

Can someone help me find a replacement audio output tranformer
>Bogen Model CHB 50 mono amp it was used in a church as a PA amp
>The only numbers i can find on the transformer are 83-330-000 below that is
>8316701.
>The amp uses Two 6L6s a 12AX7 a 6C4 and a 6EU7
>If you have one or can help me find one email jarad@nbnet.nb.ca

>PS It also says Lear Siegler on the chassis
>Thanks jarad

# 643. Re: CB to SIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33AFFA49.4088@qsl.net>
Source record: 92953

Got this from the top/bottom of part 1 posted earlier this
year:

By Shawn Baris ZR1EV
PO BOX 212
Brackenfell
7561
Republic of South Africa

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

Maybe you can look up the call somewhere.

Good Luck
-Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 644. Re: Need help with RFI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33B00F65.3DDB@qsl.net>
Source record: 92954

Since it is on the telephone lines, I would have the
Tel-company investigate immediately! They're the
pro's and can probably troubleshoot over the line.

I think you can report a bad line using 611 or something,
look in the front of the phonebook.

If they fail to fix the problem, you will have to isolate
the problem i.e. Radiated or Conducted emissions. Try
a portable tv or something and walk around with it.

If the problem is not evident on the portable, maybe it's
in the powerlines. RF chokes are in order for the Phonelines
and line cord.

Hope this helps.
-Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 645. Re: advice on repairing traces in rf amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-24 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33B026CF.5BC1@qsl.net>
Source record: 92955

Mark&Sher N8REZ wrote:
>
> W. D. Milner wrote:
> >
> > akrol29b@aol.com (AKrol29b) wrote:
> > >I have a 2 meter amp whose pa transistor failed and took out a small area
> > >of trace where dc is applied and output goes to the relay.
> > >what is best to bridge this area? solder bridges add pf's I am told and
> > >the output caps are fixed
> >
> > You can buy copper trace repair tape at many electronics supply houses
> > and it is fairly inexpensive. It is usually self adhesive and a small
> > amount of tining at the seams will complete the circuit.
> >

Do NOT use the self adhesive strips. They will eventually
cause dendrite or crystalline growth. Get the non-adhesive type.
-Ed
> > >I cut the gold plated wings off the mrf247,would those be any good?
> >
> > You need to use silver solder to effectively solder to gold. The extra
> > heat needed might further damage the circuit board.
> >
> You do NOT need silver solder to solder to GOLD!! Gold solders quite
> easily....73 N8REZ
Correct! 60/40 or 63/37 tin/lead is all you need. -Ed

-Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 646. Needed: 2 meter Amplifer Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: ScottWeb@hotmail.com
Message-ID: <33b15c85.572821@news.pipeline.com>
Source record: 92956

Hello, my name is Scott and I need a schematic (including parts list)
for a 2 meter (United States band plan) RF amplifier. It needs to
accept and input of 5watts and have an output of AT LEAST 30watts.

Thank you in advance,
Scott

## 647. Specs of Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <867191885@infoway.com>
Source record: 92957

I'm a little lost, especially in the solid state world.
Where do I go to find mfg data sheets for the following:
BUZ45
BUZ53A
BUZ74
HXTR6103TXV
IRF441
IRF512
IRF840
Thanks for a point in the right direction.
Don

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

# 648. Re: Dan's Small Parts and Kits Announces BIG SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33b0925e.424954@nntp.infoave.com>
Source record: 92958

Thanks Jerry,
I was just about to make an order..... finnally finnished up
my first Renerative Receiver. (Don't like it... but its finnished)
and was thinking of tackling a simple superhet. Maybe I will go back
and modify the regenerative, by adding a double balanced detector. It
has LOTS of AM BC stations covering everything up.

On Tue, 24 Jun 1997 00:53:17 GMT, jparker@fix.net (Jerry Parker)
wrote:

>Dan's has announced a big Sale beginning July 1st.
>
>
>Dan is putting his already low prices even lower by allowing an
>
>additional 25% OFF on the Internet Catalog Prices for Parts AND
>
>10% OFF on all Kits.
>
>Check it out at:
>
> http://www.fix.net/dans.html
>
>You must mention you are ordering from his Internet Catalog #5
>to get the discount.
>
>Enjoy,,,Jerry...K
>
>ps..Oh yes, Sale ends 31 August
>

## 649. Re: FS: MFJ 901B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33b09332.637075@nntp.infoave.com>
Source record: 92959
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Forgive my ignorance Butch.... but I don't read the trade magazines
to much. what is a MFJ 901B?

On Tue, 24 Jun 1997 12:14:36 -0500, Butch Magee
<butch@apollo.wes.army.mil> wrote:

>MFJ 901B for sale, 38.00 shipped conus.
>
>Butch KF5DE

## 650. Re: digital voice keyers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5opsd8$rme$1@news3.microserve.net>
Source record: 92960

Radio Shack has a voice storage module avaliable for around
$20. The board has full instructions and applications, I have
toyed with the idea of building a unit with one of these when my
old homebrew system using the Toshiba TC8831F (about $160 when I
bought it!) chip goes south.

73 Steve N3FTI

In article <33AF6EEE.168AF0F9@cs.utexas.edu>, kharker@cs.utexas.edu says...
>
>I may not be able to get into this for quite a while, but I'm
>thinking eventually I'd like to build a digital voice keyer, primarily
>to work the rocks on VHF ssb without going hoarse. I've
>been reading the 1993 ARRL Handbook's article on the "Chiptalker" keyer,
>but I'm wondering if there're any other kits / partial kits / schematics
>for voice keyers? The big drawbacks I saw
>to the "chiptalker" design were:
>
>1) The PCB layout is much larger than I would like - if I could find
>something like 2.25" x 2" (the size of the Super CMOS Keyer III PCB) I
>could make a matching device, and I really don't need all the
>experimentation space if I can get it right the first time :-)
>
>2) The soft divisions between the four memories. This isn't a huge
>deal, but it would be nice to somehow prevent one memory from "bleeding"
>across boundaries into the next. Perhaps send a beep
>to the speaker when you goof.
>
>3) 5-second memories are too short. For ssb meteor-scatter work in
>North America, 15-second memories would be perfect. Of course, four of
>these would require an IC with at least 60 seconds of digital memory...
>
>4) No obvious provision for stopping a memory playback. Hit the wrong
>button in the excitement of a burn and you're probably toast. Perhaps
>use some sort of microphone pass-through where hitting the microphone's
>PTT button bypasses the keyer altogether and stops playback, a la the
>Super CMOS Keyer III behavior with the paddles.
>
>Anyway, just some random thoughts... perhaps the state of the art has
>advanced since the original 1991 article...

## 651. Re: ! PROVEN PSYCHICS! TRY-IT-FREE!! 1-800-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: vank6@aol.com
Message-ID: <19970625034200.XAA23157@ladder01.news.aol.com>
Source record: 92961

Why don;t you post your Psychic ad someplace else,I for one would thank you.

## 652. Carson 117V/880V transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Rob Gregory <skidrow@interlog.com>
Message-ID: <01bc8128$81d92d60$bb436cce@default>
Source record: 92962

Wondering if anyone out there knows where I can get one
of these old transformers.
For a Hy-Gain amplifier from mid 70's era.

Thanks
Rob VE3-LUA

## 653. Re: Needed: 2 meter Amplifer Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5oqcnv$lka$1@news.belwue.de>
Source record: 92963

>Hello, my name is Scott and I need a schematic (including parts list)
>for a 2 meter (United States band plan) RF amplifier. It needs to
>accept and input of 5watts and have an output of AT LEAST 30watts.

Hi Scott,

Go to Motorola. (www.motorola.com?). They have pages on their
RF power devices with schematics. The kind of amplifier you are looking
for is usually cheaper to buy, though.

73, Moritz

## 654. Eico 324 signal generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: pchow@cisco.com
Message-ID: <5oqcog$7bl$1@news-sj-2.cisco.com>
Source record: 92964

Anybody have a schematic for an Eico Model 324 signal generator? Will pay for copying and shipping cost.

Thanks & 73,
N6YD/Peter

## 655. ferritronics crystal/mechanical filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: andy_w@oldham.gpsemi.com
Message-ID: <867224499.7192@dejanews.com>
Source record: 92965

Searching through my junkbox the other night I came across a filter (which I assume is either mechanical or crystal) made by Ferritronics of Richmond Hill Ontario.

The type number is FL2352P

Does anyone have any info on the filter sprecifications?

Thanks

Andy Wright G4OJY

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 656. Mods for Mil.radio wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: erwin.cremers@ingram.nl
Message-ID: <5oqlhn$945$3@news.Kijfhoek.NL.net>
Source record: 92966

Hello,

Does anyone know of books or maybe even sites that have modification for mil.radios in them. I'm looking for Mods for the RT67and 68 or any other you might have. The mods i'm primairaly intersted in are bandwith and frequenty shift improvements.

I'm going to put them on my Internet site so everybody can access them.

Greetings,

Erwin


```
____
| |
//////////\\\\\\\\\\
| Erwin Cremers |
| PE1MGR |
| Dutch Radio Operator |
\\\\\\\\\\//////////
|____________________|
______|Check my homepage at|________
|www.geocities.com/capecanaveral/4312|
|-------------------------------------|
\-------------------------------------/
|_| |_| |_| |_|
```

# 657. Re: Regenerative Receiver in Electronics Now

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33b0cde2.0@cheese.pcug.org.au>
Source record: 92967

"Kin" <kng@pacbell.net> wrote:
>The Q&A column of July issue of Electronics Now has a Regenerative Receiver
>schematic and I have a few questions regarding the circuit and am wondering
>if anybody can help me.
>
>1. There is a coil described as ' 36 TURNS, 4" DIA.'. Does anybody know
>what is the assume gauge of the wire? How do you calculate the inductance?
> I want the inductance so I can enter it into my Electronics Workbench to
>test it out.

You'd have to assume some values and then plug those into a formula to work it out. I'd start with a wire gauge of 0.5mm and assume closewound windings. I can't understand the people who work in gauges - fine when you're buying wire, but when you're using unknown wire from an old transformer, you wind 10 turns of it onto a pencil, hold a ruler (calibrated in centimetres) up to the coil, and you can read off your wire gauge (in mm).

I'm curious - why do you want to measure the inductance anyway? With these types of projects, you wind what you think is reasonable, get the receiver going and add or remove turns if you want to change youre frequency coverage.

>
>2. The 2N3904 is an NPN transistor but its drawn as an PNP. Its it wrong
>what the part number is wrong?
>

Having not seen the diagram or the article, I can't really comment. However, because we like to build things with negative earths, I'd suspect that these days 90% of transistor receiver circuits use NPN rather than PNP devices. If in doubt, I'd assume NPN.

My own experiences with regen receivers is that FET sets seem to be better and smoother operating than junction transistor circuits.

73,

Peter VK1PK

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
------------------------------------------------------------

## 658. Re: digital voice keyers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33b0cefb.0@cheese.pcug.org.au>
Source record: 92968

"Kenneth E. Harker" <kharker@cs.utexas.edu> wrote:
>I may not be able to get into this for quite a while, but I'm
>thinking eventually I'd like to build a digital voice keyer, primarily
>to work the rocks on VHF ssb without going hoarse. I've
>been reading the 1993 ARRL Handbook's article on the "Chiptalker" keyer,
>but I'm wondering if there're any other kits / partial kits / schematics
>for voice keyers?

Have you thought of using one of those digital voice recorder keyrings?
They're very compact and will even drive a full-sized 8 ohm speaker if
required. Their audio quality isn't too bad either.

You could even have a bank of three or four of them for different styles
of calls. Of course you'd need some sort of timer circuit - a 555 should
be OK.

The one I bought was on special at $10.00. However the usual price is
$20-30 ea.

73,

Peter VK1PK

--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

## 659. Motorola Spirit Pro mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Don <donw@FTC-I.NETNOSPAM>
Message-ID: <33B09FAF.3C81@FTC-I.NETNOSPAM>
Source record: 92969

Anyone know of mods for the Motorola Spirit Pro UHF portable two-way radios? Thanks for any help.

## 660. Attention-All-Writers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Ron34@compuserve.com
Message-ID: <33b0e680.0@news1.ibm.net>
Source record: 92970

We are accepting new and previously published writers for publication.
We are a NEWYORK based international literary agency with three offices:
2 in NEW YORK and one in FLORIDA. Please follow guidelines for
submission: For all fiction, including screenplays for TV & Movies:
Send us a brief synopsis, the first chapter, and include a self-addressed,
stamped envelope=S.A.S.E.
Short Stories: Send brief synopsis, 3 pages, S.A.S.E.
Poetry: Send 3 poems, S.A.S.E.
For all nonfiction: Send us a brief synopsis, the first chapter, and include
a S.A.S.E.
Do not send complete manuscript unless invited.
WOODSIDE INTERNATIONAL LITERARY AGENCY
33-29 58 Street
Woodside, New York
zip: 11377
Tel: 718-651-8145

## 661. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: "Robert R. Koblish" <Xn3hat@erols.com>
Message-ID: <33B12261.149C@erols.com>
Source record: 92971

Dale Martin wrote:

> How about the guy at the convention (just about any convention)
> with the rubber duckie mounted on top of a hardhat? (I waiting
> to see a phased array....I just know it will happen)

Well, that one makes sense, at least. Improves coverage over wearing
the HT on your belt clip with the ant radiating into your abdomen.

Improves rx, lets you run low power, battery lasts all day, . . .
So what if it looks goofy?

--
regards
-Bob N3HAT

To reply, remove the leading X in my return address.

# 662. capacitor for Butternut vertical ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: "Robert R. Koblish" <Xn3hat@erols.com>
Message-ID: <33B125DE.2832@erols.com>
Source record: 92972
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

Hi,

A friend of mine has a Butternut (HF6V?) HF vertical antenna. The local hoodlums broke the doorknob capacitor that's in the 30 metre circuit.

Can anyone enlighten me as to the value of this capacitor, and suggest a possible source besides Butternut?

Thanks in advance.
--
regards
Bob Koblish, N3HAT
Baltimore

Anti-spam: To reply, remove the leading X in my return address.

## 663. Re: Attention-All-Writers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33B0C91A.5449@taxes.net>
Source record: 92973

This is the infamous Woodside agency that has been plaguing writers
with their "reading fee" scam for years, and was recently involved
in an alleged Internet stalking incident.

Here's the URL for the inside story on the Woodside scandal.
Go to this site for all the details:

http://www.geocities.com/~hitchcockc/story.html

You can probably find tons-o-stuff about Woodside in Deja News, in
the archives for misc.writing. And I believe Woodside is also mentioned
in the misc.writing FAQ.

You want to stay away from these people!

# 664. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Dave Burr <dtburr@mcs.com>
Message-ID: <01bc8188$01ebd7a0$693f5fcc@dtburr.mcs.com>
Source record: 92974
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

Why do you need to contact Fisher? (are they even still in business?)

This is typical in low-end electronics, but it can be solved. Most hams that have been around for a year or two could solve it (or greatly reduce it) for you in a heartbeat. If you know any experienced hams, try to contact him or her.

First, have you done any checking to see what the source of the RF is? Is it coming in on the AC line? Are you using the video feed into the TV or the composite signal from the VCR into the TV? Are you using good, shielded cable (in either case)? Are your connections good?

If all of the above checks out, have you tried winding the offending lead around a ferrite core for several turns?

If you are using the composite output from the VCR, have you tried a simple high pass filter? Does your "ham" equipment have a low pass filter? How about a good ground?

Contact a ham with some knowledge and he will go over this with you and you should be able to solve it in 30 minutes with maybe $5 of Radio Shack parts, if that. There is no point in contacting Fisher until all the easy fixes have been tried (99% of the time these will work).

Web Williams <kr4wm@sccoast.net> wrote in article
<MPG.e11000fd8fb44fe9896a0@news.infoave.net>...
> I'm a ham operator, and I use relatively high power levels (>1500 watts)
> on many different frequencies. My television set is not being interfered
> with, only when my wife wants to watch a video tape does my hobby begin
> to cause problems. No neighbors complain, so the problem is extremely
> local. The VCR is a Fisher, and I've been to thier website looking for an

> e-mail address to write to a technician, but there are none published. I
> know that many electronic manufacturers try to get by with the least
> amount of parts, but have available modification kits just for my
> problem. Any idea how to get 'hold of a Fisher factory tech on the
> internet? Anybody ever have this problem and fix it? Thanks -Web
> kr4wm@sccoast.net
>

# 665. Re: capacitor for Butternut vertical ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Patrick Lynd <patrickl@wco.com>
Message-ID: <33B14F5C.6312@wco.com>
Source record: 92975
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

Robert R. Koblish wrote:
>
> Hi,
>
> A friend of mine has a Butternut (HF6V?) HF vertical antenna. The local
> hoodlums broke the doorknob capacitor that's in the 30 metre circuit.
>
> Can anyone enlighten me as to the value of this capacitor, and suggest a
> possible source besides Butternut?
>
> Thanks in advance.
> --
> regards
> Bob Koblish, N3HAT
> Baltimore
>
> Anti-spam: To reply, remove the leading X in my return address.

Bob:

Finding the capacitor is easy, the problem is finding the proper size hexagonal female nuts and then getting them soldered to the capacitor. I managed to break off one of the nuts on the 40 meter capacitor and lost it. I tried to find a replacement or at least something that would do but was unsuccessful and finally had to call Butternut.

Let me warn you, Butternut isn't shy about charging a pretty steep price for the things.

Patrick Lynd (AC6YD)

## 666. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <867259407snz@microvest.demon.co.uk>
Source record: 92976
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

In article <01bc8188$01ebd7a0$693f5fcc@dtburr.mcs.com>
dtburr@mcs.com "Dave Burr" writes:

> Why do you need to contact Fisher? (are they even still in business?)

Fisher is a marque of Sanyo ELectric. They're in Teterboro NJ or a
town close by. Call information for Area Code 201.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

## 667. Re: transverter 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33b13a0c.11613730@news.atl.bellsouth.net>
Source record: 92977

On 23 Jun 1997 06:47:07 GMT, "Arthur Kloc" <klocworx@v-wave.com> wrote:
>Dimitris Koystravas <sv2dsu@med.auth.gr> wrote in article
><33AD88F2.C9BA8266@med.auth.gr>...
>> hello out there...from greece
>> i wnat to ask if there is someone how have any schematic to make a
>> transverter for the 2m band?
> In 1985 ARRL handbook Chapter 31 you can find two circuits: one "easy" and
>the other high performance (in that era). If you'll have problem locating a
>copy, let me know and I will try to scan couple of pages and e-mail them to
>you.

Even better is to get a copy of the RSGB's _The VHF/UHF DX Book_ edited by
our own Ian White. In there you will find a chapter detailing the Suffolk Transverter
by Sam Jewell. This is a modern high performance transverter design.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 668. Re: capacitor for Butternut vertical ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33B1055F.10EB@taxes.net>
Source record: 92978
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

You can get the pF value from Butternut. The actual capacitor
doesn't have to be an EXACT replacement as long as the value
and the physical dimensions are close.

Current and voltage handling requirements are important, but
you may be able to use molded "postage stamp" silver mica caps
if you're QRP. Alternatively, if you've access to any smaller
fixed vacuum caps (ARC-5 surplus, mainly) these could work.
I typically see a few of these at every swapfest for less than a buck.

And I've successfully repaired an HF6V with a handful of assorted
doorknob caps hand selected for value and series-paralleled.

OR -- take the easy and sanitary way out, and send Butternut
some buck-olas.

N6OTQ

# 669. Re: www.hamradio-online.com: Photo of Yaesu's pager-sized HT available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <33B15FBF.5115@bnr.ca>
Source record: 92979
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

Barry O'Grady wrote:
>
> vbook@vbook-nospam.com (Ed Mitchell) wrote:
>
> :Ham Radio Online is a free online web "magazine" about ham radio. No ads. Its
> :run by volunteers. We have nothing to sell. Come enjoy our web site at
> :http://hamradio-online.com
> :
> :------------------------
> :Ed (KF7VY) and Kim (N7VPL) Mitchell
> :SEND email replies to vbook@vbook.com
> :Visit Ham Radio Online, it's free! at
> :http://www.hamradio-online.com
>
> There are a great many errors in the information provided. It's obviously
> written by people who have an inflated idea of their knowledge.

?Where is YOUR free ham radio web page located :-)
Gabe Nemeth VE3SLJ.

>
>
> ====================================
> To reply via email please remove the XX from my
> return address.

## 670. Re: transverter 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <RK13oHAuLWszEwXk@ifwtech.demon.co.uk>
Source record: 92980

Gary Coffman wrote:
>
>Even better is to get a copy of the RSGB's _The VHF/UHF DX Book_ edited
>by our own Ian White. In there you will find a chapter detailing the
>Suffolk Transverter by Sam Jewell. This is a modern high performance
>transverter design.

For details of the book, see www.ifwtech.demon.co.uk/g3sek

I'll be posting some new FAQ/follow-up pages in a few days.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

## 671. fs - 300FT COAX...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <33B195A8.C5B@worldnet.att.net>
Source record: 92981

COAX CABLE ---- heavy-duty, 1cm diameter, black plastic
covering, with foam dielectric. New, was on wooden spool
until I unwound it to get approximate length of 300 + feet.
No marking on cable; spool label says 1GHz. Was left
after cable TV upgrade, so probably 75 ohm. $20 + ship.

## 672. Analysis/Synthesis Capability for Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <33B18C4A.79D@webblabs.com>
Source record: 92982
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radioamateur..misc,rec.radio.amateur.space

Many amateur radio operators have contaced us in recent months regarding availability of affordable electronic analysis and synthesis tools. We have now released Version 2 of the Professional Partnership (PP) Program. While there is a one-time $975 charge, the PP program may be distributed throughout a club, organization or company. Of special significance is the profound level of Wireless/RF/Microwave capability included.

The PP Program includes:

Nodal Circuit Analysis with True Two-Node Port Definition
Unconstrained Noise Analysis
Transmission Structure Synthesis & Analysis
Over 40 Single & Coupled Topologies
Strip (Planar) Structures
Wire Lines
Coaxial Arrangements
Waveguide (Non-TEM) Topologies
Passive Filter Synthesis
Lowpass
Highpass
Bandpass
Prototypes
Practical Reactively-Coupled Realizations
System & Receiver Design Support
Link, Terminal & Radar Analysis
System Architecture Characterization
Spurious Analysis
Transmit & Receive
Coincident & Tuned
Preselector & Output Filtering
Phase Noise Analysis
Time Domain Effects
Frequency Domain Effects

500+ Page User's Manual with Examples & References

Acquire a single PP Program package for your club, company or organization, and you will be furnishing all of this needed capability to every designer, not just one! Our competitors are furious with us for having created the uniquely progressive opportunity. It seems they're still using dongles to hinder access to their own products.

Please contact me for additional information.

Kathy Goerg
Professional Partnership Program Coordinator

Webb Laboratories

## 673. FS: Drake L4PS for L4B/L7 linear <<<<<<<

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970625233801.TAA14273@ladder01.news.aol.com>
Source record: 92983

To add to previous posting:

If picked up in Dayton, Ohio price would be $150.

Thanks.

Evan
K9SQG@AOL.com

## 674. Re: Specs of Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Jim Strohm <jstrohm@texas.net>
Message-ID: <33B1C0E1.48DB@texas.net>
Source record: 92984

For the IRF parts, International Rectifier was the first-source
supplier and should have data sheets available if you call a sales rep
or their literature distribution center and ask nicely.

Usually the data sheets are free if you know how to ask.

For the others -- An Allied or Newark catalog may turn up a supplier
or manufacturer, and then you work backwards for the data sheets.

If you can find the part listed in a cross-ref or service-part
substitution book, you might get enough data from a similar part.
back before fire was invented, SK and ECG used to provide some
very complete catalogs that -- while not good enough for UHF
and microwave work, would sure help for audio and small-signal
VHF.

Part of the hobby is tracking down the information!

N6OTQ

## 675. <Attention-All-Writers>

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Poe@idt.net
Message-ID: <33b1d085.0@news1.ibm.net>
Source record: 92985

We are accepting new and previously published writers for publication. We are a NEW YORK based international literary agency with three offices: 2 in NEW YORK and one in FLORIDA. Please follow guidelines for submission:
For all fiction, including screenplays for TV & Movies: Send us a brief synopsis, the first chapter, and include a self-addressed, stamped envelope=S.A.S.E.
Short Stories: Send brief synopsis, 3 pages, S.A.S.E.
Poetry: Send 3 poems, S.A.S.E.
For all nonfiction: Send us a brief synopsis, the first chapter, and include a S.A.S.E.
Do not send complete manuscript unless invited.
<WOODSIDE INTERNATIONAL LITERARY AGENCY>
<33-29 58 Street>
Woodside, New York
zip: 11377
Tel: <718-651-8145>

# 676. !!!PROVEN PSYCHICS / FREE PREDICTIONS!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: file@brainlink.com
Message-ID: <5oqm49$1qu@kensie.dorsai.org>
Source record: 92986

Curious about psychics? Now you can try a psychic
reading free, just dial 1-800-677-8039 - our free
samples line where master psychics will amaze you
with their knowledge and forsight. Try it now -
see for yourself. adults over 18 only

Dial 1-800-677-8039

# 677. !!!FREE PSYCHIC READINGS / FIND OUT HOW!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: file@brainlink.com
Message-ID: <5oqr3o$3li@kensie.dorsai.org>
Source record: 92987

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

## 678. !!!FREE PSYCHIC ADVICE/SPECIAL SAMPLES LINE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: file@brainlink.com
Message-ID: <5or71j$73k@kensie.dorsai.org>
Source record: 92988

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-677-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-677-8057

# 679. !!!TROUBLE WITH LOVE??? TRY A PSYCHIC FOR FREE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: file@brainlink.com
Message-ID: <5or02f$54f@kensie.dorsai.org>
Source record: 92989

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

## 680. Re: capacitor for Butternut vertical ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33B1896B.A19@qsl.net>
Source record: 92990
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,sci.electronics.repair

I have the original patent here with me, in hand.
It specifies 67 picofarad for the 30 Meter section.
the 40 Meter cap is also 67 pf. the 80 meter cap
is 200 pf. Hope this helps.

Patent # 4442436 filed Nov.16, 1981. Approved 4/10/1984.

Here's the IBM patent server:

http://patent.womplex.ibm.com/
Select Patent Number search (This is at the bottom)
and Enter:4442436 in the dialog box.

At the top of the summary page, you'll see that you can
actually look at each submitted graph/text of the patent
in its entirety.

Don't know where to get these though....
Good Luck.
-Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARCI#????
mailto:we6w@qsl.net http://www.qsl.net/we6w

## 681. AA7 Superhet Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-25 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5os8et$qol@rosenews.rose.hp.com>
Source record: 92991

Ok, so I set aside building TRF broadcast receivers..they got boring.

I decided to build a Superhet using the old shouldered glass tubes i.e. 6K7G etc.... use a separate oscillator, 3 ganged tuning condenser with similar capacities, (would need a 'padder' to compensate for tracking problems) and an S-meter. I planned on winding my own rf coils just like the TRF's.

Well, then I decided that since I already had a supply of the standard 7pin bottles, decided to go with an AA7. Incorporate an RF amp, use an aerial instead of a loop to begin with...12BA6 feeding the mixer 12BE6, one stage of IF 12BA6 to the 2nd detector 12AV6 and finally 25C5 output. I used another 12BA6 for the high-mu triode section to see if I could get an S-meter amplifier going.

Found a lot of the stuff I needed including chassis at Alltronics in San Jose off Zanker Road. The rest came from AES etc etc... No power transformer needed! Usually the most expensive part. I hate that.

I've never built a TRF or Superhet in my life and after my success with TRF's decided that a superhet cant be any worse. For anyone learning electronics basics and/or wants to restore antique radios instead of just collecting them, I would highly recommend going through the same motions I did to learn about the pitfalls and successes of AVC, coupling, tracking etc etc. I'm still learning, but in the process came out with a pretty good AM radio that competes with the standard AA5's of that day. Well, a cheap one anyway.

The coils were all designed around standard coil winding formulas found in the ARRL handbook and various other sources. You need lots of sources to figure out what one alludes to but never makes clear.

Most of the radio is just normal biasing math, i.e. consult with the tube manuals for tube specs and find a value to start with, I came up with the same numbers used by most AA5's. Tubes are very tolerant and you can be several hundreds of ohms off one

way or the other I found. The coil design became
the most critical in insuring this wasnt all wasted
effort. If I didnt get the coil dimensions and
number of turns right, if I didnt couple the IF
windings right, and since they werent going to
be shielded...they could...well, you can see
what I was up against.

I decided against using a tuning condenser with
similar capacities. I thought I would also have to
use a 3 ganged condenser: RF, Mixer and Osc.

Decided to go for the standard Superhet 2 ganged
RF and Osc section. RC couple the RF amp to the
mixer. Easy.

The rf coil was calculated to work 550 to 1700 Kc,
and so consequently I wound the osc to track 455 Kc above
that. The IF transformers were easy and I used ceramic
trimmers. These came out to be about 30pF once adjusted.
Having a Scope and RF Gen is mandatory in addition to
your usual DVM or Triplett VOM etc.

I used Lucite dowels of the proper diameter as cores
and bank wound all the coils. Bank wound coils require
an extra step once you've calculated the needed inductance
for the frequency you want to cover. Also you need to
figure out how to keep the winding all 'bank wound' and
not end up in a big sloppy ball. I did this by winding
the coils first on a similar dowel with some tape over
where the wire would lay, this would allow me enough
play (once wound) to get the coil off the dowel so
I could transfer it over to the actual dowel I would
use. This turned out extremely successful and the coils
almost look commercially-wound. They had just enough of
an extra diameter that I could also moved them up and
down the dowel, which was important when I was adjusting
the coupling between the IF coils.

When I first powered up, the thing was oscillating like
crazy and I figured 'Oh well, so much for my radio-design
days' but pondered and floundered along until I realized
that the sqealing was due to something other than the
local osc not tracking the RF amp. I found the oscillator
wasnt even oscillating. The coil is the Hartley type
with a tap at 10% up from the ground end. I had to ground
the (RF ground) tuning cap body AVC and also had the coil
ground at the same RF ground point. Shoulda worked I thought.
Well, as soon as I chassis-grounded the osc coil, it worked
great. Had some distortion, turned out to be bad 25C5.

New one on order. In the meantime, I had to go with a
35C5 and yank the pilot lamp out to give me the needed
filament voltage.

I have plenty of gain, and for local stations, good selectivity,
even for unshielded IF coils garage-built by joe blow
from Kokomo. I plan to add another stage of IF which
should give even more gain and selectivity. I am able to
hear KNX in LA here near Sacramento etc.... I do have some
image problems which I need to check out, but otherwise
without any modifications to the coil, my bandwidth was
from about 850 kc to 1650 kc. I added about 25% more
inductance to the Osc coil and was able to trim its
trimmer to cover from 640 to 1650 kc now. I am having
problems getting the S-meter to work correctly. Using
a bridge circuit which follows the AVC voltage. Doesnt
seem sensitive enough and I cant zero it. I found that
the filament string has lots of influence regarding gain,
etc and that it is important that the string come out
to 120V or you are going to see significant degredation
in performance.

I decided that until I could figure out why I couldnt get
the bridge circuit for the S-meter to work, I'd just
meter the plate current of the meter amp. So, the meter
kind of works backwards. That is, the meter is pegged
for no signal, and then when the AVC is strong, the
negative AVC starts cutting off the plate current
and so the needle dips. No big deal. But it still
bugs me, I'll be working on that.

If any of you would like help trying something like
this let me know, I'd be happy to try to help.
It is very interesting, you know. Thanks to
John Bell in Roseville Ca. who has been down this
road before gave me a lot of assistance. He has wound
his own IF coils etc. too.

## 682. Re: transverter 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <znZvjEAfprszEwAf@ifwtech.demon.co.uk>
Source record: 92807

Zack Lau wrote:

>Is there any interest in really high performance designs?

>What is really "good enough?"

I'm sure that there's always interest (well, I would say that, wouldn't I?)

It's very difficult to find transmitter and receiver designs that can cope with VHF DX and contest situations.

Right now we're probably at the stage of development where the best-equipped stations can survive if a near neighbor is beaming straight at them, and their own antenna is oriented away in some random direction. But both receivers will probably fold in a head-to-head situation, so there's still more work to do.

Development goes in cycles. With receivers, some years ago it was VHF front-end overload; then we built better front-ends and the problem moved to IF overload (or HF transceiver overload for people using transverters); then we upgraded our IFs and the problem shifted to synthesizer noise; and now maybe we're coming back around to the VHF front-end again.

Meanwhile we're also trying to improve our transmitters - and of course encouraging the other guys to do the same!

At each step we gain some real advantages, but they also uncover another layer of the problem.

The important thing is always to analyse the WHOLE SYSTEM, and not just rush to use all the latest devices. For example, GaAsFET RF amplifiers were a step backwards until we learned how to use them properly: they can't offer much additional S/N improvement over a front-end that's already good, but their very high gain can ruin strong-signal performance.

>I've been thinking of using an image reject mixer using
>phased FET rings--which ought to get the mixer's input
>intercept around +45 dBm. This could accomodate a very
>low noise power FET preamp, perhaps with some clever
>feedback to get the gain down to more reasonable levels
>for a very high input intercept.
>
Exactly my point - every dB of unnecessary RF gain will chop close to a dB off the top end of the dynamic range.

The Suffolk transverter is quite carefully designed so that it doesn't have any conspicuous weak points. Unless the HF RX front-end is very robust against strong in-band signals, it will overload before the transverter does. This approach also gives the best performance out of a system made using relatively low-cost devices. The down-side is that if you want to upgrade the performance of the transverter, you'll probably have to re-design every single stage.

>Also, if one enjoys metalworking, one can devise much
>better filters than typically used. I just built an
>interdigital 432 MHz filter with a 2.7 MHz bandwidth
>and 2.5 dB of loss.
>
Out-of-band interference is a separate problem really. If you can build an RF amplifier with a moderate-Q (ie low-loss) input network that can handle strong out-of-band signals without folding, then you can afford much more filter loss after that stage, and present the mixer with a highly band-limited spectrum.

OTOH, if the RF stage needs some extra protection ahead of it, I agree that must involve heavy metal.

>Along similar lines, it looks like the 100W MRF 177M Gemini
>FET pair would make a dandy class A amplifier at the 10
>watt level. One question I haven't quite resolved is noise
>from a switching power supply. Often, you still end up with
>AM modulation from the switching--which is awfully tough to
>reduce below -100 dBc.

Tell us more, Zack - how many volts, how much power gain, how little IMD... how many $$$?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

## 683. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: yaesutom@aol.com
Message-ID: <19970626161500.MAA24208@ladder02.news.aol.com>
Source record: 92808

> How about the guy at the convention (just about any convention)
> with the rubber duckie mounted on top of a hardhat? (I waiting
> to see a phased array....I just know it will happen)

I once saw a guy with a 3 element 440Mhz quad on his helmet.

yaesutom@aol.com
http://members.aol.com/yaesutom

## 684. Some BA instrumentation. SEM & Pyrometer heads.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <33B2ACB0.29B9@atl.org>
Source record: 92809
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,sci.electronics.equipment

It's not an 'old radio' but has the same appeal here.

It's got a filament and a vacuum and is almost a tube.

It's the ISI-40 Scanning Electron Microscope (SEM)
that I'm picking up tomorrow. Alas, no manual and no
pumps.

On the off chance someone has a manual for this beast...

Oh, It's got a CRT too so that's two tubes :-)

Also a couple of other odd bits made there way over here today.
They appear to be some sort of optical pyrometers.
Each has an objective lense, a partially silvered mirror
to split 'light' path between eyepiec and what appears to be a
photodiode(with a chopper in the path to the diode)

I mention these as possible swap fodder for a manual and maybe a pump
(which I'm sure will require additional swap bits).

-bob

## 685. Re: Simple MOSFET test?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ou7tu$q8e@hpcvsnz.cv.hp.com>
Source record: 92810

Bill Meara (wmeara@erols.com) wrote:
: Homebrewers:

: I'm working with some dual gate MOSFETS (Depletion mode). I know
: that these devices are very susceptible to damage by static charges.

: Is there a simple test that can be performed with a VOM to determine
: if the gate-n channel dielectric is good?

: I'm looking for something simple that can be done with a VOM -
: something similar to the standard check that can be done on the
: junctions in a bipolar transistor.

: If I put a VOM across the gate and the n-channel (source or drain) I
: should get a very high resistance correct? (This is essentially a
: capacitor in a MOSFET, right?)

Yes, you should read an infinite resistance both directions with
your ohm meter. You can short the drain and source leads together
and measure to the gate. Be very careful with these guys: take
proper static (ESD) precautions. Work on a conductive surface,
and ground yourself to that surface before picking up the transistors.

Another test you can do that will give you a more quantitative
indication of gate leakage current: Connect the ohm meter between
drain and source...positive to drain, if it's N-channel. Connect
a large enough voltage from gate to source to turn off the channel.
Disconnect that voltage, letting the gate float...shielded from
excessive hum and electrostatic pickup. Watch the meter show you
how the gate capacitance discharges with time. For example, if
the gate capacitance is about 1pF, and it takes 20 seconds for the
channel resistance to change enough to indicate a 1 volt gate
change, then the leakage current is about 1/20 of a pA. I've
often seen leakages like that, or even less, on good transistors.
Obviously, you can calibrate things if you want to get a bit more
complicated. If you do have gate leakages down in that range,
you'll never see them on the typical ohm meter!

--
Cheers,
Tom
tomb@lsid.hp.com

## 686. Re: AC pwr xformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ou8n4$q8e@hpcvsnz.cv.hp.com>
Source record: 92811

Lou or Annette Hinshaw (aruder@pipeline.com) wrote:
: Lee <ab7on@paclink.com> wrote:

: >I am in need of AC step down power transformer 125-125 primary 60hz to
: >18-20 vac secondary at minimum of 15 amps. Can be surplus, used or new.
: >I need at least 3 of these.

: make 'em.

..

: The first one should be an evening's work. The other two might take
: another evening.

Maybe that's OK for Lou, but I've got better things to do with my
evenings! Lots of good surplus places around with transformers.
"Surplus Center" in Lincoln, NE, and Herbach and Rademan in
Philadelphia have stuff like this, and so do many other places.
I'd be happy to scout them for you and sell them to you for the
price of two evenings of my time, billed at consulting rates...

:-)

(Plus, televisions with 60Hz power transformers are getting pretty
hard to find these days! Mine, even 20 years old, seem to be all
off-line switchers or just direct floating chassis.)

--
Cheers,
Tom
tomb@lsid.hp.com

# 687. Re: Carson 117V/880V transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: aa744@james.freenet.hamilton.on.ca
Message-ID: <5ou04o$pil@james.freenet.hamilton.on.ca>
Source record: 92812

You could probably use a filament transformer,and an old microwave
transformer,,,,good up to 1 amp secondary
Fred
VE3-FCX,,,,btw,,,I have save a few here.
In <01bc8128$81d92d60$bb436cce@default>, "Rob Gregory" <skidrow@interlog.com>
wrote:
> Wondering if anyone out there knows where I can get one
> of these old transformers.
> For a Hy-Gain amplifier from mid 70's era.

> Thanks
> Rob VE3-LUA

## 688. Specs of Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <867278036@infoway.com>
Source record: 92992

I received the response that a little more info/explaination
would be useful to help direct me toward data sources.
I go to my local parts store, and look
at their solid state devices & prices, then figure
if those pieces can be used in any of the circuits I have
under consideration. They don't give many specs, and
when they do, often incorrect specs.
Project wize, I'm interested in a 2mtr amp from 2 watts to...
(Maybe class E?)
For example
Where do I go to find mfg data sheets for the following FET's:
In particular, I need freq spec, are these useful for powersupply,
HF,VHF transmitter, rf switches for rdf etc.

BUZ45 MOSFET, N-CH $4.95
BUZ53A 1000volt 2.6 amp TO-3 $7.50
BUZ74 500volt 24 amp TO-220 $1.25
HXTR6103TXV NPN,Bi, Hi-rel, 4 GHz, HPAC100 pack 5.95
IRF441 MOSFET, N-CH TO-3 $3.95
IRF512 MOSFET, N-CH TO-3 $1.25
IRF840 MOSFET, N-CH TO-3 $ .95

MTP12N20 FET 200V 6amp N-CH, TO-220 $1.95
MTP8P08 FET 80volt 8 amp P-CH, TO-220 $1.95
VN-64 MOSFET 60V 10amp 80watt TO-220 $2.75

Thanks for a point in the right direction.
Don

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739

---

# 689. fs - 300FT COAX...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <867289880@infoway.com>
Source record: 92993

OK, I'll give you $20 plus reasonable shipping.
Or pick up if local.
Where are you and how much is shipping?

I am at
57 Junipero Serra Ave
San Rafael, CA 94901
(415) 459-4503

Newsgroups: rec.radio.amateur.homebrew
De> Subject: fs - 300FT COAX...
De> Date: Wed, 25 Jun 1997 15:03:20 -0700

De> COAX CABLE ---- heavy-duty, 1cm diameter, black plastic
De> covering, with foam dielectric. New, was on wooden spool
De> until I unwound it to get approximate length of 300 + feet.
De> No marking on cable; spool label says 1GHz. Was left
De> after cable TV upgrade, so probably 75 ohm. $20 + ship.

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

# 690. Re: www.hamradio-online.com: Photo of Yaesu's pager-sized HT available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: richardm@zeta.org.au
Message-ID: <5osjr5$qg5$1@godzilla.zeta.org.au>
Source record: 92994
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

In <5ojrqq$2cg$1@news.mhv.net> Tom@astro.net writes:

>In article <33ac0a2c.8653671@news.fastlink.com.au>, barryoXX@fastlink.com.au wrote:
:
>>There are a great many errors in the information provided. It's obviously
>>written by people who have an inflated idea of their knowledge.

> Want to elaborate on that? Just what are you talking about? The site is
>just fine.

Tom, don't waste your time trying to get a sensible answer out of Barry -
he's evidently a congenital idiot, whose feeble mind overloads when he
sees American spellings (e.g. "20 meters" as distinct from "20 metres").
He never contributes anything of any worth to this newsgroup, preferring
to troll it when the aus.religion and aus.politics mob ignore him...

73 Richard VK2SKY

## 691. Linearize GE MASTR II PA ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <33B28CE7.665A@mwt.net>
Source record: 92995

Anybody ever try to make a class C GE Mastr II 100 Watt PA linear? I'd like to try it for SSB or maybe even ATV. Would it just need a little biasing circuit on each amplifier stage or more surgery than that??
73, Scott, N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

# 692. Re: AC pwr xformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5oslqo$4ea@camel3.mindspring.com>
Source record: 92996

Lee <ab7on@paclink.com> wrote:

>I am in need of AC step down power transformer 125-125 primary 60hz to
>18-20 vac secondary at minimum of 15 amps. Can be surplus, used or new.
>I need at least 3 of these.

>Lee / AB7ON
>ab7on@paclink.com

make 'em.

Get 3 olt TV sets the big kind with huge xfmrs in them, and remove the
last (secondary) windings.

Wrap 10 turns of wire around the primary and hook it to a 10 K ohm
10 watt resistor.

connect primary to a line voltage and measure both primary and
secondary voltage.

Divide secondary voltage by 10. You get Turns-per-volt value
AT THAT INPUT VOLTAGE. if that is your regular voltage, fine.

If not, take a ratio to tell you what you would have in the secondary.

then with your new T/P/V value, figure how many turns you got to
have to get the voltage you want.

The first one should be an evening's work. The other two might take
another evening.

Good luck.

Lou HInshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

# 693. Re: ! PROVEN PSYCHICS! TRY-IT-FREE!! 1-800-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33b1fadf.1246359@news.capital.net>
Source record: 92997

On 25 Jun 1997 03:42:41 GMT, vank6@aol.com (VANK6) wrote:

>
> Why don;t you post your Psychic ad someplace else,I for one would
> thank you.

How do you think your request is going to get to this spammer? Posting it here on this newsgroup won't do it. These things are spewed out by an automatic robot.

--
Butch N2YMJ

To send mail,
delete the xyz
from my address.

## 694. Simple MOSFET test?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33b239e7.2370892@news.erols.com>
Source record: 92998

Homebrewers:

I'm working with some dual gate MOSFETS (Depletion mode). I know
that these devices are very susceptible to damage by static charges.

Is there a simple test that can be performed with a VOM to determine
if the gate-n channel dielectric is good?

I'm looking for something simple that can be done with a VOM -
something similar to the standard check that can be done on the
junctions in a bipolar transistor.

If I put a VOM across the gate and the n-channel (source or drain) I
should get a very high resistance correct? (This is essentially a
capacitor in a MOSFET, right?)

Any advice or guidance would be appreciated.

73 de Bill N2CQR

## 695. Re: Perth radio experimenters group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33b24636.0@cheese.pcug.org.au>
Source record: 92999

Tony - Re your query about PREG, I noticed that they no longer have their home page up. I don't have any email addresses for them. However, you could try ringing Rod Green VK6KRG on (089) 271 7145 or write to VK6KRG or VK6BRO QTHR in the callbook (the Internet QRZ callbook should be OK).

73,

Peter VK1PK (ex VK6BWI & PREG member)

--


_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

# 696. ! PROVEN PSYCHICS! TRY-IT-FREE! 1-800-677-8063

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: sue@quicklink.com
Message-ID: <5ot9r3$3hm$5403@news.quicklink.com>
Source record: 93000

The Live Psychic Calling Center invites you to enjoy
a complete fifteen minute, live psychic reading with
no credit card charges. Try it Free on
1-800-677-8063. Adults over 18 only.

Dial now 1-800-677-8063

## 697. Re: transverter 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <33B275E0.D43@arrl.org>
Source record: 93001

Is there any interest in really high performance designs?

I've been thinking of using an image reject mixer using phased FET rings--which ought to get the mixer's input intercept around +45 dBm. This could accomodate a very low noise power FET preamp, perhaps with some clever feedback to get the gain down to more reasonable levels for a very high input intercept.

Also, if one enjoys metalworking, one can devise much better filters than typically used. I just built an interdigital 432 MHz filter with a 2.7 MHz bandwidth and 2.5 dB of loss.

Along similar lines, it looks like the 100W MRF 177M Gemini FET pair would make a dandy class A amplifier at the 10 watt level. One question I haven't quite resolved is noise from a switching power supply. Often, you still end up with AM modulation from the switching--which is awfully tough to reduce below -100 dBc. What is really "good enough?"

--Zack Lau W1VT zlau@arrl.org

# 698. !!!FREE PSYCHIC READINGS / FIND OUT HOW!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: sue@quicklink.com
Message-ID: <5otn98$b7n$5403@news.quicklink.com>
Source record: 93002

Hear a gifted psychic speak your fortune and future
on 1-800-677-8048 our special samples line where you
can try a psychic reading free. Don't take the word
of others - see for yourself just how accurate they are.
Adults over 18 only.

Dial 1-800-677-8048

## 699. Re: Specs of Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ou9lm$q8e@hpcvsnz.cv.hp.com>
Source record: 93003

Don Phelps (don.phelps@infoway.com) wrote:
: Where do I go to find mfg data sheets for the following FET's:
: In particular, I need freq spec, are these useful for powersupply,
: HF,VHF transmitter, rf switches for rdf etc.

: BUZ45 MOSFET, N-CH $4.95
: BUZ53A 1000volt 2.6 amp TO-3 $7.50
: BUZ74 500volt 24 amp TO-220 $1.25
: HXTR6103TXV NPN,Bi, Hi-rel, 4 GHz, HPAC100 pack 5.95
: IRF441 MOSFET, N-CH TO-3 $3.95
: IRF512 MOSFET, N-CH TO-3 $1.25
: IRF840 MOSFET, N-CH TO-3 $ .95

: MTP12N20 FET 200V 6amp N-CH, TO-220 $1.95
: MTP8P08 FET 80volt 8 amp P-CH, TO-220 $1.95
: VN-64 MOSFET 60V 10amp 80watt TO-220 $2.75

For the IRF parts, go to www.irf.com, which is International's web site. You are likely to find that they don't have data sheets on the web site for what you want, but they have a fax-back service. The web site lists the fax-back numbers for each part. They also have a cross-reference look-up window on the web site, and you might find the BUZ numbers in it. The HXTR looks like an HP number...I'm not sure what we have on our web site for part data sheets! ;-) I'm spoiled by our internal info systems; sorry. I think the VN number is Siliconix...and I think you can get there thru www.temic.com but I'm not positive about that. Who does the BUZ parts? Siemens? Motorola? (Moto did one or two BUZ parts, but has dropped them, I believe...may be identical to a Moto number.) -- Check web sites. The MTP parts are Motorola and should have data sheets on www.motorola.com.

I saw a picture in a trade magazine recently of a room full of catalogs at a semi mfgr being cleared out: they are going to delivering them on the web and on CD-ROM. I sure like that better! I can get data sheets pronto, almost all are in Adobe Acrobat format which prints nicely, and the "books" (CD-Roms) take up MUCH less space on my bookshelf.

If the web sites I mentioned aren't right, you should be able to search for each company and find obvious hits.

--
Cheers,
Tom

tomb@lsid.hp.com

## 700. Magnet wire wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: "W. Worley" <worley@snowhill.com>
Message-ID: <33B2C448.60CC@snowhill.com>
Source record: 93004
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

Want SURPLUS #25 magnet wire,( or possibly #24 and #26 ) at least 3 or 4 lbs, not over $2/lb please. Will buy up to 10 lbs of one size. May need other sizes in future. Email or call 334-347-5281.

## 701. FS: Xtal 10.7MHz 4pole 25KHz filter (6 pcs)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: cliff@leica-gps.com
Message-ID: <867350815.2473@dejanews.com>
Source record: 93005
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.swap

Have Qty 6 Crystal 10.7MHz 4Pole 25KHz BW filters, ECS-10.7-15B
(DigiKey# X704-ND) forsale. All unopened in original sealed bags.
Needed per K0PFX/WB9MJN IF mods for Mitrek 9600 baud packet operation.
New price $25, will sell/ship anywhere in CONUS for $15 with prepayment.
Bought more than I actually needed. -Cliff

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 702. Digital Frequency Display with backlit display module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-26 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <33B2B432.60CB@aade.com>
Source record: 93006

The Digital Frequency Display with backlit display module is now
available. Unfortunately they are expensive, $29.30 Digi-Key price.

Digital Frequency Display with backlit module $74.95+$1.50 S/H
Digital Frequency Display standard module $49.95+$1.50 S/H

DFD specifications have changed a little to make it easier to adjust
and assure temperature stability. IF offset range 16.383MHz max in steps
of 1 KHz.
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

## 703. amp for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: pquandt515@aol.com
Message-ID: <19970627030201.XAA03531@ladder02.news.aol.com>
Source record: 92813

```
new amp for sale . marage dual band 2m 440 1 line in 1 line out cost 179
new sale for 115 + s&h or trade for hard drive email to pquandt515@aol.com
```

# 704. WTB Boat Anchor.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: Trapper27@juno.com
Message-ID: <33b35190.440114@nntp.infoave.com>
Source record: 92814

I am looking for something to receive 20 40 & 80 meters... I don't care if it operates by means of Transistors, Tubes, Rocks, or squirrel power! I would just like to be able to receive the above bands on a rig that has a readout or dial that will give me an idea of what fequency I am at.

I live in the Greenville South Carolina and could drive to pick up Rcvr if your location is close enough. Otherwise we could arrange prepayment and shipping.

Price wise.... I am looking for the cheapest thing I can find.

"Duh" thats a given... every buyer wants the lowest price.

What I guess I mean by the above is that.... I am not preoccupied with asthetics. If its missing a few knobs or lights are burnt out thats fine... Notch filters etc.... are not required. I don't have a lot of cash... I am a young married trying to pay for a new home and land..... and a boat anchor at the right price that I could build filters for etc... would be right up my alley.

Anybody feeling charitable.... I may be more trouble than I am worth.... but I will sing your praises high and low! <Grin>

# 705. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970627041101.AAA11736@ladder01.news.aol.com>
Source record: 92815

In article <5oml8v$r65@lace.colorado.edu>, tiemann@spot.Colorado.EDU
(TIEMANN BRUCE) writes:

>
>"The antenna's the thing!" They could even stoop to MODEL the
performance
>of various antennas, and state what the calculated performance is, but
>instead there's just silence.
>
>Does anyone out there have an idea how this might be changed?

If you think people ready to fight over code vs. no-code, you should see
the arguments about which antenna works best, or how to measure
gain properly, or if gain was measured properly. Even the best of the
antenna modeling software isn't always right either. You tell me
what's best, a butternut vertical, a gap vertical, or a cushcraft, and
I'll
know which one you presently own. It's difficult to measure how well
something as simple as a vertical works. If you use an antenna range,
there are certain requirement that have to be met. If you just set up the
antenna as a typical ham would on a mast a certain height for a quad,
log periodic, or quad, you'll still get complaints that the height used
wasn't the proper one. If you use a Field Strenth Meter (FSM) 3 miles
away to make measurements, some will claim that's too far, and others
will point out that you can't tell what the takeoff angle is for such an
antenna with such a simplified test. That is of course assuming that
your FSM is either properly calibrated or has a repeatable scale with
known accurate means of antennuation.

Note that I haven't even gotten to whether dBd or dBi should be used
as the reference scale, and the question of what real world reference
antenna also raises questions. LET'S be honest, in the real world
everything about antennas as set up by the average ham is guess
work. Oh, we can use SWR meters, power meters, antenna analyzers,
in the end all we can do is use the antenna and see if we're happy with
what we can hear, and who can hear us.
-art clemons-

## 706. new ham website

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: n2kbk@aol.com
Message-ID: <19970627044500.AAA13827@ladder01.news.aol.com>
Source record: 92816

check out
http://members.aol.com/n2kbk

please email me and let me know what you think of this site.Any
suggestions welcome.

73 chris

# 707. Don't read this message!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: Jason <jlsb@ix.netcom.com>
Message-ID: <5ovgfb$g16@dfw-ixnews11.ix.netcom.com>
Source record: 92817

CALLING ALL LITERARY MINDS!

I am trying to compose a coffee table book on the topic of EXCUSES.  To add an original flavor to my project
I am attempting to derive my research entirely from people I come in contact with on the Net.
If you have, or know of, any interesting, unique, or even bizarre excuses, and would like to participate in this experiment
in creative literature, please reply to this message with your excuse.  Any excuse that is used in the published version will
receive full literary credit.  Thank you in advance for helping a fellow netizen.
Long live free speech!

Sincerely yours,

Jason

## 708. 50.400AM this weekend!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33B3CC49.794B@pactitle.com>
Source record: 92818

Hello all,

I'll be calling CQ on 50.400 AM all this weekend.

Was a bummer I missed out on lastnight's good opening.
Need to check the radio before I go to bed.

Sat I'll be on from 10:00 pdt - 22:00 pdt
Sun from 10:00 pdt - 18:00 pdt (later if there's openings)

Hope to hear from you...

P.S. If you have not checked out my 50AM web page, please do so......

http://www.geocities.com/Hollywood/5860/50am.html

73....
Dave Booth kc6wfs dm04rk Saugus,Ca
http://www.geocities.com/Hollywood/5860/
booth@pactitle.com

# 709. Re: Some BA instrumentation. SEM & Pyrometer heads.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: "S. Lee" <slee@u.washington.edu>
Message-ID: <Pine.A41.3.95b.970627094138.77288B-100000@homer35.u.washington.edu>
Source record: 92819
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,sci.electronics.equipment

Seems to me that you'll be needing two pumps, Bob. The first
is a mechanical roughing pump to get your first vacuum. Next
you'll need an oil based diffusion pump to get your hard vacuum.

A good place to look for these pumps is at a university's
surplus property sales department. I've seen a few go out to
auction this way.

There are a lot of seals in an SEM, Bob. Hopefully you will
have access to something like a helium leak detector otherwise
your pumps may be hard at work with little to show for it. The
electronics are generally very reliable with most electrical
problems occurring at the connectors. The roughing vacuum pump
needs to be vented away from the instrument to prevent oil
condensation from contaminating the SEM. Cleaning the column
and being able to pull a good hard vacuum will be your two biggest
maintenance concerns. I wish you the best of luck with your new/old
SEM as these are very fascinating instruments to work with.

Stephen Lee, AB7HI

On Thu, 26 Jun 1997, BOB DUCKWORTH wrote:

> It's not an 'old radio' but has the same appeal here.
> It's got a filament and a vacuum and is almost a tube.
> It's the ISI-40 Scanning Electron Microscope (SEM)
> that I'm picking up tomorrow. Alas, no manual and no
> pumps.
>
> -bob

## 710. for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: Michael Gladu <mgladu@warwick.net>
Message-ID: <33B4500B.C26@warwick.net>
Source record: 92820

I am posting this for a friend

FOR SALE or TRADE

- one Motorola Maratrac UHF land mobile radio
- 450 to 470 MHz 100 w, 99 channels, remote radio head
- includes the speaker, microphone, deluxe control head
- fully operational
- valued at about 250-350 dollars wholesale according to the local motorola dealer
- cost about $2000.00 new at 1990
- manufatured in 1990.
- radio model number is T74XTA7TA7BK; ser. number is 776AGY0835

Interested ????

Please email me at n1jfd@juno.com
Serious offers only please !!!!

## 711. Re: ! PROVEN PSYCHICS! TRY-IT-FREE!! 1-800-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: dbossel529@aol.com
Message-ID: <19970627194201.PAA12907@ladder02.news.aol.com>
Source record: 92821

Really I am very tired of seeing that crap too. Why don't you get a job,
or even a life!

Best Regards

# 712. Re: MCW for OSCAR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: <>
Message-ID: <970526204640.tvr@spinner>
Source record: 92822
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew

>Hello, all: is it possible to use a modulated continuous wave signal (MCW
>as described in this month's QST) with a handheld to work the OSCAR
---
>satellites as long as a proper receiver is used?

This is a quibble, Gary, mostly to clarify my understanding. It doesn't seem like MCW is inherently evil, as that represents a variety of emission types. Given a sufficiently pure sine wave as modulation, isn't emission type J2A (SSB) almost indistinguishable from CW? Even A2A (AM) ought not take more bandwidth than twice the frequency of that sine wave.

The problem comes with what is probably being suggested ['haven't seen the relevant QST yet], that is, MCW using emission types F2A or G2A (frequency or phase modulation) which uses completely unacceptable bandwidth for satellite transponders [as opposed to repeaters, such as on MIR, AO-27 or AO-21 (currently SK)]. The best you *might* be able to do is to make a fake microphone out of a suitable value of resistor and a telegraphic key. If you've a remembered to turn off PL (*important*), i think you'll be sending an FM carrier with very little modulation which might be something like CW that sounds bad and drifts horribly, and probably should only be tried at a time when almost no one else is on, to find out that one *could* use a given satellite if one obtained the proper equipment.

In short, don't use FM with a non-FM satellite!!!

Now, can anyone suggest a homebrew 2M transmitter (CW or SSB) so those of us who don't have $300-$500 (or more) and/or an HF rig lying around can experiment with such things without potentially causing serious interference?

-- KD6PAG (networking old-timer, RF newbie)

P.S. You can often find me trying AO-27 on most daylight passes that give at least 20 degrees elevation in the S.F. Bay Area. If you can hear it, then you can probably work it.

## 713. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <33B3D4F9.64D9@hp.com>
Source record: 92823

WILLIAM E. SABIN wrote:

> For many years, 1962 to 1983, I had quite a few articles published in
> QST and didn't get a dime for them. It didn't bother me a bit. Reason: I
> was doing what I wanted to do because I wanted to do it, and not for the
> money. Amateur radio was then and is now an avocation. The payment that
> I get these days helps to meet the expenses incurred and that is about
> it. I am not in the *business* of writing articles. It is not true that
> everything that we put our efforts into has a dollar equivalent.
> Bill W0IYH

Bill, I could not agree more.

A true "Amateur" just does things for the sheer love of it. This is founded in the very root of the word in Latin.

As a kid, I learned a lot out of an ancient(even then) ARRL handbook. When I was given the opportunity to write part of a new edition, it felt like the opportunity to repay a big debt. The sort of debt that you can't just throw money at, the sort that you can only repay with personal effort.

I put my best effort into it, and really tried to do the best job that could be done. I think I put in more effort than anyone could have impelled me to by mere money. The feedback I've received both from Newington and from readers, has been very encouraging. I keep the messages in a file that I take a peek at whenever things seem to be going wrong and I need a boost to cheer me up.

The ARRL did indeed pay for the material, at a rate they set. I wondered what to do with the money after the British tax man had made off with his 40%. In the end, I decided to buy something to act as a special memento, something that would last a long time. I would have been happy to do it for free, my professional activities provide enough income and keep me in new toys.

For people not in fulltime employment, the youngsters, the oldsters and those between jobs, payment for publication helps them for the materials or parts used, and allows them to afford to create/build further things that can in turn be published.

Professionals have plenty to offer amateur radio. People like Bill, myself, and many others can spread information about how some of the things we've done can be applied to amateur radio.

Amateur radio, equally, has a lot to offer professionals. It's what started me off mumblety-mumble years ago. If I have a satisfactory

career, when I know what I owe it to. Amateur radio is where I go to look at things from a different viewpoint, it's where I go when I want to play with some idea that doesn't fit in with my boss's definition of "business". It's where I sometimes go looking for inspiration.

Even if the likes of QST, QEX, Radcom stopped paying authors, there would still be people prepared to submit good articles, but the real loss would be the reduction in output from a number of people with interesting things to say, but less fortunate in the ability to fund their costs.

I once read "Remember, it's the amateurs who run fastest, jump highest...."

Cheers
David GM4ZNX

## 714. WTB: used microwave equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-27 00:00:00 UTC
From: Hugh Shane <hughie@nicoh.com>
Message-ID: <33B417D6.7BD6@nicoh.com>
Source record: 92824
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew

I'm looking for a supplier of used microwave radio equipment.
Transmitters, receivers, antennae, plumbing. Any leads?

Please reply via email to hugh@tetonvalley.net. I'll post a summary.

Thanks,
Hugh Shane
Engineer
TetonValley.Net

# 715. Re: Linearize GE MASTR II PA ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33b350e2.380582@news.atl.bellsouth.net>
Source record: 92825

On Thu, 26 Jun 1997 08:38:15 -0700, scott <acepilot@mwt.net> wrote:
>Anybody ever try to make a class C GE Mastr II 100 Watt PA linear? I'd
>like to try it for SSB or maybe even ATV. Would it just need a little
>biasing circuit on each amplifier stage or more surgery than that??
>73, Scott, N0EDV

The transistors used in that PA were selected for Class C service.
It is likely that they have a rather limited range over which they'll
exhibit satisfactory linearity. This means that even if you add a
stiff bias circuit, the power output you could achieve with good
linearity would be disappointing. It is pretty hard to get good
linearity out of a high power solid state PA operating at 12 volts
anyway, the impedances get very low, so specially designed
transistors are typically used for linear service.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 716. Writers-Seeking-Publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-28 00:00:00 UTC
From: agent654@aol.com
Message-ID: <33b4db49.0@news1.ibm.net>
Source record: 92826

/We are accepting new and previously published writers for publication.
We are a NEWYORK based international literary agency with three offices:
2 in NEW YORK and one in FLORIDA. Please follow guidelines for
submission: For all fiction, including screenplays for TV & Movies:
Send us a brief synopsis, the first chapter, and include a self-addressed,
stamped envelope=S.A.S.E.
Short Stories: Send brief synopsis, 3 pages, S.A.S.E.
Poetry: Send 3 poems, S.A.S.E.
For all nonfiction: Send us a brief synopsis, the first chapter, and include
a S.A.S.E.
Do not send complete manuscript unless invited.
(WOODSIDE INTERNATIONAL LITERARY AGENCY)----------
33-29 58 Street>>>>>----------
Woodside, New York
zip: 11377
Tel: 718-651-8145>>>>>>>>_________

# 717. !!! PROVEN PSYCHICS / FREE PREDICTIONS !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-28 00:00:00 UTC
From: susan11@ultinet.net
Message-ID: <33b517b0.2@nntp1.nac.net>
Source record: 92827

Curious about psychics? Now you can try a psychic
reading free, just dial 1-800-677-8039 - our free
samples line where master psychics will amaze you
with their knowledge and forsight. Try it now -
see for yourself. adults over 18 only

Dial 1-800-677-8039

# 718. Re: 2n4416 vs 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33b55214.14522005@news.online.no>
Source record: 92828

On Wed, 11 Jun 97 00:33:00 GMT, w7el@teleport.com (Roy Lewallen)
wrote:

>In article <339DA8B9.1450@qsl.net>, Ed Loranger <we6w@qsl.net> wrote:
>>I have a whole bunch of the 4416's at home. Are they
>>better or worse than the mpf-102's?
>>
>>-Ed Loranger
>
>Better, in that their specifications are tighter. (For example, the 2N4416
>IDSS is specified as 5-15 mA, a 3:1 range. The MPF102 is 2-20 mA, or
>10:1.) I wouldn't be surprised if 2N4416's are selected from the same dice
>MPF102's come from.
>
>Roy Lewallen, W7EL

and MPF103=2N5457
MPF104=2N5458
MPF105=2N5459
...?

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 719. 70cm UHF transmitter schematics wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-28 00:00:00 UTC
From: Hans.Ameel@ping.be
Message-ID: <33b59259.8254924@news.ping.be>
Source record: 92829

Hello all,

My name is Hans Ameel, ans I am an electronics student.

I would like to build myself a 70 Cm transmitter for packet use, since
I dont like using my HT for that purpose.
I already have a qualifying receiver.

So what I need now is a schematic of a UHF transmitter with a power
output of circa 5 W

diagrams of 2m VHF transmitters are also welcome, of course, as are
any useful building tips.

Kind regards,

Hans.

ON1DFE (Belgium)

Hans.Ameel@ping.be

# 720. Re: HeatSink nylon hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-28 00:00:00 UTC
From: Robert Ogburn <ogburn@standfast.com>
Message-ID: <33B5B72C.6B92@standfast.com>
Source record: 92830

David Shalita wrote:
> 
> Hi,
> 
> I purchased by mail order last year, a nice assortment of insulting
> mounting
> hardware for heatsinks and TO-3 transistors and IC's (LM317K), assorted
> nylon shoulder washers, screws, nuts but have lost the source company
> name. Just built a multiple output power supply with several LM317K TO-3
> IC's and depleted all my nylon heatsink hardware.
> 
> After checking with Dan's Small Parts and DC Electronics, I am running
> out of ideas.
> 
> Please suggest some possible sources. These were just assortments of
> nylon parts in small plastic bags.
> 
> 73, W6MIK...Thanks
> --
> _____________________________________
> Dave Shalita,
> af389@lafn.org
> Van Nuys, CA

Try HdB Electronics in Redwood City, California.

## 721. Re: digital voice keyers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-28 00:00:00 UTC
From: ums@nconnect.net
Message-ID: <33b48e34.1674395@news.nconnect.net>
Source record: 92831

On Tue, 24 Jun 1997 01:53:34 -0500, "Kenneth E. Harker"
<kharker@cs.utexas.edu> wrote:

>I may not be able to get into this for quite a while, but I'm
>thinking eventually I'd like to build a digital voice keyer, primarily
>to work the rocks on VHF ssb without going hoarse. I've
>been reading the 1993 ARRL Handbook's article on the "Chiptalker" keyer,
>but I'm wondering if there're any other kits / partial kits / schematics
>for voice keyers? The big drawbacks I saw
>to the "chiptalker" design were:

I designed a voice keyer called the "Contest Card" that plugs into the
PC and is compatible with the top three contest logging programs. It
was published in the Sept. 1993 QST and re-printed in the 1995-1997
ARRL Handbooks. There are some features in the design you might find
useful if you decide to design your own.

I have kits available. Check my website @ www.QTH.com/w9xt for
more info if you are interested in going that route.

>
>1) The PCB layout is much larger than I would like - if I could find
>something like 2.25" x 2" (the size of the Super CMOS Keyer III PCB) I
>could make a matching device, and I really don't need all the
>experimentation space if I can get it right the first time :-)
>
>2) The soft divisions between the four memories. This isn't a huge
>deal, but it would be nice to somehow prevent one memory from "bleeding"
>across boundaries into the next. Perhaps send a beep
>to the speaker when you goof.

When you record with the ISD chips they keep recording until you stop.
I did one design (I work for a contract electronic design and
manufacturing company) for a customer that could not allow overwriting
other messages. It used a PIC micro to time recording. It would stop
the record when the time was up if the user did not stop before then.
.
>3) 5-second memories are too short. For ssb meteor-scatter work in
>North America, 15-second memories would be perfect. Of course, four of
>these would require an IC with at least 60 seconds of digital memory...

Get the ISD2560 chip (DigiKey sells them). That is 60 seconds long.
I modified one of my voice keyers to use that chip and have used it
for meteor scatter.

>4) No obvious provision for stopping a memory playback. Hit the wrong
>button in the excitement of a burn and you're probably toast. Perhaps
>use some sort of microphone pass-through where hitting the microphone's
>PTT button bypasses the keyer altogether and stops playback, a la the
>Super CMOS Keyer III behavior with the paddles.

If you design your own, allow provisions (or modify the Chip Talker if
you go that route) to remove the CE (chip enable) to the ISD chip.
That will abort a playback. I put that feature into the Contest Card.
If you hit the <ESC> key with most of the software that supports it,
the message playback stops.

>Anyway, just some random thoughts... perhaps the state of the art has
>advanced since the original 1991 article...

ISD has really enhanced its product line since they first came out
with their first parts. Some of the new ones are set up for
interfacing with micros and have a couple of minutes of storage. They
are really the way to go if you want to build a voice keyer.

Have fun!

73 - Gary W9XT

ppvvpp@mixcom.com
http://www.QTH.com/w9xt

# 722. MODIFING A RS PRO2026

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: jakedeth@aol.com
Message-ID: <19970629023800.WAA15047@ladder01.news.aol.com>
Source record: 92832

NEED ANY INFORMATION AN MODIFING PRO2026 TO RECEIVE
FREQ. ON THE 200MHZ TO 300MHZ . THANKS.....

## 723. n3tuk web page updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: n3tuk@tidalwave.net
Message-ID: <33b5c139.4437800@newsdesk.tidalwave.net>
Source record: 92833

visit http://www.geocities.com/SiliconValley/Heights/5575/softw.html

## 724. FS: surplus stuff on the net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: pdrunen@aol.com
Message-ID: <19970629053201.BAA20795@ladder02.news.aol.com>
Source record: 92834

Hi Friends,

I posted my surplus stuff at http://home.aol.com/pdrunen. I have mostly high current diodes (DO-5 package) and Transistors (TO-3) a must for 13.8V power supplies. E-mail if you see something you need.

I also have my DTMF decoder and a link to a nice place to look for shareware.

Paul

# 725. Re: ! PROVEN PSYCHICS! TRY-IT-FREE!! 1-800-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33b55e10.17588467@news.online.no>
Source record: 92835

On 27 Jun 1997 19:42:41 GMT, dbossel529@aol.com (DBossel529) wrote:

>Really I am very tired of seeing that crap too. Why don't you get a job,
>or even a life!
>
>Best Regards
we have received one more bulletin. Perhaps we have to welcome this
rubbish - everybody returns a bitmap or DXF file as email reply? Does
not need to be large.....edit the filename to something strange
Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 726. Re: Homebrew Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33b5fe0e.2283287@news.online.no>
Source record: 92836

On 3 Jun 97 08:22:24 GMT, Peter Parker <parkerp@pcug.org.au> wrote:

>
>kb8ydx@geocities.com (Adam Liette, KB8YDX) wrote:
>>
>>Hi all. Anyone know of a website with schematics for some simple
>>homebrew (preferably tube) projects? Been to AF4K's website. looking
>>for others too.
>>
>> Adam KB8YDX
>> Ansonia, Ohio EN70qf
>
>SM0VPO's page is by far the best I've seen. You can find it via the
>Australian QRP Home Page (Links section). URL below.
>
>73,
>
>Peter VK1PK
>
>--
>_____________________________________________________
>Peter Parker
>
>E-mail: parkerp@pcug.org.au
>Phone: (06) 285 1004 (ah)
>Amateur Radio: VK1PK
>
>Home Page: http://www.pcug.org.au/~parkerp/
>The home of Novice Notes Online and the VK QRP Web Page.
>_____________________________________________________
>
>
SM0VPO has written an info to uk.radio.amateur newsgroup dated
97.06.10

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 727. HELP with UPS Part Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: kelmgeo@saba.kuentos.guam.net
Message-ID: <5p5c4j$cuu@lehi.kuentos.guam.net>
Source record: 92837

This is not exactly amateur homebrew, but I can not think of a better place to post this. If anyone has an idea of a better group, please let me know...

Do you have access to a IC Master or other IC index? I'm looking for a IC/volt-reg/hybred whatever for my ups, the number on the IC/module is

first line 97 0280
next line I*R 9338A

The * is the trademark sign for International Rectifier. It's a flat black module, oblong, 2-3/8" long, 7/8" high and about as thick as a standard lead
pencil. There are 13 pins in-line on the bottom. Also two screw holes on either end of the front side that holds it to the heat sink.

I'm guessing that it's the problem as the ups has output in both line and battery mode. The ups just will not charge the battery once the line power returns.

The UPS is an Exide Model 4095 1,500 va.

The shops here can not cross the number, so I can not order one.

THANKS for your help!

ghk

## 728. Re: HeatSink nylon hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: David Newkirk <dnewkirk@bellatlantic.net>
Message-ID: <01bc8486$22057b80$0279c697@namn>
Source record: 92838

Robert Ogburn <ogburn@standfast.com> wrote in article
<33B5B72C.6B92@standfast.com>...
> David Shalita wrote:

[deletions]

> > I purchased by mail order last year, a nice assortment of insulting
> > mounting
> > hardware for heatsinks and TO-3 transistors and IC's (LM317K), assorted
> > nylon shoulder washers, screws, nuts but have lost the source company
> > name. Just built a multiple output power supply with several LM317K
TO-3
> > IC's and depleted all my nylon heatsink hardware.
> >
> > After checking with Dan's Small Parts and DC Electronics, I am running
> > out of ideas.

[deletions]

> Try HdB Electronics in Redwood City, California.

The July/September 1997 Digi-Key catalog (http://www.digikey.com/) has
nylon Phillips-head machine screws (2-56, 4-40, 6-32, 8-32, 10-32), hex
nuts, as well as nylon spacers, etc.

Regards,

David Newkirk, W9VES

# 729. Re: Carson 117V/880V transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33b657b5.5400665@news.mnsinc.com>
Source record: 92839

On 26 Jun 1997 10:59:36 -0400, aa744@james.freenet.hamilton.on.ca
(Fred Colville) wrote:

>You could probably use a filament transformer,and an old microwave
>transformer,,,,good up to 1 amp secondary
>Fred
>VE3-FCX,,,,btw,,,I have save a few here.
>In <01bc8128$81d92d60$bb436cce@default>, "Rob Gregory" <skidrow@interlog.com>
>wrote:
>> Wondering if anyone out there knows where I can get one
>> of these old transformers.
>> For a Hy-Gain amplifier from mid 70's era.
>
>> Thanks
>> Rob VE3-LUA

There is a company that will custom make any transformer for you.
They can repair existing transformers or build from scratch to your
specifications. I have no idea about the pricing but look in:

http://www.mnsinc.com/bry/mega/repairs.htm

and

http://www.mnsinc.com/bry/mega/partsupp.htm

I think you can find them there!

73 - Bry, AF4K

# 730. FS: Gaussmeters, fluxgates

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5nkh$2epi@newssvr01-int.news.prodigy.com>
Source record: 92840

MAGNETIC SURVEY INSTRUMENTATION

Prices include shipping in Lower 48.

MEDA uMAG-02WB Handheld, battery-operated digital fluxgate magnetometer. Sensitivity: +/- 0 - 20.00 - 200.0 - 2000 milliGauss F/S, DC-400 Hz (-3dB @ 400 Hz ref to DC). Analog output +/- 2.000 V F/S. Linearity .02% or better. Absolute accuracy +/- 0.5% or better, traceable to NIST. With 10 meter cable and transverse probe, 6 spare batteries in storage case, multiple-battery harness for up to 8 batteries (approximately 12 days continuous operation), analog output cable w/BNC (to oscilloscope input), manual, calibration certificate, transit case. In new condition. Current price from manufacturer is $900. Sell at $450. Three available: all three, $1300 including 3-channel chart recorder (see below).

DEXSIL MAGNUM 310. Handheld, battery-operated, micropro-cessor based 3-axis digital induction milliGaussmeter. Auto-ranging; 0.04-9.96 milliGauss (+/- 2%), 10 - 99.6 milliGauss (+/- 5%), 100-996 milliGauss (+/- 5%), 1.00 - 10.0 Gauss (+/- 5%) for 60 Hz signals in 60 Hz mode. F/S accuracy in 3rd harmonic mode is +/- 5%. In braodband mode (40-310 Hz @ -3dB) accuracy is +/- 10%. Displays all three vector components plus resultant or resultant only. Has low battery indication and automatic shutoff. Fully self-contained. WIth carrying case, manual and calibration certificate. New price $695. Used, very good condition; $250.

LEEDS & NORTHRUP SERVO RECORDER 136-304-304-304-00-00-00-L0088-L0088-L0088-6-BV-000. Three-channel servo recorder, modified for potential inputs. Can be internally adjusted from +/- 1 millivolt F/S to +/- 2V F/S. Set at +/- 1V F/S. Chart speed @ 60 Hz 2cm/hr or 2 cm/minute (at 50 Hz = 1.67 cm/min or 1.67 cm/hr). Internal line voltage selection for 100/120 V, 220 V or 240 V. Power burden: 27 VA. Power input; 3-wire IEC connector. (Uses standard IEC cords). With 2 sets spare pens, 2 boxes charts, a few spare parts, carrying case; Used, very good condition; $100.

UNIVERSAL IEC LINE CORD SET. Each 6-foot line cord has a standard female 3-wire IEC connector at one end, and a male connector at the other; one of each from the following list:

Australia 3-pin w/ground male pin
Denmark 3-pin w/ground male pin
Europe 2-pin w/ground female & strap
India/South Africa 3-pin w/ground male pin
Israel 3-pin w/ground male pin
Italy 3-pin w/ground male pin
Switzerland 3-pin w/ground male pin
United Kingdom Fused 3-pin w/ground male pin
USA/NEC/Japan (100/120V) 3-pin w/ground male pin

One of each of the known electrical connections in the world;
9 cords in carrying case, NEW: $100

EVERYTHING TO ONE ADDRESS: $1500.

## 731. FS: Cathode ray tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5n4m$26vm@newssvr01-int.news.prodigy.com>
Source record: 92841

```
FOR SALE: cathode ray tubes

Electrostatic instrument types, 1 gun

1 ea 2BP1 used $16.00 2" round
1 ea 3RP11A new flat face $41.00 3" round
1 ea 5ABP/DP7 used " " $26.00 5" round
1 ea 5ADP/BP7 used " " $26.00 5" round
1 ea 5AQP1A used " " $26.00 5" round
2 ea 75ARB31 new " " $41.00 75 mm/3" round
2 ea 130BEB31 new " " $51.00 130 mm/5" round

Electrostatic instrument types, 2 gun

1 ea 7MBP20 new flat face $56.00 4" X 6" rectangular

Electrostatic binary direct-view storage CRT
(w/socket & complete set of data sheets)

1 ea H1051P31 new flat face $56.00 5" diam

Magnetic deflection types (70 deg, 12.6 V heater)

1 ea 5ST6111P39A new $26.00 5" rectangular
1 ea 10ST6105P39C new $43.00 10" rectangular

P1: green, medium persistence
P7: blue, short persistence/yellow long persistence
P11: blue, short persistence
P20: green, medium-short persistence
P31: green, medium-short persistence
P39: green, long persistence

Prices include shipping and insurance in lower 48 states.

E-mail for info: DQCB48A@prodigy.com
```

## 732. FS: tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5n2s$2qb6@newssvr01-int.news.prodigy.com>
Source record: 92842

UPDATED 6/26/97

Lab collection of used tubes. All are guaranteed to be within normal test limits when shipped. All are either American made or made by Amperex, Mullard, Siemens, or Telefunken. TUBES ARE NOT SORTED BY MANUFACTURER, AND SORTING BY MANUFACTURER IS NOT AVAILABLE. (Please don't ask!) All items subject to prior sale. When they are sold, they are gone forever; there will be no restocking.

**********
* *
* PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY *
* *
**********

* * * * * * * * * * ALL TUBES $1.00 EACH * * * * * * * * *

TYPE Stock

0B2..... 5
0G3/85A2..... 18

1BC2..... 1
1G3GT/1B3GT.... 1
1J3..... 1
1K3..... 1
1V2..... 1
1X2A..... 2
1X2B..... 2

2BN4..... 1
2D21..... 3 (see 5727)
2E26..... 3

3A3C..... 1
3BN6..... 1
3BZ6..... 2
3CB6..... 1
3GK5..... 2
3HQ5..... 1

4BZ6..... 3
4CB6..... 1
4DK6..... 1
4JC6..... 1
4JD6..... 1

5AQ5..... 1
5CG8..... 1
5EW6..... 1
5JB8..... 1

6AC7..... 4
6AF4..... 2
6AG5..... 11
6AH6..... 40
6AL5 (see 5726)
6AN5..... 3
6AQ5A..... 3
6AQ7GT..... 1
6AR6..... 3
6AS6..... 17 (see 5725)
6AU8..... 2
6AV6..... 1
6AW8A..... 4
6AX4GT..... 1

6BH6..... 14 (see 6661)
6BJ8..... 1
6BK7..... 3
6BN6..... 3
6BQ6GA..... 1
6BV11..... 1
6BW4..... 2
6BX6/EF80..... 24

6CB6 (6CF6).... 23
6CG8A..... 3
6CH8..... 1
6CL8A..... 3
6CM6..... 2
6CM7..... 1
6CM8..... 1
6CN7..... 1
6CY7..... 1

6DK6..... 1
6DQ6A..... 3
6DZ4..... 1

6EN4..... 1

6FG7..... 1
6FQ7..... 1

6GB5..... 1
6GC5..... 1
6GF7..... 1
6GH8..... 5
6GM6..... 1

6GU7..... 2
6GY6..... 2

6HZ6..... 2

6J6..... 9
6JU8..... 1

6KA8..... 1
6KZ8..... 1

6LU8..... 1

6MD8..... 1

6S4A..... 1
6SF5..... 1

6W4..... 2

6X4..... 13

6Y6GT..... 1

8B10..... 1
8FQ7..... 2
8JV8..... 2
8KA8..... 1

9-7 (Ballast).. 1

10JT8..... 1
10LZ8..... 1

11BQ11..... 1

12-4 (Ballast). 1
12A6..... 2
12AE10..... 1
12AL11..... 1

12BF6..... 2
12BN6..... 1
12BQ6GTB..... 1
12BV11..... 1

12EQ7..... 1

12MD8..... 1

12R-K9..... 1

12SG7..... 5
12SJ7..... 4

12T10..... 1

14BR11..... 1

15BD11..... 1
15KY8..... 1

17AY3..... 1
17CU5..... 1
17JZ8..... 2

19CL8..... 1
19EA8..... 1

21HB5A..... 1
21LU8..... 1

23Z9..... 1

33GY7..... 4

34CE3..... 1

42KN6..... 1

5696..... 2
5725 (6AS6).... 37
5726 (6AL5).... 5
5727 (2D21).... 2
5735..... 2
5844..... 3
5963.(12AU7+)..111
5965..... 7

6186.(6AG5).... 4
6203..... 4
6211..... 12
6350..... 2
6485.(6AH6).... 5
6661.(6BH6).... 6
6682..... 1

EVERYTHING - - make an offer - -

PRICES SHOWN DO NOT INCLUDE SHIPPING

SHIPPING CHARGES (USA ONLY; elsewhere, ask for quote)
Up to 10 tubes: $4.00.
Up to 20 tubes: $5.00
Up to 30 tubes: $6.00
Up to 50 tubes: $8.50
Up to 100 tubes: $9.95
Over 100 tubes: FREE
COD AVAILABLE (CASH ONLY!!) add $5.00

TERMS: Payment with order. Checks will be held 10 business
days. Money orders clear in 1 day. COD: $5 additional.
All items subject to prior sale. E-mail for information.

ORDERING: Please order by e-mail so that we can confirm your order and hold the tubes for you!

PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY.

## 733. FS: Timers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5nc6$2epi@newssvr01-int.news.prodigy.com>
Source record: 92843

INDUSTRIAL CONTROL TIMERS
(Shipping included in Lower 48)
* to one address

NEW in original box:

(5) ATC "Shawnee II" universal timer,
.01-99.99 sec, .1-999.9 sec,
.01-99.99 min or .1-999.9 min;
120V/60Hz: $60.00 ea
5/$275.00*

NEW, shelf-worn:

Eagle "Cycl-Flex" (120V/60Hz)

(3) HP515A6 0-10 sec w/shell $50.00 ea
(8) HP50A6 0-30 sec w/shell $50.00 ea
(1) HP50A6 0-30 sec no shell $40.00
(1) HP701A6 0-60 sec w/shell $50.00
(2) HP55A607 0-30 min w/shell $50.00 ea
(1) HP55A607 0-30 min no shell $40.00
all 16/$700.00*

Agastat electropneumatic timing relay: (120V/60Hz)

(1) 70-2AC 1.5-15 sec DPDT on delay $65.00

Agastat solid-state timing relays, 120 V AC/DC

(1) SSC226NA 1-30 sec DPDT off delay $35.00

Agastat DPDT solid-state timing relays, 24V AC/DC

(1) STARX022XSEBXA .5-15 sec off delay $35.00
(1) STARX022XSEFXN 6-180 sec off delay $35.00
(1) STARX022XSEMXA .5-15 min off delay $35.00
(1) STARX022XSERXA 2-48 hr off delay $35.00
(1) STARX012XSEAXA .1-3 sec on delay $35.00
(1) STARX012XSEIXA 2-60 min on delay $35.00
(2) STARX012XSERXA 2-48 hr on delay $35.00 ea

Agastat Timing Relay Socket, 10A, Screw terminals

(40) BT5A11SC 11-pole, flat blade type, $6.50 ea
similar to P/B 27E893 all/$200.00*

Eagle - G/W DPDT solid-state timing relays, 120V 50/60 Hz

(4) CG30A6 5-30 sec on delay $30.00 ea
(1) CG510A6 1.5-10 sec on delay $30.00

TEC Timing Relay, 120V 50/60 Hz, DPDT

(1) ER-2 130S 0-30 sec on delay $30.00

ENTIRE LOT TO ONE ADDRESS: $1250.00*

## 734. FS: Panel meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5n7g$k2s@newssvr02-int.news.prodigy.com>
Source record: 92844

FOR SALE:

*NEW* GE "Horizon Line" 3" X 4" rectangular, 80 VDC FS,
1000 ohms/volt ( 1 mADC FS) in original unopened boxes;
36 in lot: $135 all, shipping included. Easily rescaled.

## 735. FS: Test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5ni3$1dmq@newssvr01-int.news.prodigy.com>
Source record: 92845

-HP- 302A wave analyzer, 10 Hz - 50 KHz, 10 Hz bandwidth,
phase-lockable; voltmeter ranges 100 uV to 300 V.
All solid state, w/manual repro: $150
40#
-HP- 712B variable power supply, 0-500VDC @ 200 mA,
0-200VDC @ 5 mA, -300V @ 50 mA, 6.3 VCT AC @ 10A $65
85#

Measurements Corp. 65B AM signal generator w/ modulation,
01 uV to 2.0V, 75 KHz to 30 MHz $65

John Fluke 801BR differential voltmeter, 5-digit,
working: $50
25#
John Fluke 801BR differential voltmeter, 5-digit,
as is: (not tested) $20
25#

Both of them: $60
45#
**********
MUSEUM PIECES - working

SENSITIVE RESEARCH INC "Rhodes Potential Voltmeter",
Model PV; wooden case instrument w/galvanometer, bridge,
etc., 2 mVDC to 20 VDC $50
25#
Weston Model 45 standard voltmeter, 1/2% 150-300-750 VDC,
wooden case: $50
15#
Weston Model 341 "High Frequency Voltmeter", 1/4%
accuracy to 1 KHz, 30, 75 V F/S, wooden case: $50
15#

## 736. FS: 270 degree panelboard meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5n9j$k2s@newssvr02-int.news.prodigy.com>
Source record: 92846

FOR SALE: 270 degree panelboard meters
(Shipping included in Lower 48)

NEW: EACH

(1) Yokogawa 5AAC $70

USED:

(1) GE 15VDC $30
(1) GE 2AAC F/S: scale
unnumbered but divided $30
(1) GE 150 VAC $30
(1) GE 5AAC, 0-25 scale $30
(2) GE 10AAC, 0-25 scale $30
(1) SqD 600VAC; needs
outer bezel $25
(1) W'hse 5AAC, 0-200 scale $30

All 9 to the same address: $250

Used current transformers

Electromagnetic Industries Inc

(3) 50:5 P/N 2N-500 $12.50 ea
(1) 60:5 P/N 2N-600 $12.50

All 4 to the same address: $40.00

## 737. FS: Linear magnetic field sensors (Hall effect)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5nmf$38v6@newssvr01-int.news.prodigy.com>
Source record: 92847

Texas Instruments TL173C. Linear output magnetic field sensor.
Range: +/- 500 Gauss. Usable to 0.1 Gauss. 12 - 15VDC operation.
TO-92 package. With data; price includes shipping. $5.00 each;
3 for $13.00. (Inquire about larger quantities.) Send check
or M/O to Don Klipstein, PO Box 518, Ambler, PA 19002-0518.

## 738. FS: 13-line telephone system (KTU)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5nf7$k2s@newssvr02-int.news.prodigy.com>
Source record: 92848

All items are located in Philadelphia, PA. area.
Packing, shipping, etc., are included in price.
(Lower 48) Prices are in $US.

All reasonable offers will be considered.

TELEPHONE EQUIPMENT AND SUPPLIES

GTE 10A2 13-Line Key Telephone system (KTU)

Consists of: 1- GTE H-886501-95 wall cabinet
26.25" W X 17.75" H X 9.5" D
1- GTE S-418034 power supply (w/30 Hz)
1- GTE D-543840-A power cable
1- GTE H-886584-7 13-line panel w/GTE
FD-1058-BF interrupter
6- GTE WA-1400-E line card
(has music-on-hold capability)
1- GTE WA-1467-A
Music-on-hold interface card
1- GTE WA-1401-A intercom card
1- GTE S-550763 3-plug, 50 foot cable
for interconnecting H-886584-7
panel to lines and telephones
1- GTE 10A2 13-line KTS manual

General:

Compatible with touch-tone and rotary systems. Contains
6 line cards with capability for music-on-hold, music-on-hold
interface card, intercom card, full-size power supply, wall
cabinet, with interconnect cables and manual. Designed to
support up to 20 multi-line key telephones. Everything is
NEW, but has been unpacked. Never connected. Will accept
Western Electric 400-* line cards. Original cost well over
$1000.
Everything....$375.00. If you pick it up, $300.00.

## 739. FS: Magnetrons

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5npj$290m@newssvr02-int.news.prodigy.com>
Source record: 92849

All items are located in Philadelphia, PA. area.
Shipping not included in price. Prices are in $US.

X-BAND MARINE RADAR MAGNETRONS: EACH
JRC9M80 7.5 KW Magnetron (NEW-repacked)..(2 available) $50.00
For Anritsu, etc

M599 5KW Magnetron (NEW, ORIGINAL CARTON 1 available) $50.00
Raytheon, many others

SHIPPING - UPS SURFACE ONLY - 1 tube $7.00, 2 - $12, 3 - $16
(Lower 48 states)

TERMS: Payment with order. Checks will be held 10 business
days. Money orders clear in 1 day. COD AVAILABLE
(CASH ONLY!!) add $5.00. All items subject to prior
sale. E-mail for information.

## 740. FS: Digital timers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5p5nsc$2mhi@newssvr02-int.news.prodigy.com>
Source record: 92850

FOR SALE: REVISED 6/14/97

Electronic timer assemblies and components.
All items located 10 mi NW of Philadelphia, PA.
Prices do not include shipping.

```
************************************************************
* DYNAMIC TECHNOLOGIES INC. P/N 88052002 timer assembly *
* *
* Printed circuit, single board. Digitally counts power *
* line frequency to generate four precision timed intervals *
* of 15 sec., 30 sec., 1 min., and 2 min.; also manual *
* start/stop. Accuracy: +/- 1 cycle of line frequency. *
* *
* Control; manual input via membrane switch (or equivalent). *
* User selects one of 6 options on keyboard (DTI P/N *
* 88052003) start 15 sec, start 30 sec, start 1 min, start *
* 2 min, start continuous or stop. On-board piezo loud- *
* speaker beeps for each keyboard entry. Last command *
* entered cancels previous command or command in progress. *
* *
* Power input: 120/240 V 50/60 Hz. Frequency and voltage *
* selected by jumpers on mating connector (A/MP P/N 1-480287;*
* requires up to 10 ea. A-MP P/N 60617-1 pin). Connector is *
* available from A-MP or their distributors. Grounding is *
* required for best noise immunity. *
* *
* Output: Normally Open (NO) relay closes during timed *
* period. One terminal of relay is connected to one AC line *
* terminal (pin) on the connector; other relay contact to *
* independent pin on connector. Relay contacts rated 30A *
* resistive: printed circuit designed for 5A load. External *
* varistors required for inductive loads; can be mounted on *
* mating connector. *
* *
* Timer overcurrent protection; 2 ea fuses, 2AG, 1/8 ampere *
* fast blow, (Littelfuse P/N 225.125 typical) in clips on PC *
* board. 1 set of fuses is installed on board. *
* *
* Size: PC is 4-1/2" X 6" X 1-5/8" overall. Mounting *
* centers 4" X 5-1/2". Designed to mount with four nylon *
* snap mounts, RICHCO P/N DLCBS-4-01 typical. 1800 available;*
* 2 membrane switches included with each timer. 104 timers *
* per carton; shipping weight: approximately 60 lb/ctn. *
* 1; $10.00 w/shipping and schematic. *
```

```
* *
* All 1800: $3000. (reproducible drawings included) *
* *
* 1000 extra membrane switches available @ $100.00/lot *
* *
* 2AG-1/8A fast blow fuses, Littelfuse P/N 225.125. *
* 5800 available in original packing. $65 per 1000, *
* $300 all. *
* *
* NYLON snap-in printed circuit mounts; RICHCO P/N *
* DLCBS-4-01, Snaps into .156" hole at each end; *
* 1/4" spacer between. in bags of 1000. 25 bags available. *
* $20/bag; $400/lot *
* *
* Circuit breaker, Potter-Brumfield P/N W28X1A-5, 5 Ampere; *
* in original factory cartons (600/ctn). 4500 available *
* (7-1/2 cartons). $300/ctn, $2000/lot *
* *
* RELAY, 12VDC, SPSTNO, 30 Ampere; Printed circuit mount, *
* Potter-Brumfield P/N T90N1D1-12; in original factory *
* packing. 250 available. $125/lot *
* *
* EVERYTHING LISTED IN THIS GROUP: $5250. *
* *
**************************************************************
```

# 741. !!! SAMPLE A REAL PSYCHIC / TRY IT FREE !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: susan11@ultinet.net
Message-ID: <33b673bb.0@nntp1.nac.net>
Source record: 92851

How do you know if you've found a real psychic?
Now you can see for yourself. Listen to our psychics
first, then decide if they know your future and fate.
Try it free on 1-800-677-8061. Adults over 18 only.

Dial now 1-800-677-8061

## 742. Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <33B6A9CE.6754AE04@visi.com>
Source record: 92852

Hi,
I'm looking for a keyer to put in my latest 8mm film can rig. Something ala
the Curtis chip (are these still availible?) I don't really need memories, or
freq read out, but it does need to be small. Suggestions?
Tnx es 72

--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

## 743. Re: Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: Robert Friess <Rfriess@ix.netcom.com>
Message-ID: <33B6B9D4.3A8F@ix.netcom.com>
Source record: 92853

Bob Liesenfeld wrote:
>
> Hi,
> I'm looking for a keyer to put in my latest 8mm film can rig. Something ala
> the Curtis chip (are these still availible?) I don't really need memories, or
> freq read out, but it does need to be small. Suggestions?
> Tnx es 72
>
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com
Hi Bob,

The Curtis chips are available from Mouser.

73,
Bob, N6CM

# 744. need specs for 3CX1200A7/D7/Z7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bc84c4$5e3c5540$b39ed8cc@km3g.cts.com>
Source record: 92854

I have contacted Eimac but the spec sheets have not arrived yet. What is the max. plate voltage for the 3CX1200A7? What are the differences btwn the A7- D7 - Z7?
I am building an hf amp but using an older ps I built a few years ago. It runs 6800vdc at about 1 amp ccs and don't know if this is too much for these tubes. It worked flawless with a 4-1000 in g.g. i built a while back.

Any specs or experiences with the 3CX1200 series tubes would be appreciated.

Lane KM3G

km3g@cts.com

## 745. Re: MCW for OSCAR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33b6b6d1.148848942@news.atl.bellsouth.net>
Source record: 92855
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew

On 27 Jun 1997 03:53:20 GMT, tvr@alive.com@alive.com> (Tovar) wrote:
>This is a quibble, Gary, mostly to clarify my understanding. It
>doesn't seem like MCW is inherently evil, as that represents a
>variety of emission types. Given a sufficiently pure sine wave as
>modulation, isn't emission type J2A (SSB) almost indistinguishable
>from CW? Even A2A (AM) ought not take more bandwidth than twice the
>frequency of that sine wave.

Sure, a keyed audio signal into a SSB rig should be indistinguishable
from ordinary CW. We do FSK that way by putting an AFSK signal
into the microphone jack. We couldn't call the emission MCW then,
though. It would just be ordinary CW generated a different way.

But if you did that with an AM or FM transmitter, not only would you
use a lot of bandwidth (not serious in itself) but the continous carrier
would be using excessive transponder downlink power. That's the
real issue.

>The problem comes with what is probably being suggested ['haven't
>seen the relevant QST yet], that is, MCW using emission types F2A
>or G2A (frequency or phase modulation) which uses completely
>unacceptable bandwidth for satellite transponders [as opposed to
>repeaters, such as on MIR, AO-27 or AO-21 (currently SK)]. The
>best you *might* be able to do is to make a fake microphone out of
>a suitable value of resistor and a telegraphic key. If you've a
>remembered to turn off PL (*important*), i think you'll be sending
>an FM carrier with very little modulation which might be something
>like CW that sounds bad and drifts horribly, and probably should
>only be tried at a time when almost no one else is on, to find out
>that one *could* use a given satellite if one obtained the proper
>equipment.
>
>In short, don't use FM with a non-FM satellite!!!
>
>Now, can anyone suggest a homebrew 2M transmitter (CW or SSB) so
>those of us who don't have $300-$500 (or more) and/or an HF rig
>lying around can experiment with such things without potentially
>causing serious interference?

Your suggestion of *keying* an FM transmitter is a quick, easy, and
cheap way to get going. Any old UHF FM transmitter will do for mode
B birds, or a VHF-Hi version will do for mode A. I like the GE Exec II,
but a Motorola or even an old ham rig will work. Don't use PTT for keying.
That's usually ugly and slow. Key a low level stage after the oscillator.

This works dandy, and is easy to do. Surplus commercial FM rigs
can be bought for $50 or less and run 80 to 110 watts. Makes a nice
signal on the bird. (Disable the modulator.)

You can convert an Exec II to VXO control by simply inserting a 0 to 10 volt
tuning voltage via a pot into the temperature compensation pin of the channel
element. this can give you about +/- 20 kHz tuning on 70 cm, somewhat less
on 2m. This also works on receive for doppler tracking if you're using the radio
as a FM rig for a digital microsat. These commerical rigs are pretty easy to
get to work properly at 9600 baud too.

The cheapest route to SSB that I know is to use an old SSB CB with a
transverter. Almost all of them can be easily modified to allow the clarifier
to swing transmit as well as receive, so you won't have holes between
the channels where you can't work. You can convert the CB to 10m if
you like, but it's usually easier to just change the crystal in the transverter
so it'll expect a 27 MHz IF. Fleamarket SSB CBs go for between $20 and
$50. A good transverter is going to cost $150 or so at a hamfest. So you're
looking at about $200 if you go that route. You might find a used IC-211 for
that much, so that's another alternative.

There's also Rick Campbell's T2. That's a very simple SSB phasing exciter
(kit available from Kanga). It can be built to work on 2m or 70 cm (actually
anywhere between 500 kHz and 500 MHz). Output is only 10 mW though,
so you'll need some serious amplifiers behind it. You can get to 3 watts with
a Mitsubishi brick (RF Parts) and follow that with an amplifer designed to be
driven by a HT (Mirage, etc). That'll probably drive the cost above the options
listed above. There's a companion R2 receiver you might want to check out,
though. It works pretty good, but you'll want a preamp in front of it. You have
to supply the LO for either of these rigs. That can be just a VXO, or if you
want to get fancy, a DDS such as the one featured recently in QST.

Antennas can be cheap too. A length of wooden 2x2 and some aluminum
clothesline wire for elements will give you a dandy CP yagi for under $10.

There's lots of ways to put a signal to the birds. You don't have to spend
thousands to get setup to do it.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 746. F.S. - Tubes, radios, books, etc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970629201500.QAA23788@ladder02.news.aol.com>
Source record: 92856

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco plus radio related publications. Schematics for many older radios and TV's - just $3 delivered. Tube Manuals, Tube Substitution books, Service Manuals, radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #620-T.

## 747. Viking Ranger II Data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: Mike & Karen Fisher <fishermk@warwick.net>
Message-ID: <33B6995C.65E0@warwick.net>
Source record: 92857

A ham friend of mine (I' m not one) has a Viking Ranger II transmitter he is restoring. It had been badly butchered and he is struggling with it. This unit was apparently available as a kit at one time and if he could get a copy of the original instructions it would be a big help. This seemed a likely spot to post a request. Any other links would be appreciated. Thanks. MF

## 748. *Teenage School Girls * young1.jpg

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: asd
Message-ID: <5p6r1e$qa3$480@news.internetmci.com>
Source record: 92858

Are you ready to look at pictures of Teens fucking and sucking?

Then cum visit:

http://www.sexy-girls.com

All models represented on Sexy-Girls are 18 years of Age or Older.

## 749. Micor PA as aplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: Toby Rogers <tobyr@www.prairieweb.com>
Message-ID: <33B73A9F.3390@www.prairieweb.com>
Source record: 92859

I have had really good luck with Micor 110watt PA for amp. I used the realys form the Micor as tx/rx, 12vdc is easy to hook up red+ blk-, 1/2watt drive.

Here is the big question. Up till this point I have been using this puppy to turn my ht into a hp/ht. That is great for being the FM big dog. What I would like to do is use it on SSB so maybe I can be hear A grid or two away.

Will I have any luck using it the way that it is, or will I have to do major surgury?

Also what can I do to bypas the Exciter stage of the PA so I won't have to attenuate the input?

Any help is appriciated.
Thanks for reading this post.

'73s
--
_// T-Bear
(*.*) Toby Rogers KB0SME
()~*~()
(_)-(_) tobyr@prairieweb.com

# 750. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-29 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc846a$60859be0$f5915cc1@dummy.forthnet.gr>
Source record: 92860

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS. OPEN FROM 14/April/97
TO 31/October/97. FOR INFORMATIONS
CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

## 751. HB admin - Re: *Teenage School Girls * young1.jpg

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19970630023501.WAA20669@ladder01.news.aol.com>
Source record: 92861

Is this the type of posting that the Supreme Court that we all must
tolerate. I do not believe this is the forum for this low moral postings.
I find it offensive.

## 752. Craig Antenna Tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: ead@sprynet.com
Message-ID: <5p7emr$d5d$1@juliana.sprynet.com>
Source record: 92862

Anyone know where I can obtain data on a Craig antenna mast. It is a telescoping minimum ht 8 ft, Max ht 30 feet. Please email responses to ead@sprynet.com

Tnx
Eric KJ7NC

## 753. Post to the Newsgroups with Mailloop

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: oirueou@OUREOWUR.COM
Message-ID: <5p7fll$qk4$2723@news.internetmci.com>
Source record: 92863

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Extract from a Web Page-

Extract from an FTP Site-

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## 754. Lowest INTERNATIONAL Calling RATES Available !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: remove@freemail.nll
Message-ID: <5p7i6k$945$4620@cadmium.aware.nl>
Source record: 92864

We offer very competitive low international calling rates worldwide, with saving up to 85% !!!

Some examples:

Australia - USA = 0.29 US$/minute
Hong Kong - UK = 0.61 US$/minute
New Zealand - Netherlands = 0.66 US$/minute
Japan - Germany = 0.61 US$/minute
Singapore - USA = 0.35 US$/minute
Sweden- Canada = 0.36 US$/minute
Germany- Dom Rep =0.71 US$/minute
France - Bahamas = 0.60 US$/minute

There are no fees, other than usage !!

If you might be interested in more information on our services and rates to other countries, please visit our website at http://www.angelfire.com/biz/GTconsult or send us a message to GTconsult@freemail.nl and tell us the countries you call now, what you are paying now and which service you use at the moment !!

If you think this is not the appropriate newsgroup to place this advert, please let us know by sending an e-mail to remove@freemail.nl and mention the newsgroup in the subject heading, so that in future we will not advertise in this newsgroup again !!

Regards
Robert

## 755. Homebrew 70 cm Transmitter schematics wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: Hans.Ameel@ping.be
Message-ID: <33b79fa9.3542607@news.ping.be>
Source record: 92865

Hello,

I would like to build a 70 cm FM UHF transmitter for packet use.

So I would verry much appreciate any schematic diagrams or
construction idea's.

Schematics for a 2 m FM VHF transmitter are welcome too.

Kind regards,

HAns.

ON1DFE (Belgium)

Hans.Ameel@ping.be

## 756. Re: Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: Jim Amos <jamos@aironet.com>
Message-ID: <33B7AEE0.32EA@aironet.com>
Source record: 92866

Bob Liesenfeld wrote:
>
> Hi,
> I'm looking for a keyer to put in my latest 8mm film can rig. Something ala
> the Curtis chip (are these still availible?) I don't really need memories, or
> freq read out, but it does need to be small. Suggestions?
> Tnx es 72
>
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com

I would recommend the TiCK-2 keyer from Embedded Research. It is in a 8 pin dip package, has sidetone out, and all adjustments are done digitally via the keyer. This includes adjusting the speed. The price for just the chip is $5.00 and is a great deal. I built one into a 20M CW rig and love it. It includes a "tune" ability and also a "straight key" and more!

The URL for Embedded Research is:

<http://www.vivanet.com/~gmdsr>

Jim N8CAH
jamos@aironet.com

## 757. Re: Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: urolab@ix.netcom.com
Message-ID: <5p8scj$qjk@dfw-ixnews3.ix.netcom.com>
Source record: 92867

In <33B6A9CE.6754AE04@visi.com> Bob Liesenfeld <wb0poq@visi.com>
writes:
>
>Hi,
> I'm looking for a keyer to put in my latest 8mm film can rig.
Something ala
>the Curtis chip (are these still availible?) I don't really need
memories, or
>freq read out, but it does need to be small. Suggestions?
>Tnx es 72
>
>--
>Genuine E-mail From the Land of the Everlasting Icicle...
>Bob Liesenfeld
>wb0poq@visi.com

No contest..the "Tick II" keyer from imbeded technologies as is used in
the popular NorCal 38 Special. New version is cheap('bout $10),
surface mount(small) and even has a 25 char. memory for contests. The
origional Tick is also available also small, cheap(er even) from same
folks.

WB4DTC - Dave

## 758. Diodes for detection i SWR meters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: lassie <arvid@plea.se>
Message-ID: <33B7EBE0.40AE@plea.se>
Source record: 92868

Hello.
My next project is a SWR meter working well over
432 Mhz. The mechanics seems possible to make, keeping
a good 50 ohm thru-line, but what detector diodes should be
suitable? Old GE-diodes, like OA90 or AA119 can be found in
some schematics, but are there any more modern alternatives?
Schottky or hot-carrier diodes?
What diodes are used in commercial professional SWR meters?
Some strange HP ones?
Grateful for any help
73 //Lars [SM4RZW]

# 759. Re: Viking Ranger II Data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-3006971453180001@k4dii.ksc.nasa.gov>
Source record: 92869

In article <33B6995C.65E0@warwick.net>, Mike & Karen Fisher
<fishermk@warwick.net> wrote:

> A ham friend of mine (I' m not one) has a Viking Ranger II transmitter
> he is restoring. It had been badly butchered and he is struggling with
> it. This unit was apparently available as a kit at one time and if he
> could get a copy of the original instructions it would be a big help.
> This seemed a likely spot to post a request. Any other links would be
> appreciated.

MF-

Twenty years ago, I picked up a Viking Ranger (original version with 27 MHz and NO grid-blocked keying), that had apparently been wired from a kit. I also had a difficult time renovating it. I had the manual at the time, but don't recall having the assembly instructions. They may have been two separate documents.

To the best of my knowledge, the Ranger II (new version with 50 MHz) did NOT come in kit form. If you find someone with the older assembly instructions, it would certainly help. But, your friend should be aware that there are some differences.

73, Fred, K4DII

## 760. QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5p962g$gof@lace.colorado.edu>
Source record: 92870

In article <5oml8v$r65@lace.colorado.edu>, tiemann@spot.Colorado.EDU (TIEMANN BRUCE) wrote:

> QST also has the extremely irritating position of being entirely mum
> about antenna performances. The ads aren't allowed to even MENTION
> gain,...snip...
> Does anyone out there have an idea how this might be changed?
>
> Bruce
> N6URH

>- I used to go to VHF/UHF antenna contests, Bruce. There were consistent
>discrepancies between the claimed db gain of manufactured antennas and
>the db gain that was measured on the antenna range. If you guessed that
>the measured gain was consistenly lower than manufacturers' claimed gain,
>congrats.

To be expected. But why doesn't the ARRL publish the results in QST? Perhaps some day, we will all see that, say, Cushcraft's claimed gains are *always* 3 dB high, and Tonna's are spot on, say. This might cause one or the other company to change their advertising to conform to reality - unless they spend too much on advertising, of course. Another thing is that maybe one company states what they think is their antenna's gain, dBd, in free space, while another states antenna+ground gain, at optimum height and takeoff angle, vs. an isotropic in free space. And, SURPRISE! get substantially "better" gains.

--> IMO the ARRL is in a unique position to dictate a standard but instead they not only say nothing, they forbid others to say anything. <--

>Since there is no antenna range in Newington, accepting antenna
>manufacturers' claimed gain seems to be the only way this might be
>changed. However, accepting such would be like having a fishing contest
>where each fisherman is required to report the size of the fish he
>caught, instead of bringing the fish in to be measured by a panel of
>judges.

What do they need a range for? They put up one on a tower, take field strength readings from a few different locations as the thing is swept around 360 degrees, then they put up another one - say, a dipole - or maybe a competitor, and then take field strength measurements again. Present the data, and that's that. This would be especially helpfull with mobile antennas, which are small so (1) it wouldn't be a lot of work, and (2) performance is expected to be poor-ish.

>It seems to me that no db claims in antenna ads is one of the things that
>QST has right.

So, you are basically advocating censorship in a technical, "scientific"
magazine. What other things should be censored? Amplifier powers?
Feedline losses?

I completely disagree. They saw fit to mention that one amp maxed out at
1480 watts - a whopping 0.13 dBs down from the leagal limit. And they
don't even MENTION the antenna performance of the HTs in the product
reviews. Now, do you think they might vary by more than 0.13 dB? If so,
then why don't they say so? Why, they could even measure the radiation
efficiency thermally, but putting each one in a styrofoam cooler, pumping
in a bunch of power, and measuring the reflected power and temperature
rise - with no guessing about the pattern or anything. But they don't do
that either.

IMO this is a disservice to the amateur community.

I repeat; how could this be changed?

Bruce Tiemann
N6URH

## 761. 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: Joshua <dvillijj@telkom.co.za>
Message-ID: <33B81F67.5271@telkom.co.za>
Source record: 92871

could anybody tell me what a 3-500Z made by GE in the USA is worth ?
this tube is unused and in original box.

regards
Joshua

## 762. ITU's $39 Telephone Logger introductory special ends soon!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: chris@itutech.com
Message-ID: <ECLwIo.MvE@iglou.com>
Source record: 92872
Cross-posted to: alt.comp.hardware.homebuilt,comp.robotics.misc,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc

The special introductory pricing ($39, reg. $59) for our Telephone
Logger kit is scheduled to expire on 7/01/97. We have extended this
pricing to 7/11/97. This is a great opportunity to get our Telephone
logger kit at a very low price. The Logger connects to your PC and
will log telephone numbers, the starting and ending times of calls,
and the duration of all calls placed on any extension of your
telephone line. The Logger can plug into any phone outlet, no
special installation is required. The kit also great for hams and
scanner buffs since it can decode DTMF from any audio source.

See our web page for more details!
---
Chris Sakkas (chris@itutech.com) ftp://itutech.com
ITU Technologies (sales@itutech.com) http://www.itutech.com
See our web page for PIC development tools and Caller ID->RS-232 products!
VISA/MasterCard/AE accepted Phone:(513)661-7523 FAX:(513)661-7534
Toll Free Order Line: 1-888-4-ITU-TECH

# 763. Re: "HOT" Chassis to Ground

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: Bryan <ks4hr@injersey.com>
Message-ID: <01bc859d$e447c640$6d3b8bce@bryan>
Source record: 92873
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thare are two things that cause that. First is the leakage of a cap from AC input to the chassis, another leakage can be within the power transformer. With 2 wire plugs you can try reversing it in the socket, it will get worse or better depending on where the leakage is since one side of your 120 is "ground" and the other 120 above it.

I have a flouresent light fixture with a leak, if I touch it and the grounded equipment at the same time I get a little "tingle". Not enough to worry about but about 20 VAC..
--
Bryan ks4hr@injersey.com

Butch Magee <butch@apollo.wes.army.mil> wrote in article <33B7C325.1D1E@apollo.wes.army.mil>...
> I was re-arranging the shack this weekend, and noticed, when
> reconnecting the ground, that I had a little ac voltage between the
> chassis and ground strapping. The ground for the shack is seperate from
> the house wiring ground. This is an older home with a two wire only
> wiring plan. The house ground is from the breaker box to earth covered
> copper bar. The rig ground is about 30 ft. from the house ground, and
> meter shows 18 vac. This has brobably been there for years and I never
> noticed it.
>
> Anyone have any suggestions as to cause/cure or just forget and keep on
> operating as usual?
>
> Thanks,
>
> Butch KF5DE
>

# 764. CAROLINA WINDOM & HF ANTENNAS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <33b8226e.2167511@noticias.ibernet.es>
Source record: 92874
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dear friends:
Through the last months I have been reading a lot about antennas over here, so people seem to be interested and keen on experimenting with antennas.
One of my questions could be about the Carolina Windom antenna by Radioworks. I own a windom antenna made by myself with a 6.1 balum and 41 metres of wire off centre fed with coax. It is pointing North, and is about 5 metres over the roof of my 14 storeys (floors) building, and I am still wondering if I could say that the antenna performance is at 5 or if I should say at 49 metres over the ground... I wonder if there are too many differences between the Carolina and the windom made by myself. I know the Carolina has a kind of vertical radiator but, Is it any interesting???
I have worked this year Taiwan, Chagos, Tunez, Lybia, Guinea, Santo Tom�, Belice, Santa Helena, Japan, USA, Africa, all Europe and with some success in almost every pile-up (considering that I hear the Dx, of course). I have tried a 1/4w vertical for 17 metres put at 1 metre over the roof with 3 counterpoise radials and the windom dipole seems to be better than the monoband vertical (both testing in the 17 metres band, of course). Only from time to time when working the USA the vertical is performing similar to the windom. I wonder if the vertical would improve if elevated to say 3 metres over the roof or if putting 2 or 3 radials more.
I am very satisfied with the windom�s performance, as the propagation is not very good nowdays, so maybe will be improving through the months, BUT as I have been always keen about vertical, Will someone explain me why the windom is out performing the monoband vertical?
What I want to do most is DX.
Francisco EA5VD
Please E mail me to: jorgegc@mundivia.es

# 765. ICOM 706 PROBLEMS !!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <33b9229d.2214500@noticias.ibernet.es>
Source record: 92875
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dear friends:
I have recently sent a message telling my problems with the 706. I had the HF section not working, neither transmitting nor receiving, though the VHF section was working OK. This happened one day while I was tunning the antenna.
I have got several answers from different countries but mostly from USA and Europe (Thanks!) and though I am still not sure about my problem, it seems that I am not the only one who has suffered this problem...
As mine is not under warranty as it is 15 monhs old (though I have not used more than 20 times) I will have to pay some hundred Usa $ dollars to the technical repair service in Spain for having the 706 repaired.
But this is not the only problem. Some people have told me also that the VHF section can be damaged if the HF and theVHF antennas are very closed.
I wish I could have an Email from ICOM America or ICOM Japan with an explanation to all this.
Also people had improved the VHF reception (very poor!) with some modiffications passed via packet or internet.
Now ICOM is back again with a new version of the 706...What problems will remain? Which ones have been solved and which ones not?

Please if you are or have been a 706 user write me back with your experiences, comments, improvements, mods, etc.

E mail jorgegc@mundivia.es

# 766. Re: CAROLINA WINDOM & HF ANTENNAS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: Cecil Moore <cecil_a_moore@ccm.ch.intel.com>
Message-ID: <33B832BD.1B61@ccm.ch.intel.com>
Source record: 92876
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

jorgegc@mundivia.es wrote:
> I know the Carolina has a kind of vertical radiator
> but, Is it any interesting???

Hi Jorge, it is interesting because it is more like the original Windom than yours is. The original Windom had some vertical radiation that helped out on 80m and 40m for low antennas.

> Will someone
> explain me why the windom is out performing the monoband vertical?

Your vertical needs many more radials but at that height, don't expect it to be as good as the Windom. A well-designed vertical will outperform a low horizontal antenna, but not a high one, at least not in the direction of maximum gain for the horizontal.

There are directions where the vertical will beat the socks off the Windom and there are directions where the Windom will beat the socks off the vertical. Such is the normal difference between vertical monopoles and horizontal dipoles.

73, Cecil, W6RCA, OOTC

# 767. TEST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: "E. Jeff Cassell W6RGV" <EJCASSELL@CCGATE.HAC.COM>
Message-ID: <33B82A9B.3D66@CCGATE.HAC.COM>
Source record: 92877

This is a test

## 768. WTB 866A Tube Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: k9two@sprintmail.com
Message-ID: <867716917.3788@dejanews.com>
Source record: 92878

I am looking for a couple of tube sockets for a 866A
homebrew power supply project.

73 Don Ferrill K9TWO

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 769. Schematic Drawing Software?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: James Jorgensen <jandrjor@interaccess.com>
Message-ID: <33B87E64.4E34@interaccess.com>
Source record: 92879

Does anyone know of a good software package for drawing schematics on either a Macintosh (preferred) or PC? I especially want to draw schematics of tube circuits.
Thanks,
Jim Jorgenen, K9RJ

## 770. Computer Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: Paul J <kd6lor1@home.net>
Message-ID: <33B88F55.1456@home.net>
Source record: 92880

Help, can anyone suggest a way to run a computer off of 12V battery power. I have a remote location with unreliable 120VAC. What I want to do is trickle charge a car battery, and let the computer continue to run in the event of a power failure.

What would be ideal is a computer power supply that takes 12VDC as its input instead of 120VAC.

Any suggestions would be appreciated.

Cc to kd6lor1@home.com

Thanks, Paul Jaruszewski, KD6LOR

## 771. Re: Micor PA as aplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5p8qdd$iq7@newsworthy.West.Sun.COM>
Source record: 92881

In article <33B73A9F.3390@www.prairieweb.com>,
Toby Rogers <tobyr@www.prairieweb.com> wrote:
>I have had really good luck with Micor 110watt PA for amp. I used the
>realys form the Micor as tx/rx, 12vdc is easy to hook up red+ blk-,
>1/2watt drive.
>
>Here is the big question. Up till this point I have been using this
>puppy to turn my ht into a hp/ht. That is great for being the FM big
>dog. What I would like to do is use it on SSB so maybe I can be hear A
>grid or two away.
>
>Will I have any luck using it the way that it is, or will I have to do
>major surgury?

The Micor PA is a class-C amplifier, class-C amplifiers are non-linear.
You need a linear amplifier for SSB. You *can* convert some class-C
amplifiers into reasonable class-AB (linear) amplifiers, but this is
not something I'd even attempt with the older Micor PA.

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

## 772. Re: Diodes for detection i SWR meters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5p9e3c$h3g@hpcvsnz.cv.hp.com>
Source record: 92882

lassie (arvid@plea.se) wrote:
: My next project is a SWR meter working well over
: 432 Mhz. The mechanics seems possible to make, keeping
: a good 50 ohm thru-line, but what detector diodes should be
: suitable? Old GE-diodes, like OA90 or AA119 can be found in
: some schematics, but are there any more modern alternatives?
: Schottky or hot-carrier diodes?

There's an HP Schottky "zero-bias video detector" diode in
an SOT-23 case that's intended for use in inexpensive,
high-volume applications. I got some samples and have
been using them up to 440...they should go much higher
with no problem. The number is HSMS-2850. I'm sure
there are many other Schottky detector diodes that would
work well in that sort of application. In my application,
I'm detecting RF down to sub-millivolt levels with them.

--
Cheers,
Tom
tomb@lsid.hp.com

## 773. Chair-Pak !! a backpack with a built in Chair !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-06-30 00:00:00 UTC
From: chairpak@chairpak.com
Message-ID: <33b77be0.0@news.net999.com>
Source record: 92883

Welcome,

Chair-Pak is a great idea!!!

It's a Backpack AND a built-in Chair!!!

See it at http://www.chairpak.com

3 Sizes Full Pak, Day Pak, and a Child Pak!

How many times have you gone somewhere and needed a chair ?
beach waiting in line with friends
hiking around the campfire conventions
air shows at the park in line at the DMV
outdoor concerts hiking trails car shows
camping on campus reading at the poo l /beach
fishing trekking rest areas
poetry readings jams outdoor games
outdoor sport events story telling to children picnics
theme parks national parks hunting
backyard outdoor weddings and anywhere you want to SIT!!!

Carry your stuff and your chair where ever you go!!!

Where do you want to sit today?

Chair-Pak is made of the strong durable Dupont Cordura and the frame is of strong and light T6 aluminum.

If you would like to order, or get more information about Chair-Pak, please visit our web site

http://www.chairpak.com

## 774. Seimens RT125/2000 Tubes for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: "Jeff W. Parisse" <jparisse@ddlabs.com>
Message-ID: <01bc85b2$5b1afee0$1d0597cf@jparisse>
Source record: 92884

I've got two NEW Seimens RT125/2000 Transmitting tubes for sale.

These are beautiful high power performers! I'll sell one or both.

Please e-mail offer to jparisse@ddlabs.com

## 775. LONG WIRE ( wire types)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <33b8522a.526071@news.zippo.com>
Source record: 92885

Would anyone be able to offer thier opinion on the differant
types of wire composition, for long wire antenna's, such as copper,
fencing wire, ???

Steve Carlisle

# 776. FS: TEK 465M and HP 8640B/323 Sig. Gen.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: murrayp <murrayp@MCI2000.com>
Message-ID: <01bc85d1$fb69b840$aa1437a6@kevin--home>
Source record: 92886

SIGNAL GENERATORS AND O SCOPES!
(4) HEWLETT PACKARD 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz, $475 each, free shipping
in USA, working but may need minor repairs and/or calibration.
---
TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!

## 777. Re: FS: surplus stuff on the net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: kj4uo@aol.com
Message-ID: <19970701054401.BAA09858@ladder02.news.aol.com>
Source record: 92887

Hi,

I think the address should really say:

http://home.aol.com/PDRUNEN

## 778. PC controlled.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: Michael Gray Anthony <gray480@wilmington.net>
Message-ID: <33B8D23C.7ABB@wilmington.net>
Source record: 92888

Does anyone know if any work has been done on building a radio on an ISA card or using a serial or parrallel interface to a PC? I would like to see some work done in these directions using software based DSP and DDS to build a commercial quality reciever/tranciever at low cost. I would appreciate any information as to work along these lines or someone interested in the idea.

email gray480@wilmington.net
packet ke4qiu@km4eo.#ilm.nc.usa.na

## 779. Oscilloscope FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0107970344590001@wd1v.mv.com>
Source record: 92889

On my home page or send an Email with SUBSCRIBE in the subject field and you'll receive the FAQ as an attached file.

73,

John D. Seney
http://www.mv.com/ipusers/wd1v

## 780. ! PROVEN PSYCHICS!! TRY-IT-FREE!! 1-800-677-8063

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: michele@precipice.com
Message-ID: <5pabnb$ard@news1-alterdial.uu.net>
Source record: 92890

The Live Psychic Calling Center invites you to enjoy
a complete fifteen minute, live psychic reading with
no credit card charges. Try it Free on
1-800-677-8063. Adults over 18 only.

Dial now 1-800-677-8063

# 781. !!!FREE PSYCHIC ADVICE / SPECIAL SAMPLES LINE !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: ps002@puresource.com
Message-ID: <5paih5$hsl@news1-alterdial.uu.net>
Source record: 92891

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-677-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-677-8057

## 782. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5paio0$fl5$5@nadine.teleport.com>
Source record: 92892

In article <5p962g$gof@lace.colorado.edu>,
tiemann@spot.Colorado.EDU (TIEMANN BRUCE) wrote:
>In article <5oml8v$r65@lace.colorado.edu>, tiemann@spot.Colorado.EDU
>(TIEMANN BRUCE) wrote:
>
>> QST also has the extremely irritating position of being entirely mum
>> about antenna performances. The ads aren't allowed to even MENTION
>> gain,...snip...
>> Does anyone out there have an idea how this might be changed?
>
>IMO this is a disservice to the amateur community.

>. . . .

>I repeat; how could this be changed?
>
>Bruce Tiemann
>N6URH

1. Join the ARRL if you're not already a member.

2. Tell your director your concerns.

3. Encourage others to contact their directors. If lots of people do, you
have a shot at getting things changed. If they don't, nothing will change
-- and it shouldn't.

Roy Lewallen, W7EL

# 783. !!!PSYCHIC PREDICTIONS / TRY IT FOR FREE !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: ps002@puresource.com
Message-ID: <5paq1f$l76@news1-alterdial.uu.net>
Source record: 92893

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

## 784. ITU's $39 Telephone Logger introductory special ends soon!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: chris@itutech.com
Message-ID: <5paadp$q5v@thorgal.et.tudelft.nl>
Source record: 92894
Cross-posted to: alt.comp.hardware.homebuilt,comp.robotics.misc,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc

The special introductory pricing ($39, reg. $59) for our Telephone
Logger kit is scheduled to expire on 7/01/97. We have extended this
pricing to 7/11/97. This is a great opportunity to get our Telephone
logger kit at a very low price. The Logger connects to your PC and
will log telephone numbers, the starting and ending times of calls,
and the duration of all calls placed on any extension of your
telephone line. The Logger can plug into any phone outlet, no
special installation is required. The kit also great for hams and
scanner buffs since it can decode DTMF from any audio source.

See our web page for more details!
---
Chris Sakkas (chris@itutech.com) ftp://itutech.com
ITU Technologies (sales@itutech.com) http://www.itutech.com
See our web page for PIC development tools and Caller ID->RS-232 products!
VISA/MasterCard/AE accepted Phone:(513)661-7523 FAX:(513)661-7534
Toll Free Order Line: 1-888-4-ITU-TECH

# 785. Re: Computer Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: "Byron T." <byron.taradena@juno.com>
Message-ID: <33B901DC.7AAB@juno.com>
Source record: 92895

Paul J wrote:
> 
> Help, can anyone suggest a way to run a computer off of 12V battery
> power. I have a remote location with unreliable 120VAC. What I want to
> do is trickle charge a car battery, and let the computer continue to run
> in the event of a power failure.
> 
> What would be ideal is a computer power supply that takes 12VDC as its
> input instead of 120VAC.
> 
> Any suggestions would be appreciated.
> 
> Cc to kd6lor1@home.com
> 
> Thanks, Paul Jaruszewski, KD6LOR

How about using a 12VDC to 120AC converter? The type used in solar
power systems....

Byron T. KC7EYU, Tucson, AZ.

## 786. Re: Need 3SK97 mosfet help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: Alex <abom@iaehv.nl>
Message-ID: <01bc8632$657ed930$de219082@cig483>
Source record: 92896
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

If you like, you can have one, I have a 3sk97 (Matsuhita)

********** Alex **********
* e-mail: abom@iaehv.nl *
* pa0axb@qsl.net *
**********

## 787. Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: mkj@world.std.com
Message-ID: <ECnEzs.2r1@world.std.com>
Source record: 92897
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

(I originally posted this query to some Electronics groups, and it was suggested that the Radio groups would be more likely to have an answer.)

Can someone here please give me a quick tutorial, or point me to information, about how to calculate the inter-winding capacitance (and self-resonance) of a multi-layer coil, based on the geometry? Thanks.

--- mkj

## 788. output impedance of class c amp???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: yaesutom@aol.com
Message-ID: <19970701180100.OAA06429@ladder02.news.aol.com>
Source record: 92898

Does anyone know how to calculate the output impedance of a class C 1 transistor amplifier? I have a homebrew AM tx for shortwave that uses an old 2SC2314 (i think) driver transistor out of an old CB for the output. It is a class C amplifier with an RF choke on the collector going to +12V for power, then a .01uF cap on collector for the RF output. With no matching network/filter, I can get about 1watt carrier into a 50 ohm load. It sound great, but it's full of harmonics because its just the output of a class C amplifier. I need to make a pi network to filter out harmonics, but I don't know what the output impedance of the transistor is. I have a book that has a formula, but one of the things you need to know is what power output you need out of the amp. What if the power output is changing (AM, SSB, or whatever)?

yaesutom@aol.com
http://members.aol.com/yaesutom

## 789. Re: Computer Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5pbb0b$6d5$1@news1.rmi.net>
Source record: 92899

Paul J (kd6lor1@home.net) wrote:
: Help, can anyone suggest a way to run a computer off of 12V battery
: power. I have a remote location with unreliable 120VAC. What I want to
: do is trickle charge a car battery, and let the computer continue to run
: in the event of a power failure.

: What would be ideal is a computer power supply that takes 12VDC as its
: input instead of 120VAC.

Have you considered using a laptop? Even a 'big' laptop, if that's
the kind of 'horsepower' you need?

Most run and charge off some sort of wall-module -- most wall modules
for laptops seem to be 9v and most battery packs seem to be 7.2vdc --
at least on the older, affordable models. Float a car battery from a
charger off the mains -- float the laptop of the battery with a
12.6v-to-9v lm309/7809 regulator and you should be reliably 7x24.

hth

73
Jonesy

--
SK

--
Marvin Jones jonz@rmi.net
Gunnison, Colorado

## 790. Big Page Of Links

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: dwentz@accessus.net
Message-ID: <5pbk2m$hu2$1@news.accessus.net>
Source record: 92900

Has large section of HOMEBREW and QRL
http://users.accessus.net/~dwentz/kb9jja/jja_ham-links.html

73's
de kb9jja/dale

## 791. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: Jim Phillips <phillips@spacestar.net>
Message-ID: <33B96B8B.1973@spacestar.net>
Source record: 92901
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Mahatma Kane-Jeeves wrote:
>
> (I originally posted this query to some Electronics groups, and it was
> suggested that the Radio groups would be more likely to have an answer.)
>
> Can someone here please give me a quick tutorial, or point me to
> information, about how to calculate the inter-winding capacitance (and
> self-resonance) of a multi-layer coil, based on the geometry? Thanks.
>
> --- mkj
this is a homebrew newsgroup.

build it, measure it, modify it!

Jim

There is some really good shareware on this very topic. look for it at
the ARRL. (American Radio Relay League)

## 792. Easy Tube Project?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: cvoid@netcom.com
Message-ID: <cvoid-0107971604450001@axolotl.macromedia.com>
Source record: 92902

Greetings!

Am looking for plans for a relatively easy tube transmitter/receiver/transceiver project good for someone who has never worked with tubes before... any help would be appreciated!

--
Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
* PGP v2.3a Public Key Available Via Finger *
WWW: http://www.morphine.com/cvoid/

## 793. 6M transceiver projects???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: William Vaughn <billv@olympus.net>
Message-ID: <33B9AF24.5097@olympus.net>
Source record: 92903

Hi,
I am looking for a six meter ssb project to build. Any old plans out there? QRP is fine, regenerative receiver ok, I would like to build something from scratch, homebrew if you will. Sorry nothing for sale. Any help would be appreciated. 73. Bill, KB7MRF

## 794. Updated Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33B99B01.58E7@primenet.com>
Source record: 92904

```
Updated Web Page
http://www.qsl.net/k7on
```

# 795. Comb Generator versus Marker Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-01 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <33B96BB2.10E5@lafn.org>
Source record: 92905

Hi,

I am working on a homebrew Spectrum analyser and need to
produce some markers at known frequencies.

My question is what is the easiest or best way to produce a series of
known frequency markers from 10 mhz to above 900 mhz?
I want to generate 25mhz markers and harmonics or 50 mhz and harmonics
or
100 mhz and harmonics to bracket a signal.

Is a Comb Generator ckt useful for producing known frequency markers?
If Comb is useful for markers, where can I obtain design info or who
sells it as a kit? I'd rather build my own.

At the moment, I am just using a 48 mhz TTL oscillator, in a
DIP 4 pin package, and looking at the blips from 48 mhz fundamental
and it's harmonics. There seem to not be many higher order harmonics
even though output is fast switching TTL. Highest I see is just under
150 mhz and amplitude is very small. Adding a 12 inch long clip lead is
the
only way I can seem to make the 48 mhz output radiate harmonics.

Thanks for any hints or pointers.

73, W6MIK
--

_____________________________________
Dave Shalita,
af389@lafn.org
Van Nuys, CA

# 796. ! PROVEN PSYCHICS! FREE PREDICTIONS! FREE!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: bibi12@concentric.com
Message-ID: <5pcevn$9ss@chronicle.concentric.net>
Source record: 92757

Curious about psychics? Now you can try a psychic
reading free, just dial 1-800-677-8039 - our free
samples line where master psychics will amaze you
with their knowledge and forsight. Try it now -
see for yourself. adults over 18 only

Dial 1-800-677-8039

# 797. TK/FS TWT 8.0-12.4Ghz 10Watt with powersup. 220V

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: "petersmt@worldaccees.nl" <petersmt@worldaccees.nl>
Message-ID: <33B98ACE.5@worldaccees.nl>
Source record: 92758

```
TK/FS TWT 8.0-12.4Ghz 10Watt with powersup. 220V
us $ 500,--
```

## 798. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5pd1ga$3om$1@nadine.teleport.com>
Source record: 92759
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <33B96B8B.1973@spacestar.net>,
Jim Phillips <phillips@spacestar.net> wrote:
>Mahatma Kane-Jeeves wrote:

>> (I originally posted this query to some Electronics groups, and it was
>> suggested that the Radio groups would be more likely to have an answer.)

>> Can someone here please give me a quick tutorial, or point me to
>> information, about how to calculate the inter-winding capacitance (and
>> self-resonance) of a multi-layer coil, based on the geometry? Thanks.
--- mkj
>this is a homebrew newsgroup.

>build it, measure it, modify it!

So homebrew precludes being analytical and is restricted to cut-and-try?
How sad for amateur radio.

Roy Lewallen, W7EL

# 799. ! TROUBLE WITH LOVE? TRY-A-PSYCHIC-FOR-FREE!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: bibi12@concentric.com
Message-ID: <5pco4c$7f6@chronicle.concentric.net>
Source record: 92760

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

## 800. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Fred <peerenbf@dma.org>
Message-ID: <Pine.LNX.3.95.970702064103.4319B-100000@dmapub.dma.org>
Source record: 92761

On Tue, 1 Jul 1997, Roy Lewallen wrote:

> In article <5p962g$gof@lace.colorado.edu>,
> tiemann@spot.Colorado.EDU (TIEMANN BRUCE) wrote:
> >In article <5oml8v$r65@lace.colorado.edu>, tiemann@spot.Colorado.EDU
> >(TIEMANN BRUCE) wrote:
> >
> >> QST also has the extremely irritating position of being entirely mum
> >> about antenna performances. The ads aren't allowed to even MENTION
> >> gain,...snip...
> >> Does anyone out there have an idea how this might be changed?
> >
> >IMO this is a disservice to the amateur community.
>
> >. . . .
>
> >I repeat; how could this be changed?
> >
> >Bruce Tiemann
> >N6URH
>
> 1. Join the ARRL if you're not already a member.
>
> 2. Tell your director your concerns.
>
> 3. Encourage others to contact their directors. If lots of people do, you
> have a shot at getting things changed. If they don't, nothing will change
> -- and it shouldn't.
^^^^^^^^^^^^^^^^

quite true, after reading the inflated claims of gains in other mags and
then going out on an antenna testing range and having the opportunity to
see the real world figures for the antennae in question I for one have to
agree with the QST practice. The inflated gains listed in the ads are
from the heart of Madison Ave. (for those of you who do not know where
that is check with advertising writers and they will tell you) The
antenna manufacturers learned well from the old CB market as to how to
sell the most antennas. All they had to do was list a higher gain figure
than the competitor and they out sold them to the tune of mega-bucks.
Just ask any sales manager from the old antenna specialists company how
that jingle of the coins in the cash register went.

>
> Roy Lewallen, W7EL
>
>

Well, I guess I can get on the old soap box too. But remember this, each antenna works a little bit and some times a whole lot differant in each case, All dependant upon the surrounding environment and its' effect on it.

Fred ke8tq

An Firinne in aGaidh an tSaoil
/I\

# 801. NEW WEB SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: terryh@iamerica.net
Message-ID: <5pbvej$6kl@news1.iamerica.net>
Source record: 92762

http://cust.iamerica.net/terryh/

## 802. WTB: rectifiers to replace 866 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: frankf1056@aol.com
Message-ID: <19970702114501.HAA02242@ladder02.news.aol.com>
Source record: 92763

looking for the direct replacement solid state rectifiers for the 866
tubes
Frank kb0zfn

# 803. Re: Computer Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: "John C. Fakan" <usscod@en.com>
Message-ID: <33B9EB1E.57D@en.com>
Source record: 92764

Paul J wrote:
>
> Help, can anyone suggest a way to run a computer off of 12V battery
> power. I have a remote location with unreliable 120VAC. What I want to
> do is trickle charge a car battery, and let the computer continue to run
> in the event of a power failure.
>
> What would be ideal is a computer power supply that takes 12VDC as its
> input instead of 120VAC.
>
> Any suggestions would be appreciated.
>
> Cc to kd6lor1@home.com
>
> Thanks, Paul Jaruszewski, KD6LOR

Hi, Paul,

The monitor will be the big problem. The computer uses 12vdc, 5vdc and -5vdc, so these would be easy to provide from batteries. No such luck on the standard monitors -- which are also the big power hogs. A lap top with its LCD (or other) display makes more sense.

An inverter for the monitor power would certainly work if you can live with the large energy requirements.

Good luck,
John, KB8MU

## 804. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <33ba4ab5.1292134@eskinews.eskimo.com>
Source record: 92765

mkj@world.std.com (Mahatma Kane-Jeeves) wrote:

>(I originally posted this query to some Electronics groups, and it was
>suggested that the Radio groups would be more likely to have an answer.)
>
>Can someone here please give me a quick tutorial, or point me to
>information, about how to calculate the inter-winding capacitance (and
>self-resonance) of a multi-layer coil, based on the geometry? Thanks.
>
> --- mkj
<><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
K6STI has an excellent program called COIL.EXE that calculates what
you want and more. It comes included with the ARRL handbook, or you
can order it separately for $10. Brian's address is k6sti@n2.net.

73, Bill W7TI

## 805. tuned lc oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Ariel <rox@dgte.mozcom.com>
Message-ID: <33BA524D.3E8B@dgte.mozcom.com>
Source record: 92766

I need info. about the basic tuned lc oscillator cct.

ariel

## 806. Searching for good mail order companies.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: debey@deltabeta.com
Message-ID: <33ba4e54.88644753@isdnhost>
Source record: 92767

Can someone suggest a few good mail order companies for computer and electronics products.

Thanks, Henry

## 807. Looking for mail order electronics tools.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: debey@deltabeta.com
Message-ID: <33ba4e91.88705893@isdnhost>
Source record: 92768

I am looking for some mail order sources for electronics tools.
Currently we need to purchase a desoldering station.

Thanks, Henry

## 808. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970702135101.JAA06460@ladder02.news.aol.com>
Source record: 92769

Hi Fred--

What you say is very true--and the same flap is going on right now over antenna tuner power ratings.

The ARRL is in a unique position to assert leadership in the area of technical standards--and to provide its members with a healthy dose of consumer education. Unfortunately, to date, their philosophy has been more to bully manufacturers (as bad guys) rather than to pro-actively establish uniformly-acceptable standards for testing and rating products within the industry.
Case in point--instead of setting up a range in Newington and developing comprehensive procedures for testing antennas using accepted practices, they simply (and punitively) banned gain figures from ads altogether. For tuners, the League at least attempted testing--using a technical resource outside the organization. However, the measurement technique was unverified, the loss results were inaccurate, and the results were published as gosprel in a product review format designed to make at least some manufacturers look quite bad. Once again, the approach was to play "gotcha" with the industry--rather than to assert positive leadership in the area of education and standards.

There's little doubt that ad departements within the ham radio industry deserve a measure of criticism for making marginal-to-outrageous product claims. But, when the customer is educated and the technical standards for product rating are well-defined within the industry, manufacturers no longer have the option of exagerating performance and justifying it by saying, "Everyone else is doing it, so I must, too".

This is the caliber of representation and leadership I'd expect the ARRL to exert upon our hobby--and I think the present leadership recognizes the need for it. However, to quote an old saw, when it comes to effecting change, suction works far better than pressure!

Rick K1BQT

## 809. Need PC board software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Mark Mumaw <nu6x@sedona.net>
Message-ID: <01bc86f4$81de4120$8650b6c6@nu6x.sedona.net>
Source record: 92770

I have designed a mixer/converter that allows the Kenwood SM220/SM230 monitor scope to be used with the Yaesu FT1000MP or FT1000D. I have many request to make up a PC board and parts kit.

I am looking for some inexpensive software to do the layout/artwork for a simple printed circuit board. I'm looking for either shareware, something preowned, or a cheap new package.

Can anyone help me?????

I'm also looking for a company where I can have PC boards made in small quanities (50 - 100).

Thanks .... Mark NU6X nu6x@sedona.net 520-284-6848

## 810. How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: debey@deltabeta.com
Message-ID: <33ba66a3.94868992@isdnhost>
Source record: 92771

Is it possible to use a large capacitor as a UPS?

If I have a 1.0 farad capacitor and a PC that draws 5 amps at 5 volts
how long would the voltage stay above 4.65 volts?

Is there a formula for calculating this type of thing?

Thanks,
Henry

## 811. Re: Electronic Cat Trackers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: apavlin@nasa.kodak.com
Message-ID: <5pdv53$oeu$1@kodak.rdcs.Kodak.COM>
Source record: 92772
Cross-posted to: rec.pets.cats.anecdotes,rec.radio.amateur.homebrew

Note: this rec.pets.cats.anecdotes followup also cross-posted to the group
rec.radio.amateur.homebrew in hopes of getting some advice. Cat-only followups
to this should trim the newsgroups list appropriately.

In article <33B96304.ACA44031@ix.netcom.com>, Kate Ashley <Shamrock@ix.netcom.com> writes:
> Darren Enns wrote:
> > Hello all:
> >
> > I am not sure if I have asked this question in this newsgroup before, but
> > here goes: does anyone have any leads for a small device that could be
> > attached to a pet's collar to transmit a signal that could then be used
> > to find it if it gets away from the yard?

This sounds like a discussion I was having with several of my ham radio buddies.
One of them used to work in a job where he was tracking the movements of wild
animals (bears, raccoons, etc.). Unfortunately, he couldn't get me the specs on
the telemetry transmitters they use for this work; I really would like to know
how these devices are mechanically constructed to survive the wild animal's
desire to get that <censored> thing off!

This topic is of interest to me, because my Number One cat would occasionally
decide to wander off and not come back for a day or so; when he did come back,
he (of course) pretended to be starving, although he sure didn't look it. My
guess is that he was mooching off somebody up the road, but I never did find
where he would disappear to. BTW, the cat is still around, although he hasn't
disappeared lately; maybe his food providers up the road moved? :-) And yes, the
cat is neutered; I'm not adding to the feral cat problem by letting him out
to hunt.

There are plenty of ham radio books that explain the receiving end of radio
direction finding, but there seems to be a great dearth of design information
on hidden/portable/rugged beacon transmitters. Any hams got any good ideas on
this problem?

> > I have tried these cheap 'child beepers', but they work on the principal
> > that the device on the child will 'beep' if he/she gets too far away
> > so the parent has to be within earshot. This will not work for a cat
> > that has plans of his own! :)
> >
> > I have browed a recent electronic magazine, and one company sells a
> > small FM transmitter kit for about $70 that emits a 'beep' signal on
> > 137Mhz, and then you 'simply' use a scanner radio to locate where it
> > is coming from (up to 1/2 mile). This sounds promising, but I still
> > have my doubts that it would even be 'directional' enough to be
> > useful.

Darren: Where did you see that article/ad about the transmitter? Was the transmitter designed to be attached to an animal? If so, I'd be very interested in reading the article. And, as I'm sure many hams will back me up on, such a set-up _can_ be directional enough to find the transmitter; "fox-hunting" (as it's called in the ham radio community) is a common competition event.

> > Surely there must be companies out there that recognize that a person
> > might want to find a slightly lost pet (cat)!
> >
> > Anyone have any ideas?
> >
> > Thanks
> >
> > Dare
>
> Hmmm interesting idea. One of the problems I can think of, especially
> if your cat has a break-away collar (if not I strong suggest you switch
> to one) is that the collar could be released.

--

---
Andrew Pavlin, KA2DDO
Eastman Kodak Company, Office Imaging Division
901 Elmgrove Road, Bldg. 11
Rochester, NY 14653
---

## 812. Re: WTB: rectifiers to replace 866 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Bill Durspek WØBVR <BILLJD@mcleodusa.net>
Message-ID: <33BA80AC.21E9@mcleodusa.net>
Source record: 92773

FrankF1056 wrote:
> =

> looking for the direct replacement solid state rectifiers for the 866
> tubes
> Frank kb0zfn
The replacement is a 1N2637, spec is prv=3D10KV @ 250 ma. It has a 4 pin
tube-type base and the diodes are mounted inside of an epoxied
cylindrical assy with a plate cap on top. You can probably find these
at a ham fest for several dollars.
73, Bill, W=D8BVR

## 813. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <5pe09i$6em@harpo.cs.ubc.ca>
Source record: 92774

debey@deltabeta.com writes:
>Is it possible to use a large capacitor as a UPS?

Practically, no.

>If I have a 1.0 farad capacitor and a PC that draws 5 amps at 5 volts
>how long would the voltage stay above 4.65 volts?
>
>Is there a formula for calculating this type of thing?

Of course. A current of 1 amp causes the voltage across a 1 Farad capacitor
to change by 1 volt/sec. So if your capacitor is initially charged to
5.0 V, it would take 350 ms for the voltage to drop 350 mV to 4.65 V
with a 1 A discharge rate. At 5 A discharge, it would take only 70 ms
for the voltage to drop to that level.

Not very useful, eh? That's why people use batteries - they store
*far* more energy than a capacitor for their size and weight.

Dave

# 814. ANALOGIC SIMULATOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Andrea Meini <Protech.com@agora.stm.it>
Message-ID: <33BA8546.7C2A@agora.stm.it>
Source record: 92775

Anyone there who can give me information where I
can find some ANALOGIC SIMULATOR SOFTWARE ?
I'd like it to be shareware, of course !
But, anyhow even a cheap one could fit my
needs.

You can mail directly to my other e-mail:

protech.tech@agora.stm.it

THANKS !!!!

# 815. FS: 160 - 10M Hi Power AM transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Chuck O'Neal <CONEAL@microtouch.com>
Message-ID: <01bc8717$68e3fa20$f7512ec0@coneal>
Source record: 92776

Hi Folks,

I have available for sale an extremely well built high power AM transmitter that covers 160 thru 10 meters. Final is a 4CX1500A modulated by a pair of 3CX1200A7's using 5KW broadcast iron. Fully metered, vacuum variables with turns counters, extra final tube, all machining professionally done. Plate power supply not included, needs 3500VDC at up to 1.5 amps, depending on the desired output power. All other supplies built in. Requires about a total of 26" of 19" rack space, plus room for the modulation transformer, reactor and plate supply. It can run very conservativly at 375 watts out...up to....well look up the final tube. Priced at around $1.00 a watt at full output. Due to weight it is pick up only in Bolton, MA. 30 miles west of Boston.

Need room for the next rig under construction.

Chuck...K1KW

## 816. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <33BAA596.6445@hevanet.com>
Source record: 92777

Henry C. DeBey wrote:
>
> Is it possible to use a large capacitor as a UPS?
>
> If I have a 1.0 farad capacitor and a PC that draws 5 amps at 5 volts
> how long would the voltage stay above 4.65 volts?
>
> Is there a formula for calculating this type of thing?
>
> Thanks,
> Henry

Yep, there is: dv/dt = I/C
so 5A/1F = 5volts/second. So you'd drop half a volt in .1 seconds.
So you'd need a LOT more capacitance.
--
Please remove NOSPAM from return address before replying.

# 817. FS: HB LEGAL LIMIT ANTENNA TUNER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: labenz@ix.netcom.com
Message-ID: <5pehas$kmj@sjx-ixn5.ix.netcom.com>
Source record: 92778

Legal limit T network antenna tuner 160-10 meters

Built in BC610 Antenna Tuner Chassis.

Orignal rotary inductor used in circuit 120 uh

Dual 300/300 pf johnson cap used in output of circuit

Dual 200/200 pf johnson cap used in input of circuit

$125.00 plus UPS

qsl via the E

Dave

# 818. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5pei0s$sem$1@nadine.teleport.com>
Source record: 92779

In article <33BAA596.6445@hevanet.com>, miker <mreiney@hevanet.com> wrote:
>Henry C. DeBey wrote:
>>
>> Is it possible to use a large capacitor as a UPS?
>>
>> If I have a 1.0 farad capacitor and a PC that draws 5 amps at 5 volts
>> how long would the voltage stay above 4.65 volts?
>>
>> Is there a formula for calculating this type of thing?
>>
>> Thanks,
>> Henry
>
>Yep, there is: dv/dt = I/C
>so 5A/1F = 5volts/second. So you'd drop half a volt in .1 seconds.
>So you'd need a LOT more capacitance.

Any real capacitor also has a finite internal resistance, so the voltage would also drop I * R, or 5 * R in this case, where R is the capacitor's internal resistance.

You may be tempted to try using some of the small extremely high-value capacitors used for RAM backup and the like. These have a very high internal resistance, so wouldn't be usable.

Any capacitor large enough to do the job would be absolutely huge. A battery is a much more practical choice. That's why commercial UPSs all use them.

Roy Lewallen, W7EL

## 819. Re: output impedance of class c amp???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33badab8.13230718@news.online.no>
Source record: 92780

On 1 Jul 1997 18:01:41 GMT, yaesutom@aol.com (YaesuTom) wrote:

>Does anyone know how to calculate the output impedance of a class C 1
>transistor amplifier? I have a homebrew AM tx for shortwave that uses an
>old 2SC2314 (i think) driver transistor out of an old CB for the output.

>yaesutom@aol.com
>http://members.aol.com/yaesutom
>
the question is xposted to sci.electronics.design, three replies

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 820. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33bad966.12892819@news.online.no>
Source record: 92781

On Tue, 01 Jul 1997 15:41:47 -0500, Jim Phillips
<phillips@spacestar.net> wrote:

>Mahatma Kane-Jeeves wrote:
>>
>> (I originally posted this query to some Electronics groups, and it was
>> suggested that the Radio groups would be more likely to have an answer.)
>>
>> Can someone here please give me a quick tutorial, or point me to
>> information, about how to calculate the inter-winding capacitance (and
>> self-resonance) of a multi-layer coil, based on the geometry? Thanks.
>>
>> --- mkj
>this is a homebrew newsgroup.
meaning: buying and selling items???????

>
>build it, measure it, modify it!
>
>Jim
>
>There is some really good shareware on this very topic. look for it at
>the ARRL. (American Radio Relay League)

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 821. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: David Newkirk <dnewkirk@bellatlantic.net>
Message-ID: <01bc8741$3dc55da0$7179c697@namn>
Source record: 92782
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Mahatma Kane-Jeeves wrote:
>
> (I originally posted this query to some Electronics groups, and it was
> suggested that the Radio groups would be more likely to have an answer.)
>
> Can someone here please give me a quick tutorial, or point me to
> information, about how to calculate the inter-winding capacitance (and
> self-resonance) of a multi-layer coil, based on the geometry? Thanks.
>
> --- mkj

See F. E. Terman, _Measurements in Radio Engineering_ (New York:
McGraw-Hill, 1935), Chapter III, "Circuit Constants at Radio Frequencies,"
subhead "19. Distributed Capacity of Coils" (page 67).

Regards,

David Newkirk, W9VES

## 822. World Wide Free Internet Access .

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: ASE1000@1stfamily.com
Message-ID: <717cd$123830.2b0@NEWS>
Source record: 92783

Dear Internet user,

If you are paying for your Internet services then
you have not heard about 1stFamily. We have
a marketing method that guarantees you will not
have to pay one dollar to access the Internet.

* You will never again have a busy signal !

* You will always have the fastest access you have ever seen !

* Residual income for the rest of your life !

* and much much more.

This opportunity is for YOU to take advantage of !

Do you wish to continue the rest of your life paying
$19.95/month to access the Internet when you can
access it for free with speed and reliability that exceeds
the other competitors ??? We did not think so. That
is why our company is the best and fastest growing
of it's kind and will soon compete with AT&T and MCI
and all the big companies in providing Internet Service.

For complete information please mailto:sameer@1stfamily.com
and type "More Info" in the subject box.

You will receive our webpage address where you can get enrolled in
seconds !!

---

Sameer (Sponsor ID# DUA2692)
Stop Paying for Internet Access
mailto:Sameer@1stfamily.com

---

## 823. Re: Computer Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: "Quentin J. Lewis" <bigqueue@tiac.net>
Message-ID: <33BB02C3.3272@tiac.net>
Source record: 92784

Paul J wrote:
>
> Help, can anyone suggest a way to run a computer off of 12V battery
> power. I have a remote location with unreliable 120VAC. What I want to
> do is trickle charge a car battery, and let the computer continue to run
> in the event of a power failure.
>
> What would be ideal is a computer power supply that takes 12VDC as its
> input instead of 120VAC.

There are a number of inexpensive 12v to 120v inverters on the market today. You will find them in the automotive section at Walmart or KMart. They are generally sold so that you can run AC devices on a car/boat...like TVs or computers.

-Quentin

# 824. Re: need specs for 3CX1200A7/D7/Z7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Hal Kneller <kneller@sunline.net>
Message-ID: <33BB0F08.7CD4@sunline.net>
Source record: 92785

Lane C. Zeitler wrote:
>
> I have contacted Eimac but the spec sheets have not arrived yet. What is
> the max. plate voltage for the 3CX1200A7? 5kv @ .8 amps

If you e-mail me a fax # I will fax you the data sheets from their
catalog.

These are old tubes!A7 fil v is 7.5 @ 21 amps
D7 fil is 6.3 v @ 25 amps
Z7 is same fil as D7.

There are other subtle differences.

## 825. 2m mw level transmitter sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: "David W. Foster" <fosterd@konnections.com>
Message-ID: <NEWTNews.867903798.1722.fosterd@fosterd.konnections.com>
Source record: 92786

Does anybody have suggestions where I might purchase a simple 2m transmitter with output power of a few 100 mw? Small size, low power consumption most important. Kit or pre-assembled would be fine.

Tnx,

Dave Foster
KE6MOM

## 826. Harris Medalist Console

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Hal Kneller <kneller@sunline.net>
Message-ID: <33BB2F6E.ED3@sunline.net>
Source record: 92787
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I don't know if there are any broadcast engineers on this NG, but I could sure use a program amplifier (or 2) for a Harris Medalist console. It doesn't have to be working, if you have one or more, please e-mail me.

Thanks

Hal Kneller
WZZS Radio

kneller@sunline.net

## 827. Re: WTB: rectifiers to replace 866 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: Hal Kneller <kneller@sunline.net>
Message-ID: <33BB31A7.54C6@sunline.net>
Source record: 92788

Try http://www.surplussales.com

They have lots of stuff, but if not, you may have to buy some HV diodes
and make up something. Don't forget to put some transient suppression
on if you do this.

HK KD4RLX

FrankF1056 wrote:
>
> looking for the direct replacement solid state rectifiers for the 866
> tubes
> Frank kb0zfn

# 828. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5pel29$qdb@apple.telalink.net>
Source record: 92789

debey@deltabeta.com (Henry C. DeBey) wrote:
>Is it possible to use a large capacitor as a UPS?
>If I have a 1.0 farad capacitor and a PC that draws 5 amps at 5 volts
>how long would the voltage stay above 4.65 volts?
>Is there a formula for calculating this type of thing?

Only for a very short period of time.

The formula is V(t)=E*(1-(1-e^(-t/R*C)))
where E is the voltage you charged the cap to (5 volts in this case)
e is the base of natural logarithms, 2.718
t is time in seconds
R is the resistance of the load, in this case 1 ohm. (5 volts
divided by 5 amps)
C is the capacitance of the capacitor

If I remember my algebra properly, the voltage would remain above
4.65V for 0.6575 second.

HOWEVER-- that assumes the 1.0 farad capacitor has zero internal
resistance. That is most assuredly NOT a valid assumption. In fact,
if this resistance is more than 0.07 ohm, the voltage under load will
NEVER be greater than 4.65V. (unless you charge the capacitor to more
than 5V to begin with. However, the internal resistance is on the
order of 30 ohms according to the Digi-Key catalog, so you'd have to
charge it to 155 volts - well beyond the 5.5 volt rating.)

These caps are designed to back up CMOS RAM chips, which draw
virtually no current when their logic states aren't changing.

73 Doug

## 829. Message not deliverable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: IMCEACCMAIL-Administrator+20at+20HQS3@ncr.disa.MIL
Message-ID: <199707020952.CAA22235@mailbox1.ucsd.edu>
Source record: 92790

```
This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------ =_NextPart_000_01BC86AB.F89D4FC0
Content-Type: text/plain

------ =_NextPart_000_01BC86AB.F89D4FC0
Content-Type: application/ms-tnef
Content-Transfer-Encoding: base64

<encoded_portion_removed>
vwCgJJjKKbMg

------ =_NextPart_000_01BC86AB.F89D4FC0--
```

## 830. Looking for Yaesu Owners

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-02 00:00:00 UTC
From: dthimm@newnorth.net
Message-ID: <33b9cca4.19303909@news.newnorth.net>
Source record: 92906

Greetings,

I have recently made available the N9IPV Spectrum Analyzer for the
Yaesu FT757 style rigs.
I would like to extend the same software for owners of the following
rigs...
Yaesu FT 747 style
Yaesu FT 767 style
Yaesu 980 style

Since I do not own any of the above rigs, I cannot do this unless an
owner of each of the following rigs will come forward and send me a
copy of the page(s) in your manual that describe the communication
protocol and a diagram of the front panel.

In return, I will give you a copy of the completed software.

E-Mail me for my address please. dthimm@newnorth.net

If you would like to see the features included in the FT757 version,
please visit my website and download a copy of the software at:

http://www.newnorth.net/~dthimm

Thank You and 73
Dan T.
N9IPV

## 831. Re: ic -706mkII help mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Jack Albert <jwa@tellabs.com>
Message-ID: <33BBC0EA.5112@tellabs.com>
Source record: 92707

geoff wrote:
>
> dear readers,
> have just purchased ic706mkII and wish to modify to tx across band.
> any one out there got any ideas... unsure if it same as ic-706 mkI
> tks 73's
> geoff
> gefhor@bigpond.com

try this web page

http://www.qsl.net/k7on/index16.htm

--
Jack Albert WA9FVP (Fellow Radio Hacker)
Tellabs Operations Inc.
1000 Remington Blvd Voice (630) 378-6201
Bolingbrook, IL 60440 FAX (630) 378-5790

## 832. Re: 2N3565s in AF AMP?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5pgmbl$19l$1@nadine.teleport.com>
Source record: 92708

In article <33bb6ffe.942622@news.erols.com>,
wmeara@erols.com (Bill Meara ) wrote:
>Homebrewers:
>
> I'm finishing up my Bare Bones Superhet. Just need to build the AF
>amp. I'm looking at a circuit from "Solid State design for the Radio
>Amateur" that features two 2N3565 transistors. Text indicates that
>they have a low noise figure. I'm wondering if there is anything
>really special about these transistors - could I just substitute some
>more common NPN's?
>
>Would it be adviseable to put a JFET AF AMP ahead of the two bipolar
>transistors?
>
>Thanks, 73 Bill N2CQR

The 2N3565 has a low noise figure, but only under a narrow range of conditions of collector current and collector-emitter voltage. I used one in my original "Optimized" transceiver in a common-base AF preamp running 0.5 mA of collector current. Some time later I discovered that a 2N3904, 2N2222, or nearly any other modern small-signal transistor would give a noice figure several dB better in that particular circuit.

I suggest using something like a 2N3904. After the rig is built, see if the noise level from the receiver increases when you connect the antenna and decreases when you disconnect it. If it does, the noise figure is adequate and improving it won't improve performance. (The most severe test would be with the simplest antenna you intend to use and when the band is quietest, like 40 meters in the daytime.)

Roy Lewallen, W7EL

## 833. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33bbac03.7072071@netnews.worldnet.att.net>
Source record: 92709
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Thu, 3 Jul 1997 11:17:31 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>We're referred to as "amateurs" for a variety of reasons, including:
>
>1. We don't get paid.
>
>2. We don't have access to professional equipment.
>
>3. Most of us have less time than professionals, because our full-time
> job is something else.
>
>4. Because of #1, #2 and #3, we sometimes have to cut corners.
>
>5. We can't be bothered to think and learn how to do it right.
>
>I can live with #1, #2, #3 and even #4 - but if "amateur radio" had to
>mean #5 as well, I'd be outa here.
>
>Fortunately there are people like Roy around to remind us that it
>doesn't have to be that way.

How very very true.

73 Tom

## 834. 500 watt linear CCT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Harry Lythall <no.one@no.where>
Message-ID: <33BC5F12.392@no.where>
Source record: 92710

visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

I have updated the homepage today with the 500 watt linear amplifier as promissed (to those who requested it).

Best regards Harry, SM0VPO, Upplands V&#65533;sby, Sweden.

# 835. Re: 2N3565s in AF AMP?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33BBE84F.5F70DD0@direct.ca>
Source record: 92711

Bill Meara wrote:

> I'm finishing up my Bare Bones Superhet. Just need to build
> the AF amp. I'm looking at a circuit from "Solid State design
> for the Radio Amateur" that features two 2N3565 transistors.
> Text indicates that they have a low noise figure. I'm wonder-
> ing if there is anything really special about these transis-
> tors - could I just substitute some more common NPN's?

If you can't get pukka 2N3565s, why not try for an NTE
equivalent? Or try a more readily available NPN transistor
and see if it works?

Remember too that, good as it is, Solid State Design was
published 20 years ago, and a lot of technology has happened
since then. I favour NE5532 and similar (e.g. LMC662 - yum!)
op amps for receiver audio strips these days...

> Would it be adviseable to put a JFET AF AMP ahead of the
> two bipolar transistors?

Depends on why you think you need it. The JFET amp will present
a very high input impedance, and give some additional gain.
Is this in fact what you need?
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

## 836. Re: 500 watt linear CCT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33BBAAFD.3866@taxes.net>
Source record: 92712

Harry Lythall wrote:
>
> visit: HARRYs HOMEBREW HOMEPAGE
> http://user.tninet.se/~acz732k/
> Real Hams use a soldering iron!

This is a cool page. Thank you for assembling it!
I'm gonna get the soldering iron out again.

N6OTQ

P.S. This page has the kind of stuff that made hamming fun
40 years ago.

## 837. Re: 2N3565s in AF AMP?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ph9pu$j40@hpcvsnz.cv.hp.com>
Source record: 92713

laura halliday (ve7ldh@direct.ca) wrote:
: Bill Meara wrote:

: > I'm finishing up my Bare Bones Superhet. Just need to build
: > the AF amp. I'm looking at a circuit from "Solid State design
: > for the Radio Amateur" that features two 2N3565 transistors.
: > Text indicates that they have a low noise figure. I'm wonder-
: > ing if there is anything really special about these transis-
: > tors - could I just substitute some more common NPN's?

: If you can't get pukka 2N3565s, why not try for an NTE
: equivalent? Or try a more readily available NPN transistor
: and see if it works?

: Remember too that, good as it is, Solid State Design was
: published 20 years ago, and a lot of technology has happened
: since then. I favour NE5532 and similar (e.g. LMC662 - yum!)
: op amps for receiver audio strips these days...

Ummmm The LMC662 is very nice for extremely low input bias current,
but for low noise?? If the source impedance is low, it seems like
it would be a rather poor choice, with _typical_ input-referred
voltage noise of 22nV/rtHz. That's more than 5 times what the NE5532
is, if I recall correctly. If the application is a very low
source impedance, as I suspect it may be, then there are a couple
op amps which are ideally suited to achieving low noise. I
particularly like the Analog Devices AD797, which in addition to
typical input-referred noise voltage under 1nV/rtHz, also is
capable of distortion products in the -140dBC range in modest
gain situations. I've also found that modern 2N2222's achieve
even lower voltage noise than this, and are a bit better than
2N3904's, but both are remarkably good for 50 to 200 ohm
source impedances.

(Laura: Where can I find LMC662's with about 0.01uV/C input offset
tempco?? :-)

--
Cheers,
Tom
tomb@lsid.hp.com

## 838. Antenna Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Aaron Schmitz <aschmitz@earthlink.net>
Message-ID: <33BC340A.7B30@earthlink.net>
Source record: 92714

Attention!
I have update my antenna building web site. Check it out and see
whats there.

Aaron

http://www.earthlink.net/~aschmitz

--

```
=========================================================================
====
Aaron Schmitz KB0YKI
Route 1 Box 31 -- --- \ / | / -------
Ewing, MO 63440 | / | \ | | \ / | / |
Email: |/ | / | /| \/ |/ |
aschmitz@earthlink.net |\ |-- | / | {} | \ |
aschmitz@culver.edu | \ | \ |/ | {} | \ |
World Wide Web: | \ |__/ |___| {} | \ -------
http://home.earthlink.net/~aschmitz/home.html
```


"Specializing in support for Macintosh and IBM compatible Computers"
"Real Hams use verticals, but smart ones use Yagis!"

# 839. Re: 2N3565s in AF AMP?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970703170758.28326J-100000@oso.slonet.org>
Source record: 92715

The equivelent transistor to the 3565 is the 2N929. Cliff K7RR

On Thu, 3 Jul 1997, laura halliday wrote:

> Bill Meara wrote:
>
> > I'm finishing up my Bare Bones Superhet. Just need to build
> > the AF amp. I'm looking at a circuit from "Solid State design
> > for the Radio Amateur" that features two 2N3565 transistors.
> > Text indicates that they have a low noise figure. I'm wonder-
> > ing if there is anything really special about these transis-
> > tors - could I just substitute some more common NPN's?
>
> If you can't get pukka 2N3565s, why not try for an NTE
> equivalent? Or try a more readily available NPN transistor
> and see if it works?
>
> Remember too that, good as it is, Solid State Design was
> published 20 years ago, and a lot of technology has happened
> since then. I favour NE5532 and similar (e.g. LMC662 - yum!)
> op amps for receiver audio strips these days...
>
> > Would it be adviseable to put a JFET AF AMP ahead of the
> > two bipolar transistors?
>
> Depends on why you think you need it. The JFET amp will present
> a very high input impedance, and give some additional gain.
> Is this in fact what you need?
> --
> Laura Halliday "C'est une femme mutine, assez elegante,
> ve7ldh@direct.ca grave et legere, ayant le sens
> Grid: CN89mg du confort et du plaisir en tout."
> - C. Deneuve
>
>

# 840. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970703171502.28326K-100000@oso.slonet.org>
Source record: 92716

Oh come on! Do we need Bill Gates to tell us how to press ctrl/alt/del?
To find the residual capacitance. Find how much capacitance is required
for a sample resonance with the coil in question. Say that is 10 MHz with
200 pf. Now resonant the coil at half that frequency. Place both those
capacitance values on a piece of graph paper and draw the line to zero
frequency. Now read off the remaining capacitance and that is the
distributed value you are looking for.. Cliff K7RR

On Wed, 2 Jul 1997, Bill Turner wrote:

> mkj@world.std.com (Mahatma Kane-Jeeves) wrote:
>
> >(I originally posted this query to some Electronics groups, and it was
> >suggested that the Radio groups would be more likely to have an answer.)
> >
> >Can someone here please give me a quick tutorial, or point me to
> >information, about how to calculate the inter-winding capacitance (and
> >self-resonance) of a multi-layer coil, based on the geometry? Thanks.
> >
> > --- mkj
> <><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
> K6STI has an excellent program called COIL.EXE that calculates what
> you want and more. It comes included with the ARRL handbook, or you
> can order it separately for $10. Brian's address is k6sti@n2.net.
>
> 73, Bill W7TI
>
>
>

# 841. Re: Need PC board software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Nathan Schenk <ctech@i-205net.com>
Message-ID: <33BC40A8.2347@i-205net.com>
Source record: 92717

Mark Mumaw wrote:
>
> I have designed a mixer/converter that allows the Kenwood SM220/SM230
> monitor scope to be used with the Yaesu FT1000MP or FT1000D. I have many
> request to make up a PC board and parts kit.
>
> I am looking for some inexpensive software to do the layout/artwork for a
> simple printed circuit board. I'm looking for either shareware, something
> preowned, or a cheap new package.
>
> Can anyone help me?????
>
> I'm also looking for a company where I can have PC boards made in small
> quanities (50 - 100).
>
> Thanks .... Mark NU6X nu6x@sedona.net 520-284-6848
Use generic cadd for the pcb layout.
there are many places where you can get a silkscreen made on the
internet. usually around $40.
hope this points you in the right direction

-Speed Racer-
http://www.i-205net.com/~ctech/cbradio.html

## 842. TEaching and Learning Modules

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: William Dubin <wd16@columbia.edu>
Message-ID: <Pine.SUN.3.95L.970703225754.26250A-100000@konichiwa.cc.columbia.edu>
Source record: 92718

It would be very helpful to nave a set of modules which demonstrate the basic functional blocks of a transceiver. The problem with modern radios is that it is very difficult to check their functions from stage to stage. Does such a set of modules exist and or would anyone be interested in developing them?

73

Bill Dubin

## 843. Free Service Will Save You $1,000s

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: kei093@aol.com
Message-ID: <33bc6ba7.0@news.abcs.com>
Source record: 92719

Thursday, July 03, 1997

Subject: Free Service That Will Save You $1,000s

Hi!

I am an authorized distributor for some very special software that I can give to homeowners absolutely free.

This software provides you, the homeowner, with a FREE service that allows you to...

Save Thousands Of Dollars Without Refinancing!

Cut Years Off Your Mortgage Without Increasing Your Payments!

Build Equity In Your Home 300% Faster!

Turn Your Current Mortgage Into An Investment Program!

Audit Their Loan Automatically To Find Lender Mistakes Which Occur About 50% Of The Time According To The F.D.I.C.!

And the Software is FREE - Nothing For You To Purchase!

The software takes the you through a full presentation and explains everything to you.

If you are interested in using this free software, please visit my Web Page at:

http://members.aol.com/homeown

This is truly a wonderful program and one that I'm using to save thousands of dollars for my family and friends.

Sincerely,

Kim E. Inman

PS. Please feel free to pass this information on to your family and friends.

# 844. Re: 2N3565s in AF AMP?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Nathan Schenk <ctech@i-205net.com>
Message-ID: <33BC9517.3D7E@i-205net.com>
Source record: 92720

```
laura halliday wrote:
>
> Bill Meara wrote:
>
> > I'm finishing up my Bare Bones Superhet. Just need to build
> > the AF amp. I'm looking at a circuit from "Solid State design
> > for the Radio Amateur" that features two 2N3565 transistors.
> > Text indicates that they have a low noise figure. I'm wonder-
> > ing if there is anything really special about these transis-
> > tors - could I just substitute some more common NPN's?
>
> If you can't get pukka 2N3565s, why not try for an NTE
> equivalent? Or try a more readily available NPN transistor
> and see if it works?
>
> Remember too that, good as it is, Solid State Design was
> published 20 years ago, and a lot of technology has happened
> since then. I favour NE5532 and similar (e.g. LMC662 - yum!)
> op amps for receiver audio strips these days...
>
> > Would it be adviseable to put a JFET AF AMP ahead of the
> > two bipolar transistors?
>
> Depends on why you think you need it. The JFET amp will present
> a very high input impedance, and give some additional gain.
> Is this in fact what you need?
> --
> Laura Halliday "C'est une femme mutine, assez elegante,
> ve7ldh@direct.ca grave et legere, ayant le sens
> Grid: CN89mg du confort et du plaisir en tout."
> - C. Deneuve

I always refer to NTE as "Nearly Tolerable Electronics" because they
usually have a nasty habit of failing when you need them.
```

## 845. HTX-100 no transmit!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: w5tn@prismnet.com
Message-ID: <w5tn.42.0011A9BD@prismnet.com>
Source record: 92721

Help,

I'm trying to get a Radio Shack HTX-100 to work. It receives, but it will not transmit. The TX indicator will come on, but the radio will not switch over into transmit mode. Help! Any ideas on what might be wrong, or who works on this type of radio?

Thanks,
David, W5TN

## 846. Re: PC controlled.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: nyeda@uwec.EDU
Message-ID: <2.2.16.19970702215003.08576d4c@uwec.edu>
Source record: 92722

Michael Gray Anthony <gray480@wilmington.net> writes:
>Does anyone know if any work has been done on building a radio on an ISA
>card or using a serial or parrallel interface to a PC?

I read that such a transceiver for HF was demonstrated at the Dayton Hamfest but I can't remember the manufacturer. Kantronics maybe? The article mentioned that a couple of other manufacturers were working on similar transceivers. I've thought about this a little myself. It would greatly simplify the interface electronics and allow all sorts of neat additional features in software. I don't think it will work to do the DSP stuff in software, though -- too slow, although the PC would control the DSP chip. I also came to the conclusion that the easiest way to deal with the RF shielding problems is to use a separate box for the radio set at some distance from the PC and connected to it by a long serial cable. Cables for the microphone, speaker, and key would be bundled with the serial cable (you might be able to use unused pins of the serial cable for all but the microphone which needs to be shielded).

David Nye, KB9PSL * Eau Claire, WI

# 847. Help need diagram for TMC MMXM-2 EXITER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: ACHILES <achiles@kom.forthnet.gr>
Message-ID: <01bc877e$dafeec20$eb6adbc2@achiles>
Source record: 92723
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thanks in advance
I need diagram for pll exiter of Technical Material Corporation's type
MMXM-2
This is solid state ,all mode HF , low power exiter
manufactoring No 12341-6

## 848. Help need diagram for TMC MMXM-2 exiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: ACHILES <achiles@kom.forthnet.gr>
Message-ID: <01bc8781$da47c9c0$eb6adbc2@achiles>
Source record: 92724
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thanks in advance
I need diagram for the HF, solid state, low power, pll exiter of Tehnical
Material Corporation's
model MMXM-2 manufactoring No 12341-6

email: achiles@kom.forthnet.gr

## 849. johnson fleetcom> 440 repeater?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: hacker@flash.net
Message-ID: <33bd22c7.16026089@news.flash.net>
Source record: 92791
Body handling: HTML body converted to readable text

I have a johnson 18 watt 486mhz crystal radio.
I would like info on how to convert to 440, and
if possible to rekindle some life and use as
repeater....is this feasable with this FREE
radio
thanks in advance for any/all comments

## 850. Re: output impedance of class c amp???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33ba5fd1.28626195@netnews.worldnet.att.net>
Source record: 92792

On 1 Jul 1997 18:01:41 GMT, yaesutom@aol.com (YaesuTom) wrote:

>Does anyone know how to calculate the output impedance of a class C 1
>transistor amplifier? I have a homebrew AM tx for shortwave that uses an
>old 2SC2314 (i think) driver transistor out of an old CB for the output.
>It is a class C amplifier with an RF choke on the collector going to +12V
>for power, then a .01uF cap on collector for the RF output. With no
>matching network/filter, I can get about 1watt carrier into a 50 ohm load.
> It sound great, but it's full of harmonics because its just the output of
>a class C amplifier. I need to make a pi network to filter out harmonics,
>but I don't know what the output impedance of the transistor is. I have a
>book that has a formula, but one of the things you need to know is what
>power output you need out of the amp. What if the power output is
>changing (AM, SSB, or whatever)?

Then you design for the peak envelope power condition, and let the
cards fall as they may at lower power levels.

This is the main reason why AM linear amplifiers have increased
efficiency during modulation crests.

73 Tom

## 851. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33ba5acd.27342018@netnews.worldnet.att.net>
Source record: 92793
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Tue, 1 Jul 1997 16:26:16 GMT, mkj@world.std.com (Mahatma
Kane-Jeeves) wrote:

>(I originally posted this query to some Electronics groups, and it was
>suggested that the Radio groups would be more likely to have an answer.)
>
>Can someone here please give me a quick tutorial, or point me to
>information, about how to calculate the inter-winding capacitance (and
>self-resonance) of a multi-layer coil, based on the geometry? Thanks.
>
> --- mkj

Hi MKJ.

The actual calculation is VERY complex, and is best solved by direct
measurement.

I or others can probably describe several ways to measure the effect
you need to know.

I probably still have a thirty or forty page paper written by WP
Czerwinski, and excerpts of his paper were printed in Electronics,
August 26, 1960. I'm sure you could obtain a copy from a technical
library.

Every modeling program I've tried produces VERY inflated inductor Q's,
and incorrect self-resonant frequencies. I'm not sure they work at all
with multilayer inductors.

Many VERY subtle effects modify the effective layer to layer
capacitance, so I think you'll be unhappy with the results of any
estimate or modelling program unless you are willing to accept more
than two to one error. Even the calculations of single layer solenoids
are almost impossible to make, and are not modeled accurately (at
least with all the programs I've seen).

So as much as people may want to help you, there may be no good answer
except cut and try.

73 Tom

# 852. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: hanavin@ren.eecis.udel.edu
Message-ID: <5peto0$qpj$1@dewey.udel.edu>
Source record: 92794

In article <33BAA596.6445@hevanet.com>,
miker <mreiney@NOSPAMhevanet.com> wrote:
>Henry C. DeBey wrote:
>>
>> Is it possible to use a large capacitor as a UPS?
>>
>> If I have a 1.0 farad capacitor and a PC that draws 5 amps at 5 volts
>> how long would the voltage stay above 4.65 volts?
>>
>> Is there a formula for calculating this type of thing?
>>
>> Thanks,
>> Henry
>
>Yep, there is: dv/dt = I/C
>so 5A/1F = 5volts/second. So you'd drop half a volt in .1 seconds.
>So you'd need a LOT more capacitance.
>--
>Please remove NOSPAM from return address before replying.

Yep, I agree, and that's assuming you have an ideal 1 farad
capacitor (no internal resistance). Preformance will be less.

Chuck

## 853. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: grimm@alison.sbc.edu
Message-ID: <33bbfa12.279779934@alison.sbc.edu>
Source record: 92795
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

On Wed, 02 Jul 97 07:55:02 GMT, w7el@teleport.com (Roy Lewallen)
wrote:

>In article <33B96B8B.1973@spacestar.net>,
> Jim Phillips <phillips@spacestar.net> wrote:
>>Mahatma Kane-Jeeves wrote:
>
>>> (I originally posted this query to some Electronics groups, and it was
>>> suggested that the Radio groups would be more likely to have an answer.)
>
>>> Can someone here please give me a quick tutorial, or point me to
>>> information, about how to calculate the inter-winding capacitance (and
>>> self-resonance) of a multi-layer coil, based on the geometry? Thanks.
> --- mkj
>>this is a homebrew newsgroup.
>
>>build it, measure it, modify it!
>
>So homebrew precludes being analytical and is restricted to cut-and-try?
>How sad for amateur radio.
>
>Roy Lewallen, W7EL

Not exactly, but cut-and-try is certainly a reasonable empirical
alternative to modeling, wouldn't you say? ;-)

73,
Ken K4XL
(to reply remove the Z from my address in the header)

# 854. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Dave VanHorn <dvanhorn@127.0.0.1>
Message-ID: <01bc8763$ef602960$5af135ce@hammer.stonewest.com>
Source record: 92796

Dave Martindale <davem@cs.ubc.ca> wrote in article
<5pe09i$6em@harpo.cs.ubc.ca>...
> debey@deltabeta.com writes:
> >Is it possible to use a large capacitor as a UPS?
>
> Practically, no.
>

The 1F 5V cap is particularly non-interesting. I doubt it could output that current
in any case.

Watch what happens though:

If it's line powered, then we can assume the switcher runs from about 140+ volts.
In a cap, energy stored = .5*C*V^2, so at 5V 1F stores 2.5 Joules, assuming you
can get them all out, which you can't.. Actually, I believe the only charge you can
recover is .5 * C * (5 - 4.65)^2 which is 0.061 joules.

If you have 10,000uF at 140 volts, then you have 98 joules stored total, and you
should be able to use it down to say 70 volts or so, which would indicate about
24 joules deliverable. Your load is 24 joules, so barring switcher efficiency, you've
got a one second "micro-ups" which will get you through glitches and momentary
outages, instead of a 70mS (very debatable!) figure.

You may have more voltage in the switcher primary, in which case a given case
size should store about twice the energy if the voltage is closer to 300V (doubler
input), and you should gain even more from the interval till the switcher shuts
down.

I use this technique on lower powered systems exactly for this reason. A larger
cap on the input that is strictly necessary allows me to bridge short outages
for cheap.

## 855. ic -706mkII help mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: geoff <gefhor@bigpond.com>
Message-ID: <33bb200c.0@139.134.5.33>
Source record: 92797

dear readers,
have just purchased ic706mkII and wish to modify to tx across band.
any one out there got any ideas... unsure if it same as ic-706 mkI
tks 73's
geoff
gefhor@bigpond.com

## 856. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5pfaug$qjc@news.Hawaii.Edu>
Source record: 92798
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Roy Lewallen <w7el@teleport.com> wrote:
> Jim Phillips <phillips@spacestar.net> wrote:
>>Mahatma Kane-Jeeves wrote:

>>> Can someone here please give me a quick tutorial, or point me to
>>> information, about how to calculate the inter-winding capacitance (and
>>> self-resonance) of a multi-layer coil, based on the geometry? Thanks.

>>this is a homebrew newsgroup.
>>build it, measure it, modify it!

>So homebrew precludes being analytical and is restricted to cut-and-try?

The analysis comes into play prior to construction. The product will
differ from the model, so differences are measured, then modifications
are made. Thus, as Jim stated, "build it, measure it, modify it!"

>How sad for amateur radio.

That's why we're referred to as "amateurs." The "professional radio service"
is next door.

Jeff KH2PZ / KH7

# 857. 2N3565s in AF AMP?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33bb6ffe.942622@news.erols.com>
Source record: 92799

Homebrewers:

I'm finishing up my Bare Bones Superhet. Just need to build the AF amp. I'm looking at a circuit from "Solid State design for the Radio Amateur" that features two 2N3565 transistors. Text indicates that they have a low noise figure. I'm wondering if there is anything really special about these transistors - could I just substitute some more common NPN's?

Would it be adviseable to put a JFET AF AMP ahead of the two bipolar transistors?

Thanks, 73 Bill N2CQR

# 858. Re: need specs for 3CX1200A7/D7/Z7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970703095401.FAA14777@ladder01.news.aol.com>
Source record: 92800

Yea, one of the other subtle differences is that the grid lead in the Z7 is the only one with short leads and thereby a whale of a lot easier to tame at the higher frequencies! I think everyone that used the other versions had difficulty getting the grid to ground at 10 meters.

W4ZCB

# 859. Stan King W4KR ex-W8POZ SCAM ARTIST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: kingradio@aol.com
Message-ID: <19970703100900.GAA11598@ladder02.news.aol.com>
Source record: 92801

Stan King W4KR ex-W8POZ SCAM ARTIST

I need any information on the present whereabouts of Stan King, callsign W4KR (ex-W8POZ). He left many hams in southeastern Michigan holding the bag for many thousands of dollars in an elaborate scam.

In spite of a court order (relating to these frauds) to keep his current address on file with the court in Ann Arbor, Michigan, he skipped the state in late 1996. His current W4KR license address shows a "dead-end" mail drop in Florida, and his driver's license was changed to Texas with a false address.

If you know where this crook is, please email me with the information. Any tip, no matter how small, is helpful.

73, and thank you very much.

## 860. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <33BB7A3F.70D4@arrl.org>
Source record: 92802

K1BQT wrote:
> 
> Hi Fred--
> 
> What you say is very true--and the same flap is going on right now over
> antenna tuner power ratings.
> 
> The ARRL is in a unique position to assert leadership in the area of
> technical standards--and to provide its members with a healthy dose of
> consumer education. Unfortunately, to date, their philosophy has been
> more to bully manufacturers (as bad guys) rather than to pro-actively
> establish uniformly-acceptable standards for testing and rating products
> within the industry.
> Case in point--instead of setting up a range in Newington and developing
> comprehensive procedures for testing antennas using accepted practices,
> they simply (and punitively) banned gain figures from ads altogether. For
> tuners, the League at least attempted testing--using a technical resource
> outside the organization. However, the measurement technique was
> unverified, the loss results were inaccurate, and the results were
> published as gosprel in a product review format designed to make at

Sure, if we spend enough money we can measure certain antennas--I'd like to
have a microwave test range to measure high gain 10 and 24 GHz antennas :-)

However, as the gain and frequency goes down to the kinds of antennas
amateurs really want to know about, I seriously doubt that a realistic
margin of error is achievable. A couple dB of error isn't unusual.

The measurement technique for antenna tuners was published in the April
and May 1995 issues of QST. How long should we wait for people to comment?

We tried a more direct approach with phase noise--I sent out letters
to the manufacturers describing our technique and received silence
in return. Of course, I needed to send out duplicates to at least
two manufacturers after we published our first set of reviews...

Zack Lau W1VT zlau@arrl.org

## 861. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <q7CpUGA7w3uzEwyA@ifwtech.demon.co.uk>
Source record: 92803
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Jeff Herman replied to Roy Lewallen:
>
>>>this is a homebrew newsgroup.
>>>build it, measure it, modify it!
>
>>So homebrew precludes being analytical and is restricted to cut-and-try?
>
>The analysis comes into play prior to construction. The product will
>differ from the model, so differences are measured, then modifications
>are made. Thus, as Jim stated, "build it, measure it, modify it!"
>

I'm absolutely with Roy on this one:

*DESIGN IT FIRST* and then "build it, measure it, modify it"

... which is actually what the original questioner wanted to do.

>>How sad for amateur radio.
>
>That's why we're referred to as "amateurs." The "professional radio service"
>is next door.

We're referred to as "amateurs" for a variety of reasons, including:

1. We don't get paid.

2. We don't have access to professional equipment.

3. Most of us have less time than professionals, because our full-time
job is something else.

4. Because of #1, #2 and #3, we sometimes have to cut corners.

5. We can't be bothered to think and learn how to do it right.

I can live with #1, #2, #3 and even #4 - but if "amateur radio" had to
mean #5 as well, I'd be outa here.

Fortunately there are people like Roy around to remind us that it
doesn't have to be that way.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
www.ifwtech.demon.co.uk/g3sek

# 862. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970703133501.JAA17435@ladder02.news.aol.com>
Source record: 92804

Hi Zack--

In you post you wrote:

"The measurement technique for antenna tuners was published in the April and May 1995 issues of QST. How long should we wait for people to comment?"

Your question is well taken, but not the question I would ask. As a technical editor, I'm sure you know that the mere appearance of something in print is no automatic certification of its credibility or real-world applicability.

To answer your question, perhaps one must wait for comment until the measurement technique in question is used to generate incorrect data that damages the credibility of a major manufacturer with economic consequences. That, if nothing else, is certain to gain attention and motivate a swift response.

Rick K1BQT

## 863. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33bb96b1.1613058@netnews.worldnet.att.net>
Source record: 92805

Hi Zak,

I don't agree with the Leauge bashing that goes on, I think you guys do as good a job as resources allow you to do. But I suspect you'd be better off if you openly explained WHY certain things go wrong, AND took outside suggestions seriously instead of blindly trusting a few select people.

It isn't making mistakes that get us into trouble, it's not admitting the mistakes with a frank admission of why the mistake occured.

On Thu, 03 Jul 1997 06:09:03 -0400, Zack Lau <zlau@arrl.org> wrote:

>However, as the gain and frequency goes down to the kinds of antennas
>amateurs really want to know about, I seriously doubt that a realistic
>margin of error is achievable. A couple dB of error isn't unusual.

Thats exactly true. People will squak about this until time's end but it is VERY difficult to measure an antenna, especially a horizontally polarized antenna, near earth. Comparisons at one fixed weave angle are easy and reliable, but absolute gain measurements are impractical.

>The measurement technique for antenna tuners was published in the April
>and May 1995 issues of QST. How long should we wait for people to comment?

This is where we disagree. Two points:

1.) When you receive comments, they often just get referred or relayed directly to the author. Into the trash they usually go, since its the author controlling the comments. People on here have been whining about one particular case of this where despite dozens of letters, an author had a "free-hand" to publish non-sense for years. It was only after QST sent his Handbook and other material out for review and EVERY reviewer responded negatively that anything was done.

Then, instead of QST saying "we made a mistake by not properly reviewing the material", the clean up job was left to others.

2.) With the tuner measurement article, why is iit ANYONE's job to read every QST article that might potentially affect future reviews?

That is a silly suggestion in this case Zak. In my opinion any knowlegeable engineer would AVOID using something as sensitive and unreliable as VSWR reduction through loss to measure power loss in a tuner. Take a minute and run a sensitivity analysis on that method. As small an error as the one between 1.8:1 to a 1.9:1 change in SWR can produce a DOUBLING of loss!!!

Not only that, the likelihood of error changes with tuner Q, the higher operating Q tuners producing results more sensitive to human and physical limitations.

The outside person checking the tuners used a MFJ-259 to measure SWR to calculate loss, and didn't even own or use a pair of wattmeters or an RF voltmeter to verify the results

He already found a calibration error that accounted for up to a 50% error in loss estimates, but nothing has been published yet.

People don't fully appreciate how difficult it is to measure RF power with exacting results. A Bird is only + or - 5% of full scale anywhere on the scale. Even a specially calibrated element matched to ONE meter has an error range of + and - 3%. With a caloric standard we can get only half to one percent accuracy. So with a 2500 watt slug, your 1500 watts might be as low as 1375 watts or as high as 1625 watts, and with the same slug 100 watts would be a wild guess...you might as well use a light bulb.

HOW you use the instrument is often just as important as what the instrument is. A Bird should NEVER be used as an absolute power reference because true power could vary as much as 10% of the full scale reading.

If a Bird is used in a relative comparison errors could be made to cancel out leaving only scale tracking errors. Unfortunately, the few direct measurements that were made were measured using a method that ADDS the errors instead of canceling them, producing a potential delta of 20% or MORE in the end number (ie 80% efficiency might be as low as 60% or as high as 100%).

In one test, someone moved a slug from meter to meter. They claimed the slug was from a "specially calibrated" meter. But if Bird specially calibrates a slug, the slug is matched to a particular meter, and the tolerance then becomes + or - 3% for that slug in that meter. Move that slug to another meter, and the error now becomes LARGER than 5%. That's because the slug isn't in the center of the tolerance range of the meter movements and line sampling units dimensional tolerances, instead its centered on ONE particular line sampling unit and meter.

IMHO, using a MFJ 259 to measure tuner loss is like using a weight and a knotted nylon string to measure water depth on a ship. Even my $30,000 Network Analyzer has a .25 dB or 2% tolerance in measuring return loss. Using the indirect SWR reduction loss method is nearly useless with a $30,000 instrument, why would it work with a $200 SWR meter?

I can't even find a piece of 50 ohm cable that is REALLY 50 ohms. They all measure from 44 ohms to 60 ohms, and precision mil spec cable ranges from 48 to 55 ohms.

There is NO WAY VSWR can be determined close enough to use that method in the real world, unless we want to accept a 50% tolerance in loss estimates.

>We tried a more direct approach with phase noise--I sent out letters
>to the manufacturers describing our technique and received silence
>in return. Of course, I needed to send out duplicates to at least
>two manufacturers after we published our first set of reviews...

I'd appreciate it if you could send me a copy. I make measurements for Medical FDA certification as well as other less critical requirements like matching networks. I am always interested in better ways to do things.

Have you run a sensitivity analysis on your measurements?

# 864. Re: ic -706mkII help mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-03 00:00:00 UTC
From: gfiber@cmc.net
Message-ID: <33bcb9c6.2902673@news.cmc.net>
Source record: 92806

On 3 Jul 97 03:44:12 GMT, geoff <gefhor@bigpond.com> wrote:

>dear readers,
>have just purchased ic706mkII and wish to modify to tx across band.
>any one out there got any ideas... unsure if it same as ic-706 mkI
>tks 73's
>geoff
>gefhor@bigpond.com
It is different. Your dealer should be able to provide this
information

Gary

THIS REPLY DOES NOT REPRESENT ANY OFFICIAL POSITION of
MY EMPLOYER. It represents only MY PERSONAL opinion.

# 865. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5phd1d$ss0@apple.telalink.net>
Source record: 92725

hanavin@ren.eecis.udel.edu (Chuck Hanavin) wrote:
>Yep, I agree, and that's assuming you have an ideal 1 farad
>capacitor (no internal resistance). Preformance will be less.

Yes. In fact, if the internal resistance is greater than 0.07 ohm, then the voltage at the load will never exceed 4.65 volts unless you charge the capacitor to more then 5 volts. According to the Digi-Key catalog, the internal resistance is more like 30 ohms, though that's specified at 1KHz. I'm not too sure what the DC figure is.

73 Doug

# 866. !!!! GET SOME MONEY IN A EASY WAY !!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: blackacaro@hotmail.com
Message-ID: <34a14c64.11004152@news.telepac.pt>
Source record: 92726

$$$ Big Time Mailbox Cash $$$

A little while back, I was browsing these newsgroups, just like you are
now, and came across an article similar to this that said you could make
thousands of dollars within weeks with only an initial investment of
$5.00! So I thought, "Yeah, right, this must be a scam," but like most
of us, but I was curious, so I kept reading. Anyway, it said that you
send $1.00 to each of the 5 names and address stated in the article. You
then place your own name and address in the bottom of the list at #5,
and post the article in at least 200 newsgroups. (There are
thousands.) No catch, that was it.

You can make up to or over $50,000.00 in 4-6 weeks, maybe sooner! I
SWEAR, I'M NOT LYING TO YOU, AND THIS IS NOT A SCAM! If you're
interested in making some big bucks, keep reading; if you're not, I
apologize for wasting your time.

So after thinking it over, talking to a few people first, I figured what
have I got to lose except for 5 stamps and $5, right? One person who
very recently had tried it said it worked like a charm. He started
getting money in the mail! He was shocked! He figured it would end
soon, and didn't give it another thought. But then the money kept
coming IN - tripling in size and multiplying by 10 - 20 times the
amount that he got the first week! In his first week he had made a
total of over $1,000!!! In the third week he had over $10,000 dollars,
and it's still growing! This is his fourth week and he's made about
$42,000 Total, and believe it or not the money is still coming in...

I know this has been checked out several times with the legal community
and is deemed perfectly Legal, but being a very cautious person, I also
wanted to check it out with the US Post Office. I called them
(1-800-725-2161) and explained this process and asked if there were any
regulations that would be violated by doing this. Without hesitation,
the postal official also said it is legal. At that point, I felt
comfortable going ahead and joining the process.

Let me tell you how this works and most importantly, WHY IT
WORKS!...Also, make sure you print a copy of this article NOW, so you

get the information from it, and begin making money. The process is very simple, and it consists of 3 ease steps:

STEP 1: Get 5 separate pieces of paper and write the following on each
sheet of paper: "PLEASE PUT ME ON YOUR MAILING LIST. YOU ARE NUMBER #."

Get five $1 bills, and place ONE inside each piece of paper that you have just written on, and fold each piece of paper so the bill will not
be seen in the envelope (otherwise, nosy people who like to steal envelopes with money in it will not get yours). Put one paper inside the envelope and seal it. Do the same for all 5. You should now have 5
envelopes sealed, each having a piece of paper AND the $1 bill inside. NOTE: Make sure those words that were stated above are written on each piece of paper. What you are doing is creating a service by this. This
is PERFECTLY LEGAL. Now, mail the 5 envelopes with the paper and $1 in each to the following 5 addresses:

#1 P Gratrix
12165 Monaco Dr.
Brighton CO 80601

#2 T. Livingston
2361 Antietam Circle
Lemoore, CA 93245

#3 K. Burks
HC 01 Box 103
Keene Valley, NY 12943

#4 Paulo Aboim Pinto
Praceta 1º de Dezembro 5 c/v esquerda
2675 Odivelas / Portugal

#5 Miguel Kennedy
Avenida Nossa Senhora do Rosario Nº1042
2750-Cascais / Portugal

STEP 2: Now take the #1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...) and add YOUR Name as number 5 on the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there is close to 18,000 groups) All you
need is 200, but remember, the more you post, the more money you make!

Don't know HOW to post in the newsgroups? Well, do exactly the
following:

FOR NETSCAPE USERS,

1) Click on any newsgroup, like normal. Then click on "To
News,
which
is in the top left corner of the newsgroup page. This will bring up a
message box.

2) Fill in the SUBJECT with a flashy title, like the one I
used,
something to catch the eye!!!

3) Now go to the message part of the box and retype this
letter
exactly
as it is here, with exception of your few changes. (Remember to add
your
name to number 5 and move the rest up)

4) When you're done typing in the WHOLE letter, click on FILE
above
the
send button. Then, SAVE AS.. DO NOT SEND YOUR ARTICLE UNTIL YOU SAVE
IT. (So you don't have to type this 200 times :-)

5) Now that you have saved the letter, go ahead and send your
first
copy! (Click the SEND button in the top left corner)

6) This is where you post all 200! OK, go to ANY newsgroup
article
and
click the TO NEWS button again. Type in your flashy subject in the
SUBJECT BOX, then go to the message and place your cursor here. Now
click on ATTACHMENT which is right below the SUBJECT BOX. Click on
attach file then find your letter wherever you saved it. Click once
on
your file then click OPEN then click OK. If you did this right, you
should see your filename in the ATTACHMENT BOX and it will be
shaded.

NOW POST AWAY!!

IF YOU ARE USING INTERNET EXPLORER:

It's just as easy, holding down the left mouse button,
highlight this entire article, then press the CTRL key and C key at
the
same time to copy this article. Then print the article for your
records
to have the names of those you will be sending $1.00 to.

NEXT, Go to the newsgroups and press POST AN ARTICLE type in
your
flashy subject and click the large window below. Press CTRL and V and
the article will appear in the message window. ** BE SURE TO MAKE YOUR
ADDRESS CHANGES TO THE 5 NAMES. ** Now re-highlight the article and
re-copy it re-copy it so you have the changes.... Then all you have to
do for each newsgroup is CTRL and V and press POST. It's that easy!!

THAT'S IT! All you have to do is jump to different newsgroupes
and
post away, after you get the hang of it, it will take about 30 seconds
for each newsgroup!

** REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE
MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF
200 **

This is WHY this works!

Out of 200 postings, say I receive only 5 replies (a very low
example).
So then I made $5.00 with my name at #5 on the letter. Now, each of
the
5 persons who just sent me $1.00 make the MINIMUM 200 postings, each
with my name at #4 and only 5 persons respond to each of the original
5, that is another $25.00 for me, now those 25 each make 200 MINIMUM
posts with my name at #3 and only 5 replies each, I will bring in an
additional $125.00! Now, those 125 persons turn around and post the
MINIMUM 200 with my name at #2 and only receive 5 replies each, I will
make an additional $626.00! OK, now here is the fun part, each of
those
625 persons post a MINIMUM 200 letters with my name at #1 and they
each
only receive 5 replies, that just made me $3,125.00!!! With an
original
investment of only $5.00!

AMAZING! And, as I said 5 responses is actually VERY LOW! Average is
probable 20 to 30! So lets put those figures at just 15 responses per
person. Here is what you will make:

at #5 $15.00

at #4 $225.00

at #3 $3,375.00

at #2 $50,625.00

at #1 $759,375.00

When your name is no longer on the list, you just take the latest
posting in the newsgroups, and send out another $5.00 to names on the
list, putting your name at number 5 again. Then start posting again.
The

thing to remember is, do you realize that thousands of people all over the world are joining the Internet and reading these articles every day, JUST LIKE YOU are now!! So can you afford $5.00 and see if it

really works?? I think so - People have said, "what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the Internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual Internet. Remember, play FAIRLY and HONESTLY and this will work. You just have to be honest. Make sure you print this article out RIGHT NOW, also. Try to keep a list of everyone that sends you money and always keep an eye on the newsgroups to make sure everyone is playing fairly. Remember, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea to make the money!!

GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of extra CASH. ** By the way, if you try to deceive people by posting the messages with your name in the list and not sending the money to the rest of the people already on the list, you will NOT get as much. Someone I talked to knew someone who did that and he only made about $150.00, and that's after seven or eight weeks! Then he sent the 5 $1.00 bills, people added him to their lists, and in 4-5 weeks he had over $10k. This is the fairest and most honest way I have ever seen to share the wealth of the world without costing anything but our time!!! You also may want to buy mailing and e-mail lists for future dollars.

Please remember to declare your extra income. Thanks once again
:)

# 867. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc8822$3db0e500$cd0f2399@peter->
Source record: 92727

Doug Smith <desmith@telalink.net> wrote in article
<5phd1d$ss0@apple.telalink.net>...
>
> According to the Digi-Key
> catalog, the internal resistance is more like 30 ohms, though that's
> specified at 1KHz. I'm not too sure what the DC figure is.

Pretty high also. These caps are only really useful for high impedance
loads.

I missed the beginning of this thread... if the question was if a big cap
could
be used to back up a computer with a SMPS, the answer is yes. It has been
done but I forget where I read the article. Remember that the front end of
a
typical computer PS is a rectifier charging a capacitor, so many of these
units
can run off of pure DC (they already are...). The bigest problem is that
not all
power supplies will work correctly as some generate an early power fail
signal
based on the presence of the alternating input. It's not usually worth the
effort
to find this signal and disable that logic. Also some autovoltage supplies
will
trip into the 240 Volt mode and have unreliable performance.

## 868. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5pho80$bvt@news.Hawaii.Edu>
Source record: 92728
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Ian White, G3SEK wrote:
>Jeff Herman replied:
>>Roy Lewallen wrote:
>>>Someone@somewhere wrote:

>>>>this is a homebrew newsgroup.
>>>>build it, measure it, modify it!

>>>So homebrew precludes being analytical and is restricted to cut-and-try?

>>The analysis comes into play prior to construction. The product will
>>differ from the model, so differences are measured, then modifications
>>are made. Thus, as Jim stated, "build it, measure it, modify it!"

>I'm absolutely with Roy on this one:
> *DESIGN IT FIRST* and then "build it, measure it, modify it"

Hey Ian - read my first sentence: "The analysis comes into play prior
to construction." What part of that don't you understand?

>>>How sad for amateur radio.

>>That's why we're referred to as "amateurs." The "professional radio service"
>>is next door.

>We're referred to as "amateurs" for a variety of reasons, including:
>1. We don't get paid.
>2. We don't have access to professional equipment.
>3. Most of us have less time than professionals, because our full-time
> job is something else.
>4. Because of #1, #2 and #3, we sometimes have to cut corners.

... and we're self-taught in our spare time. That's quite a bit different
than someone who's gone through a 4 or 6 year university electronics
curriculum.

>5. We can't be bothered to think and learn how to do it right.

If you're serious about this one I suggest you look for another hobby
to participate in - you'll be a danger to yourself and others.

Jeff KH2PZ / KH6

# 869. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33BCAE2A.7B3F@crpl.cedar-rapids.lib.ia.us>
Source record: 92729

David Stockton wrote:
>
> The ARRL did indeed pay for the material, at a rate they set. I
> wondered what to do with the money after the British tax man had made
> off with his 40%. In the end,

I had a very similar experience with Chapter 17, which I try to update a little each year (no payment). I used what was left to improve my home laboratory, computer and library.

> For people not in fulltime employment, the youngsters, the oldsters
> and those between jobs, payment for publication helps them for the
> materials or parts used, and allows them to afford to create/build
> further things that can in turn be published.

That was my further experience in my July 1997 QEX article. I put an enormous effort and considerable cost of materials into it. I was working for no more than 10 cents an hour net profit.

>
> Professionals have plenty to offer amateur radio. People like Bill,
> myself, and many others can spread information about how some of the
> things we've done can be applied to amateur radio.

In retirement, I find this an interesting continuation of my electronics career. Each project that I do and write about is a big educational experience for me, if for no one else.

Nice to hear from you again, David.

Bill W0IYH

## 870. Re: TEaching and Learning Modules

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33BCAEAB.1A2F@crpl.cedar-rapids.lib.ia.us>
Source record: 92730

William Dubin wrote:
>
> It would be very helpful to nave a set of modules which demonstrate the
> basic functional blocks of a transceiver.

The ARRL Handbook 1995/6/7 has quite a bit of material.

Bill W0IYH

# 871. Re: TEaching and Learning Modules

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33BCB04E.627@crpl.cedar-rapids.lib.ia.us>
Source record: 92731

WILLIAM E. SABIN wrote:
>
> William Dubin wrote:
> >
> > It would be very helpful to nave a set of modules which demonstrate the
> > basic functional blocks of a transceiver.
>
> The ARRL Handbook 1995/6/7 has quite a bit of material.
>

See also "Single-Sideband Systems and Circuits" Sabin and Schoenike,
editors, McGraw-Hill 1995.

Bill W0IYH
> Bill W0IYH

# 872. Stan King W4KR ex-W8POZ IS A CROOK ! WARNING !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: kingradio@aol.com
Message-ID: <19970704104800.GAA21592@ladder02.news.aol.com>
Source record: 92732

Stan King W4KR ex-W8POZ IS A CROOK ! WARNING !

This guy defrauded many hams in southeastern Michigan for a great deal of money. He is under court order to keep a current address on file at the circuit court in Ann Arbor, Michigan but skipped the state in December 1996. His callsign address is a mail drop in Florida and his drivers license is a fake address in Texas.

PLEASE HELP US FIND HIM. Please email me with any tip on his whereabouts. It's guys like this we don't need in ham radio.

Stan King W4KR ex-W8POZ IS A CROOK ! WARNING !

## 873. Re: 6M transceiver projects???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33bcb272.0@cheese.pcug.org.au>
Source record: 92733

William Vaughn <billv@olympus.net> wrote:
>Hi,
>I am looking for a six meter ssb project to build. Any old plans out
>there? QRP is fine, regenerative receiver ok, I would like to build
>something from scratch, homebrew if you will. Sorry nothing for sale.

Bill - don't bother with a regenerative receiver; it would be too unstable at 50 MHz. Your best bet would be a direct conversion DSB transceiver that uses a 17 MHz VXO and frequency tripler to reach 50 MHz. A 50-100 kHz pulling range should be possible on 50 MHz.

Solid State Design contains details for a suitable 6m DSB transmitter. I'd suggest though that the crystal oscillator be replaced with a VXO and tripler. A direct conversion receiver using a NE602 and FET preamp should work OK.

73,

Peter VK1PK

--


Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

## 874. HAM SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Jerry <jnewland@rapidramp.net>
Message-ID: <33BC976A.10CF97E0@rapidramp.net>
Source record: 92734

http://www.geocities.com/Colosseum/7859/

## 875. baggybob's surface mount parts fs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Baggybob@cris.com
Message-ID: <5pirl9$a5o@chronicle.concentric.net>
Source record: 92735

From baggybob@elknet.net Mon Jun 30 17:08:55 1997
Date: Mon, 30 Jun 1997 16:04:40 -0500
From: kim kelly <baggybob@elknet.net>
To: baggybob@cris.com
Subject: smd parts

baggybobs' buck a bag bargain bonanza
brought to you by bob & kim.

Surface mount parts for experimenters/prototypers
all new surplus unless otherwise noted

Shipping to the USA
Small parts orders (less than $35 usd ). I ship by priority mail. Cost is $3

Larger parts orders I will ship by UPS using an agent. Cost is $5
I ship UPS COD only upon receipt of $10 deposit. The UPS depot is 60 Km
away. I have to drive there and handle CODs myself. I cannot afford the
cost or hassle of refused COD shipments.

Really small parts orders (up to $5 surface mount parts only). Send me a
SASE with three stamps. I will put in some foam filler to prevent damage.
International orders require international money order or funds drawn upon
a US bank. We can determine together the best way to ship.
.
If you have tech questions please e-mail. I will answer in a day or two.
Address:
Kim Kelly
507 Broad St
Apt 144
Lake Geneva, WI 53147

Motorola MRF 94llL NPN hi gain low noise small signal transistor
excellent broadband linearity with typ fT = 8 GHz.
4 pin SOT-143 package data sheet available at Motorola SPS web site.
5 / $1.00 80 for $10

Toshiba 2SC3606 NPN hi gain low noise transistor. Typical fT=7GHz, noise
figure @1GHz=1.1dB.
3pin EIAJ SC59 package; slightly larger than EIA SOT-23.
8/ $1.00 100 for $10 data sheet is at Toshiba web site in .pdf format

Toshiba 2SC5084 NPN RF transistor SC-59 pkg 8/$1
data sheet available

MMBFU310 N-channel FET SOT-23 8/$1
same electrical specs as J310

MMBF5460 P-channel FET SOT-23 8/$1
same electrical specs as 2N5460

Phillips BCP51 PNP or BCP54 NPN Both are SOT 223
VCEO=45, Ic= 1 Amp, hFE 40/250, fT= 50 Mhz
good for audio, DC control
8/$1.00 100 for $10

ROHM 2SB1132 PNP SOT-89 Equal to Phillips BCX51 VCEO=45,
IC=1Amp, VCEsat= .5 V data sheet included upon request.
10/$1.00

MMBT3904 NPN general purpose amp. SOT-23 version of 2N3904, one of the most
common transistors ever made.VCEO=40. fT min =200 MHz, hFE >100<300 @ 10
ma. 10/$1

MMBTA56LT1(Motorola) or PMBTA56 if you prefer Phillips. PNP driver... both
are SOT-23 version of MPSA56. VCEO=80, fT >50MHz, hFE> 50 @ 100mA 12/$1

MMBD352 Schottky (hot carrier) SOT-23 dual diode. Use for mixer or
detector at UHF and upwards. V(BR)R= 7 volts, CT= 1pf @ 0 volts
6/$1

Motorola BAV99 dual diode series connected SOT 23 package
commonly used to prevent ESD latch-up damage on MOS inputs
VBR=70 volts, IF max =100 mA, PD=500 mW
12/$1.00

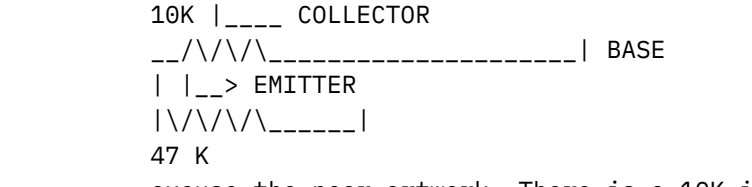
Tunning diodes SOT-23 6/$1.00
MMBV109 ratio 5:1 8-40pf
MMBV2105 ratio 2.5:1 Ct 15pf @ 4v

Quad analog switch 14066B in 14 pin SOIC pkg 4/$1

Sharp CMOS 5168HN-10L 8K x8 SRAM in TSOP 28 pkg 4/$1
Samsung KM6264BLG-10 8Kx 8 SRAM TSOP 2/$1

surface mount diodes in round MELF package
Rohm RLRH100: same ratings as 1N4002 (1 AMP, 100 Volt)
12/$1.00

SMD zener diode 350mW Pd 5% tolerance in
SOT 23 package Motorola MMBZ5240 10 volt 12/$1.00
other zeners from same series 10/$1.00
3.9 V MMBZ5227
12 V MMBZ5242
18 V MMBZ5248

ROHM NPN digital transistor DTC114YK 10/1.00


excuse the poor artwork. There is a 10K in series with the base and 47K

between base and emitter. Use as inverter with no external bias resistors required or as digital switch. IC=100 mA,VCC=50. Package is SC-59, pin spacing is same as SOT-23. data sheet available package stamping -- 64

Surface mount 1/8 watt resistor assortment.
paper strips of 20 each of 50 different values = 1000 resistors
all parts marked with standard 3 digit code
$10.00 each assortment

Chip capacitors -- 0.1uf 50 volt ,tolerance range Z
size 1206 (3.2mm x 1.5mm) packaged on paper tape
Y5V ceramic with nickel barrier terminations
MuRata pn GRM42-605Y5V104Z50
30/$1.00

I have other chip caps, mostly MuRata for same price
1206 size NPO (C0G) 50 volt 5%
1pf 2.7 3.3 4.7 5.6

20 22 24 27 30 39
56 75 150 180 300
560

220, 1000pf are 10% X7R ceramic

smaller size 0805 50 volt NPO also 30/$1.00

1.2 8.2pf, 11 12 30 100
.01uF X7R

Mica surface mount capacitor from Soshin Electric 1210 size unless otherwise noted all are 500 volt , 5% tolerance. Yeah, this is a strange one.
1, 3.5, 4.5pf, 5.5, 6.5, 7.5, 9.5, 11, 13, 15,16, 20, 22, 27, 30, 39, 51, 56, 62, 68, 75, 82, 91

the following are rated at 100 volt:110pf, 180, 200, 240

15/$1.00

Surface mount inductor (most are TDK 1210 size) 47,56,82, 220, 330, 560, 680,820 nH 10/$1.00

Surface mount ferrite chip MuRata BLM31A02. Good for supressing flight in amplifiers. Rated current 200 mA, DC resistance <0.5 Ohm. Fits same size pads as 1206 cap. 12/$1.00

Surface mount resin molded tantalums made by Panasonic, Matsuo, NEC, Sprague and possibly others.
A & B sizes 12/$1.00, C & D size 10/$1.00
A size stamping code
.1uf 35v A104
.22uf 35v V224
.33uf 35v V334

.47uf 25v E474
1 uf 16v C105
4.7uf 10v A475

B size
1uf @ 35v 4.7uf @ 10v 10uf @ 10v

C size
4.7uf @ 16v 10uf @ 16v 22uf @ 10v

Dsize
6.8uf @ 35v 33uf @ 16v

these tantalums are slightly smaller than a C size. They measure .185" L x
.1 W. 12/$1
.22uf 15v
.33uf 20v

smd LEDs 1206 size mixed mostly green with a few red or yellow or not
mixed all yellow 12/$1.00

Methode surface mount socket for 32 pin PLCC ICs 3/$1

also have some common & not so common leaded parts

e-mail for more info: baggybob@elknet.net.

## 876. 5khz Receivers ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Mr Deeley <esrkq@warwick.ac.uk>
Message-ID: <33BD15EC.75EB@warwick.ac.uk>
Source record: 92736

Question to knowledgeable radio people.

I bought a Heart Rate Monitor, the specs say the ecg chest strap transmits to the Watch Receiver at 5khz +- 10/%. (Transmits a short beep for every heart beat.)

1) Does this sound right ? (seems low)

2) If it is right, are there small (eg walkman type size) and inexpensive receivers which could pick up this signal.

regards,
Paul.

# 877. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <33bd0b0a.2132188@news.azstarnet.com>
Source record: 92737

On Fri, 04 Jul 1997 03:02:50 -0500, "WILLIAM E.
SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>David Stockton wrote:
>>
>> The ARRL did indeed pay for the material, at a rate they set. I
>> wondered what to do with the money after the British tax man had made
>> off with his 40%. In the end,
>
>I had a very similar experience with Chapter 17, which I try to update a
>little each year (no payment). I used what was left to improve my home
>laboratory, computer and library.
>
>> For people not in fulltime employment, the youngsters, the oldsters
>> and those between jobs, payment for publication helps them for the
>> materials or parts used, and allows them to afford to create/build
>> further things that can in turn be published.
>
>That was my further experience in my July 1997 QEX article. I put an
>enormous effort and considerable cost of materials into it. I was
>working for no more than 10 cents an hour net profit.
>
>>
>> Professionals have plenty to offer amateur radio. People like Bill,
>> myself, and many others can spread information about how some of the
>> things we've done can be applied to amateur radio.
>
>In retirement, I find this an interesting continuation of my electronics
>career. Each project that I do and write about is a big educational
>experience for me, if for no one else.
>
>Nice to hear from you again, David.
>
>Bill W0IYH

As a previously published author myself, I want to
thank both of you gentlemen for your efforts. I
know how much work it is and also know the warm
glow one has when his work is published.

As a recently-retired professional with thirty
years of experience in the RF measurements game, I
believe that I probably have something to offer to
the ham community to which I've belonged for 40
years and to which I own my career.

However, it is with much reluctance that I feel compelled to write about the bad experiences that have gone with the good. I do so with the hope that some in the publishing game will take note and realize that their actions can drive away some of us that may have something to offer.

Because I still entertain the idea of writing for publication in the future and I'm not trying to embarrass anybody, I will make the following brief and purposefully vague:

Item 1: Have article on speech processor published in now-defunct ham magazine. Get many requests for circuit boards from readers. Since I don't have or make boards, I contract to have some made which I sell for cost.

Editor of magazine starts kit company and offers my design as his first kit. I have to pay for ad to sell off circuit boards.

Item 2: Have article on noise blanker published in same magazine.

Some years later, friend says he sees my circuit in popular radio handbook. A short note of thanks from editor or a courtesy copy of book would have been nice. But then again, under that plan they would have to give away all of them.

Item 3: Write article on fixing birth defect in imported UHF transverter. Send to same magazine (I'm a slow learner). Article accepted for publication but no payment received.

Follow-up determines that article sent to importer of transverter for "technical review". Importer is advertiser in magazine. Article never published. Payment-upon-acceptance policy just happened to change to payment-upon-publication after article accepted.

Item 4: Read article, directed to newcomers, on different feed system for multi-band antenna in popular ham magazine. Write letter to tech editor pointing out flaws in conclusions. Exchange several letters with editor and include mathematical examples and results of modeling. Also point out errors, which have existed for years, in chart in popular radio and antenna handbooks.

My letters are never published, however, a very slightly changed version of one of my examples is published in new sub-section in revised antenna handbook. Chart which was in error also fixed. No mention ever made as to source of info.

Item 5: How it should be done. In passing, I offer only a tiny bit of advice to friends who author book on CCD camera design for amateur astronomers. They include acknowledgment in book and publisher sends letter of thanks and complementary copy of book.

Question: Should I leave ham radio and take up astronomy?

N7WS

# 878. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: "WILLIAM E. SABIN" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33BD2A05.1FE2@crpl.cedar-rapids.lib.ia.us>
Source record: 92738

Wes Stewart wrote:
>
> However, it is with much reluctance that I feel
> compelled to write about the bad experiences that
> have gone with the good. I do so with the hope
> that some in the publishing game will take note
> and realize that their actions can drive away some
> of us that may have something to offer.

My experiences with ARRL, RF Design and Communications Quarterly have been satisfactory, but maybe things do not always happen exactly as I would prefer (that's life!).

For a retired person such as myself I would suggest that the article itself be the end product of efforts and not be followed up with any business ventures. That can very quickly take all the fun out of it and endanger the family nest egg.

Bill W0IYH

## 879. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970704175600.NAA12457@ladder01.news.aol.com>
Source record: 92739

This is not precisely following the thread:

First. I read Wayne Green's stuff. Along with personal
experience I believe QST does not take hamdon to heart.
Sure they are serious about hams but not to the point of
promoting rank and file directives as I think they should.
Agreed the directives would be enormous but heck they
have to do something up there. Majoral ideas would surely
assert themselves for publication or discussion.

Second. I just had a couple articles published in Nuts & Volts.
I choose to seek publication there because the general feel and
affect of their articles is unformal and seems to be written by
others who appear to be regular guys. QST's articles, to me, are
written by stiff necked engineers or professional people unable to
inject even the slightest hint of spontaneity, humor or relationship
to just being a good ol' boy. Because of the guidelines? Ya' got me.

Third. I am also in it for the money. Just getting published made my whole
year
but the $150 per page permits me a little time to research more articles.
I made $24
an hour on the first article. WORD keeps track of my time spent so I know
what I'm earning The last article JULY/97 issue, was faster and I earned
much more than that. Maybe I got two more articles to do, maybe.

Sure I like to help other people , not necessarily hams, with ideas or
pecular knowledge I have. I'll do it on a personal basis though.
I wish all the guys at QST felt as ya'all do and would just take care
of hamdon for the pure joy of seeing the society of hams flourish
without any gratuity at all. Until then I think I'll take the money
too.....

Carl

They call me everything in the book
Sumtimes theya call me 2x4
Sumtimes they just call me...when they need a good hand
Then they call me The Radioman

We're in the CB radio bidness!
Carl Motsinger representing EFJ Devices
N9EFJ

## 880. Re: 2m/70cm homebrew duplexor wanted?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Kerry Morris <kerry@elcontrol.demon.co.uk>
Message-ID: <7yZFOCAZBUvzEwoS@elcontrol.demon.co.uk>
Source record: 92740

Many thanks to all those who responded to my original request - I now
have some useful information on this subject to be going on with.
Thanks again,
--
Kerry Morris (G1WIK, Portland Amateur Radio Club, United Kingdom)

## 881. Re: Q: calculating coil capacitance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5pk2m8$jep@nntp02.primenet.com>
Source record: 92741
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Mahatma Kane-Jeeves <mkj@world.std.com> wrote:
: (I originally posted this query to some Electronics groups, and it was
: suggested that the Radio groups would be more likely to have an answer.)

: Can someone here please give me a quick tutorial, or point me to
: information, about how to calculate the inter-winding capacitance (and
: self-resonance) of a multi-layer coil, based on the geometry? Thanks.

: --- mkj

Well, there is one, although it is a bit old:

1. Breit, G., "The Distributed Capacity of Inductance
Coils," The Physical Review, Vol. 18, No. 2, August 1921,
pp. 133-135.

For which there is a much more extensive discussion in:

2. Breit, G., "The Distributed Capacity of Inductance
Coils," The Physical Review, Vol. 17, No. 6, June 1921,
pp. 649-677.

For multi-layer coils, I can't seem to find anything else in
files. However, if they might be of any value, here are some refer-
ences related to single-layer coils (solenoids), which may lead you
to what you're seeking:

3. Palermo, A.J., "Distributed Capacity of Single-Layer
Coils," Proceedings of the IRE, July 1934, pp. 897-905.

And, for measuring the capacitance, there is one very good
reference outlining a good technique:

4. Dunn, John, "Dual Resonance Measurements Evaluate Un-
known Coils," RF Design, October 1994, p. 54.

I gotta go.

Regards,

Chris

```
,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/
oo\ Chris Trask / N7ZWY
```

(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240
. ( ) \
'-| )__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

## 882. HAM WEB SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33BDA9E9.2822CFC8@cyberramp.net>
Source record: 92742

http://www.cyberramp.net/~rnewland

## 883. Re: johnson fleetcom> 440 repeater?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Denton Larson <dlarson@ic.waseca.mn.us>
Message-ID: <33BD0D92.88822729@ic.waseca.mn.us>
Source record: 92743
Body handling: HTML body converted to readable text

Sorry to say. I doubt you will have much luck converting that radio to
the 440 Mhz band. The front end filter is has different coils in it vs
the 450 range I'm not sure of the turn count, but it would be to short.
there are several other components both in the rx and tx sections that
would have to be changed. The 450 range radios just bairly convert with
out component changes. My best advice is take it to a hamfest sorry
for the bad news.
73's Denton WB0ZUR
hacker@flash.net wrote:

> I have a johnson 18 watt 486mhz crystal radio.
> I would like info on how to convert to 440, and
> if possible to rekindle some life and use as
> repeater....is this feasable with this FREE
> radio
> thanks in advance for any/all comments

# 884. Re: Computer Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <33BDAF09.6AD2@cam.org>
Source record: 92744

Paul J wrote:
> 
> Help, can anyone suggest a way to run a computer off of 12V battery
> power. I have a remote location with unreliable 120VAC. What I want to
> do is trickle charge a car battery, and let the computer continue to run
> in the event of a power failure.
> 
> What would be ideal is a computer power supply that takes 12VDC as its
> input instead of 120VAC.
> 
> Any suggestions would be appreciated.
> 
> Cc to kd6lor1@home.com
> 
> Thanks, Paul Jaruszewski, KD6LOR

What you should look at is a UPS (uninterruptible power supply).

A good UPS has what you want: a battery + regulation.
More Power and time that the battery will hold up (in case of
power fail) higher the cost. Small UPS are in the 200$ range.
The new brand of fancy UPS is even connected to your computer
and will shutdown Win95 when power is gone and battery is low.

There are tons of them. There is even a YAHOO section just on that...

---
Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Windows Antenna Simulation Software

# 885. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <33BDB710.E4@cam.org>
Source record: 92745

Henry C. DeBey wrote:
>
> Is it possible to use a large capacitor as a UPS?
>
> If I have a 1.0 farad capacitor and a PC that draws 5 amps at 5 volts
> how long would the voltage stay above 4.65 volts?
>
> Is there a formula for calculating this type of thing?

Your PC power consumption seems a little bit low, you may
have forgot other voltages and power to disk drives etc..
Typical PC power supply is more in the 200W range that 25W.

A ONE farad at this power will give you a 5V/s slope and the
voltage will drop to 4.65V in ..... 70ms (MILLISECONDS)

I don't what you mean by "UPS". If it is just filtering small
milliseconds glitches in the AC line, the PC power supply will
do that. If you want to have your PC running when power is gone
or protect your PC from scrambling its Fat tables when there is
a power fail you need a real UPS with a battery inside.

I have seen huge capacitor banks (like 8 to 10 coke cans) used
in process control minicomputers and that gave you just enough
time (100 ms max) to save machine status so you will be able to
restart at the same point.

Capacitor UPS is no very usefull in PCs....

--
Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri

# 886. Re: *Teenage School Girls. How homebrewers would prefer the ad!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-04 00:00:00 UTC
From: Spamfighter@ziplink.net
Message-ID: <5pio1a$8ci$1@kayrad.ziplink.net>
Source record: 92746

In article <5p6r1e$qa3$480@news.internetmci.com>, asd;lfj@asdfjs.com says...
>
>
>Are you ready to look at pictures of Teens soldering circuit boards,
>scrounging parts, filling the cellar full of junk (oops, good stuff),
>working DX, and erecting triband beams?

>Then check out our web site. www.circuitchicks.com

Now it fits the newsgroup!

# 887. Re: Schematics for 6M QRP and or 6M receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5pmka0$l06@mtinsc03.worldnet.att.net>
Source record: 92607
Cross-posted to: alt.binaries.schematics.electronic,rec.radio.amateur.homebrew

If you are interested in a transverter...check my page. Address below.
73,
Woody

Doug Smith VE3 IYB wrote:
>
> Does anyone have a schematics for a 6M QRP transmitter or a 6M receiver. (transceiver)
>
> Doug Smith VE3IYB 708042@ican.net

--
de Woody, WB4QXE, woody/white@worldnet/att/net (Non-spamers, change /
to . )
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

## 888. wtd; 1296 xverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: Douglas johnson <iix@interaccess.com>
Message-ID: <33BF0977.7396@interaccess.com>
Source record: 92608

looking fer 1296 xverter in good condition.....iix@interaccess.com

# 889. How to build a VFO with an output freq of 23.000 MHZ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: jarad@nbnet.nb.ca
Message-ID: <jarad.455.02781116@nbnet.nb.ca>
Source record: 92609

I need a stable VFO with a output freq of 23.000 mhz- 23.500 mhz
I don't know what to look for
Would a digtal VFO be the answer, I would like it to go in 5 khz steps
If there is a place to buy or a kit available please let me know
Thanks Jarad
jarad@nbnet.nb.ca

## 890. Vacuum relays

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: Aatos Poutiainen <oh8jep@pp.kolumbus.fi>
Message-ID: <33BED41D.2C05@pp.kolumbus.fi>
Source record: 92610

Hello everybody!

I am looking for cheap vacuum relays for my homebrew AL project,
if somebody would help me to find them,relays must be abt 24V coil
an one closing contact included,at least 4 relays are needed,also
tubes 3-500Z and others similares are interested,and load and tune
airvariable capasitors too.
Offers to E-mail address oh8jep@pp.kolumbus.fi

73 de Aatos OH8JEP,Finland

## 891. 2m/70cm anti-duplexor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: jzawodny@pcocd2.intel.com
Message-ID: <5pmm1c$i8u$1@news.fm.intel.com>
Source record: 92611

Here's the question, is there a filter arrangement or some other
means to do the following... I have a Yeasu FT5100 with the duplexor built in,
but to use it for psuedo base station use, I would like to be able to
use beam antennas. They all appear (as I would expect) to be single band
models. Even the Cushcraft "dual band" appears to have two feedpoints. So,
is there an arrangement that will filter the output signal of the radio
to the appropriate antenna and also allow both bands to be received????

Thanks in advance..

jtz

--

Jason T. Zawodny Summer Intern, PCD SLS Department
Phone (916)356-9220 Loc:FM5-2-H2, MS FM5-45

# 892. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0507970345210001@news.vcnet.com>
Source record: 92747

In article <33bd0b0a.2132188@news.azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) wrote:

...snip...
> Item 4: Read article, directed to newcomers, on
> different feed system for multi-band antenna in
> popular ham magazine. Write letter to tech editor
> pointing out flaws in conclusions. Exchange
> several letters with editor and include
> mathematical examples and results of modeling.
> Also point out errors, which have existed for
> years, in chart in popular radio and antenna
> handbooks.

Pointing out errata seems to be a dangerous practice.
>
> My letters are never published, however, a very
> slightly changed version of one of my examples is
> published in new sub-section in revised antenna
> handbook. Chart which was in error also fixed. No
> mention ever made as to source of info.

..... but of course.
>
.........snip......

--
--Rich-- . . . 805-386-3734, ag6k

## 893. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0507970410410001@news.vcnet.com>
Source record: 92748

In article <33bb96b1.1613058@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> Hi Zak,
>
> I don't agree with the Leauge bashing that goes on, I think you guys
> do as good a job as resources allow you to do. But I suspect you'd be
> better off if you openly explained WHY certain things go wrong, AND
> took outside suggestions seriously instead of blindly trusting a few
> select people.
.....snip.....
Indeed, like trusting someone who recognizes himself as an "expert".

--
--Rich-- . . . 805-386-3734, ag6k

# 894. Re: Stan King W4KR ex-W8POZ IS A CROOK ! WARNING !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: kingradio@aol.com
Message-ID: <19970705144900.KAA01705@ladder01.news.aol.com>
Source record: 92749

>KingRadio wrote:
>>Stan King W4KR ex-W8POZ IS A CROOK ! WARNING !
>>This guy defrauded many hams in southeastern Michigan for a great deal
>>of money. He is under court order to keep a current address on file at
>>the circuit court in Ann Arbor, Michigan but skipped the state in
>>Dec 1996. His callsign address is a mail drop in Florida and his
>>drivers license is a fake address in Texas.
>>PLEASE HELP US FIND HIM. Please email me with any tip on his
>>whereabouts. It's guys like this we don't need in ham radio.
>>Stan King W4KR ex-W8POZ IS A CROOK ! WARNING !

James O'Brien <kd4cdb@bellsouth.net> Replied
>Hell it's probaly you. No name, no call,same last name.
>Interesting coincidence if you ask me. I'd say 50/50
>your him. How better to deflect guilt than pretending
>to look for yourself. How clever! You must have a
>Phd too.

Hey Jimmy - I'm the KING OF RADIO. Any resemblance to Stan King's last name is a coincidence. And your logic that I am actually Stan King putting up wanted posters all over the internet to "deflect guilt" is, well, tenuous at best. I really don't understand how that works.

Vis-a-vis the "no name, no call" bit - I do not post using my identity so as to avoid hooking up personally with TOTAL ASSHOLES LIKE YOU. I used to post under my real name until I once made an innocuous comment that some guy interpreted to be "pro-code." I received a 2AM phone call at home demanding to know why I wanted to "kill the hobby." *That* was enough for me. I am a ham, Jimmy, but don't really want to get to know morons like you "up close and personal."

My post was made looking for information on finding the whereabouts of Stan King, W4KR ex-W8POZ. Any readers out there who have so much time on their hands that they want to verify the veracity of my statements may contact the Washtenaw County Circuit Court in Ann Arbor, Michigan and request a copy of the case number 94-3565-GC titled "Doty v. King."

# 895. Re: "BIG MAN" Jimmy Obrien KD4CDB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: kingradio@aol.com
Message-ID: <19970705150400.LAA28801@ladder02.news.aol.com>
Source record: 92750

"BIG MAN" Jimmy Obrien KD4CDB
James O'Brien <kd4cdb@bellsouth.net> Wrote:
>Allright another moron who knows how to use qrz! I see that your
>trying to grow a set of balls now and that's admirable. You still
>don't have a name or a callsign. Try to find the jpg that goes
>with my call,because if your balls grow big enough and you
>are tough enough to knock on that door and repeat the crap
>you've spewed on this group to my face,that's who will beat
>the living hell out of you. As far as civility goes, if you
>don't like it put a hinge on it and swing it up your
>no-name,no-call anon ass.

Now - for those of you who have questioned why I use a screen name instead of a real name - the above is the definitive answer. Thank you, Mr. O'Brien, for so perfectly illustrating why it is extremely advisable to use a screen name on the internet. I really don't want to get to know someone like you "up close and personal."

## 896. Re: PC controlled.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: Ed <mrmicro@techie.com>
Message-ID: <33BE6EAC.4728@techie.com>
Source record: 92751

David Nye wrote:
>
> Michael Gray Anthony <gray480@wilmington.net> writes:
> >Does anyone know if any work has been done on building a radio on an ISA
> >card or using a serial or parrallel interface to a PC?
>
--
Check out the new AES catalog. Inside the front page is an
advertisement for the PatCom transceiver. It has a serial interface for
connection to a PC, a 2.5-30mhz general coverage receiver, built in CW
keyer and RTTY decoder (and more as they say on TV).

--

Ed
MrMicro@techie.com

# 897. Re: HTX-100 no transmit!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: "Thomas L. Kirksey" <tkirksey@mail.mem.bellsouth.net>
Message-ID: <33BE6EC7.4FD7@mail.mem.bellsouth.net>
Source record: 92752

w5tn@prismnet.com wrote:
>
> Help,
>
> I'm trying to get a Radio Shack HTX-100 to work. It receives, but it will not
> transmit. The TX indicator will come on, but the radio will not switch over
> into transmit mode. Help! Any ideas on what might be wrong, or who works on
> this type of radio?
>
> Thanks,
> David, W5TN

If I am not mistaken ( I had a HTX-100 for 2 years, until it was
stolen), the radio uses a PIN diode for T/R switching. If you could
find the right part, it would be a fairly simple repair.

Tom, KD4FTQ
tkirksey@bellsouth.net

## 898. HR2510 schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: milo17@aol.com
Message-ID: <19970705162901.MAA02839@ladder02.news.aol.com>
Source record: 92753

Anybody know where i can get a schematic for a uniden hr2510 ?? Any info would be greatly appreciated !
Thanks !
Mike
N2JVT
milo17@aol.com

## 899. N9IPV Spectrum Analyzer bug fix Notice!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: dthimm@newnorth.net
Message-ID: <33be7550.11465587@news.newnorth.net>
Source record: 92754

If you have downloaded a copy of the N9IPV Spectrum Analyzer
prior to July 5, 1997. You may download a 110kb corrective patch
that will eliminate the "Error 360 Invalid Property" when changing
starting and stopping frequencies.

The download is available at the following URL:

http://www.newnorth.net/~dthimm

Thank You

Dan
N9IPV
73

# 900. TX RX ANT PA CCTs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: Harry Lythall <no.one@no.where>
Message-ID: <33BEDD1F.4BDC@no.where>
Source record: 92755

Hi all,

My homepage is getting bigger and will continue to do so until
Telenordia tell me I have run out of disk space on the server.
You cn find my homepage at:

http://user.tninet.se/~acz732k/

Amongst my constructional projects are:

BASIC INFO FOR BEGINNERS
How to solder
Component identification
tools

ANTENNAS
Remote tuning of tuneable antennas
Basic dipole information
Short antennas for the HF bands
A balcony/terrace antenna (worked JA on it)
Packing crate antenna
Frame antenna

RECEIVERS
Cigar box HF receiver - uses battery valves
IC HF receiver
HF direct conversion receiver
Regenerative HF receiver
HF and VHF receiver using ZN414 (ZN416)
Modifying domestic receivers for HF SSB
Modifying domestic receiver for 160 meters
Synthesized receiver

TRANSMITTERS
FM (88+108MHz) 'BUG' (can be modified for 30 MHz)
250mW HF bands CW TX
4 watt PS for the above
5 watt CW TX - dead easy to build
CW TX using voltage regulator
Single valve TX
Two valve TX
Cigar box transmitter (valve)
145MHz FM TX
QRP SSB TX
3 watt linear 1 - 30 MHz
Phasing method SSB exciter

500 watt linear amplifier
April 1st transmitter

USEFUL
VHF NBFM Crystal RX based on a coffee tin
250vDC for valves using modern components
Stereo enhancement for HF CW
CW filters
Self tuning CW filter
Q-multiplier
CW keyer using 'relay logic'

DATA/INFORMATION
QRP frequencies
Measuring micropowers
Making PCBs, several methods
G0TLAs QRP circuit database on packet
Coil winding and 'turns' calculation.

DOWNLOADING
Signal generator program
All my QRP@WW circuits in a ZIP file
PCB foil for BUG TX (later version)
'Adult' screen saver

BREWING BOOZE
Brewing beer, wine and 'mash'
Distilling the mash (3 methods)
Making liquours

----------------------- and more -----------------------

I will be adding more to the homepage constantly, as long as
I have the time available to do it.

Have fun with QRP (and QRO) de Harry, SM0VPO, Upplands V&#65533;sby.
---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

# 901. Schematics for 6M QRP and or 6M receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-05 00:00:00 UTC
From: 708042@ican.net
Message-ID: <MPG.e284647fc346876989687@news.ican.net>
Source record: 92756
Cross-posted to: alt.binaries.schematics.electronic,rec.radio.amateur.homebrew

Does anyone have a schematics for a 6M QRP transmitter or a 6M receiver. (transceiver)

Doug Smith VE3IYB 708042@ican.net

# 902. Re: How can I use a capacitor as a UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc89a5$f6611d20$43102399@peter->
Source record: 92612

Madjid VE2GMI <mboukri@cam.org> wrote in article <33BDB710.E4@cam.org>...
>
> Your PC power consumption seems a little bit low, you may
> have forgot other voltages and power to disk drives etc..
> Typical PC power supply is more in the 200W range that 25W.
>

Probably in between those limits. The PS rating is the MAX that the
PS can handle (and in the ratios specified).

> A ONE farad at this power will give you a 5V/s slope and the
> voltage will drop to 4.65V in ..... 70ms (MILLISECONDS)
>

You don't want to do it that way. You lose your 12V and your
negative supplies (for comm, etc).

Much better to parallel the PS bulk primary capacitors with really
huge caps if you want to try this (then you have all your PS outputs
and full regulation). BEWARE! the voltages are dangerous!

If you want to save some time just buy a Back-UPS at any decent
sized hamfest for $50.

## 903. Antenna info sites on the net???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: "E.Bailey" <ebailey@wiscasset.net>
Message-ID: <5pmt3l$qae$1@news.ime.net>
Source record: 92613

Does anyone know if there is a site thats tells you how to make home made
UHF antennas? I live about 50 miles north of Portland, Maine on the coast and would like to recieve
a Spanish UHF station in Boston.
Thanx
Erlon

## 904. PL Mod for IC-2AT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: The Hendra Family <hendra@macscouter.com>
Message-ID: <33BF4710.1BFE@macscouter.com>
Source record: 92614

Anyone out there have information on where to get the module and how to modify an Icom IC-2AT with a PL Generator?

Please e-mail direct to hendra@macscouter.com.

73 de Gary WA6SUW

# 905. Re: ! PROVEN PSYCHICS / FREE PREDICTIONS 800-677-8039

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33bf4b12.2667542@news.online.no>
Source record: 92615

On Sat, 21 Jun 1997 11:22:18 -0400, Steve <semann@nr.infi.net> wrote:

>jerry williamson wrote:
>
>> They must be kept out of these newsgroups.
>
>Send them a mental message! If they're as good as they claim
>they should get it!

yes, send them some long text they have to read, in a style which
causes them trouble to read and understand. Let them think that you
are interested to talk about their proiduct, so they benefit from
reading your text to learn what you are telling them.
Change text somewhat next time you use it sending it to a spammer

Perhaps someone English/American fellow could make some text we can
use to cause them so much work reading the comments that they soon or
later have to stop advertising in some newsgroups??

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 906. /Sell/Your/Photos$$$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: ret643@aol.com
Message-ID: <5pnrvl$hcs$7082@roadrunner.miracle.net>
Source record: 92616

We are a New York based international photo agency representing professional and amateur photographers in search of having their work promoted in order to conduct their profession or hobby minus the time consuming inconvenience of presenting and selling their own work.
You do not have to be a professional photographer to sell your photographic work successfully, and as any pro will tell you, quite often throughout history an amateur stumbles on a scene that he or she photographs and ends up with a photo that becomes a classic. Those who publish magazines, books, newspapers, greeting cards, record albums, or just about anyone who works with images in their profession, are in desperate need of fresh material, and are more than willing to review photos submitted by professional photo representatives. Sometimes the photos of amateurs are sought after more so than professionals because of accidental originality and innovative themes.
At Photo Phoenix International, we delight in and value the work of people who view photography as a fine art and understand a photo representative's significance in terms of a photographer's career, reputation, and monetary gain.
The photos we are seeking are some of the following: ANIMALS, ARCHITECTURE, ART, AUTOMOBILES, BUSINESS, CELEBRITIES, DOCUMENTARY, ENTERTAINMENT, EROTICA/NUDITY, FASHION, FOOD, HEALTH, HISTORY, HOBBIES, OUTDOORS, PEOPLE, POLITICAL, PORTRAITS, STILL LIFES, RELIGIOUS, SCIENCE, SPORTS, TRAVEL . . .
Whether your work portrays conservative, experimental, stylish, or innovative themes, your project proposal should be well thought out before submitting to us.
For first contact, submit a query letter and "SAMPLES ONLY" of your photos.
You must include "2" self addressed, stamped envelopes--one for correspondence, the other for the return of your material should we not be interested.
If we think your work is sellable, we will respond as soon as possible. Do not send entire portfolio unless we ask for it.
SEND TO: Photo Phoenix International

<33-29 58 Street>
<Woodside, New York>
<11377>
<~Phone: 718-651-8145>

# 907. Barebones Superhet @ N2CQR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33bf7d26.66225873@news.erols.com>
Source record: 92617

Progress report on N2CQR's 20 Meter superhet project:

>

The LM386 contributed an element of the "Joy of Scrounging" to this project! It also allowed me to put something of my own "design" into the radio. I built the AF amp with the FET preamp and it seems to work pretty well. Unfortunately it starts oscillating if I turn the gain control beyond a certain point. I'll do some pruning to see if I can solve that problem.

But no complaints here at N2CQR! I took the five boards that I built and wired them together with test leads. While I was still checking my connections, I heard some faint CW signals. Thinking that they might be coming from my Drake 2-B across the room, I ran over and turned the Drake off. CW signals were still there, coming from the speaker of my little collection of boards and wires! Lots of fun.

A couple of minor problems I need to work on:

-- I can't swing the VXO xtal as much as I should. W1FB writes of 30 khz swings, but I can't seem to move mine more than 8 Khz. (I had a similar problem with my VXO controlled transmitter.)

-- Non-linear tuning provided by my capacitor may be annoying. Frequency changes a lot in one portion of the cap's tuning range - and changes very little at the other end. I'm not sure that I can do much about this.

-- My very "bare bones" IF filter (One 3.579 xtal with a resistor to ground!) seems to provide some rejection of the unwanted sideband, but I can hear "the other side" on strong CW sigs. Doug DeMaw had one circuit in which he substituted the emitter bypass cap in the IF filter with a crystal at the IF freq. I wonder if this would work on the source bypass cap in my FET IF amp.

-- Finally, I have to think up a way of mounting all these boards into/onto some sort of cabinet/chassis. I'm looking for some system that will make it easy for me to continue to tinker with the radio.

73 de Bill N2CQR

# 908. Re: 5khz Receivers ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <zI$RkFAjt2vzEwJ6@ddwyer.demon.co.uk>
Source record: 92618

In article <33BD15EC.75EB@warwick.ac.uk>, Mr Deeley
<esrkq@warwick.ac.uk> writes
>Question to knowledgeable radio people.
>
>I bought a Heart Rate Monitor, the specs say the ecg chest strap
>transmits to the Watch Receiver at 5khz +- 10/%. (Transmits a short
>beep for every heart beat.)
>
>1) Does this sound right ? (seems low)
Possibly uses a magnetic field to transmit rather than an rf signal like
the mag field used in theatres (for the hard of hearing).
>
>2) If it is right, are there small (eg walkman type size) and
>inexpensive receivers which could pick up this signal.
Possibly use a tee mag pick up connected to an amplifier.
>
>regards,
>Paul.

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

## 909. writers-seeking-publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: vgi564@aol.com
Message-ID: <5po3r3$9r$869@roadrunner.miracle.net>
Source record: 92619

We are a New York based international literary agency with two branch offices, one of which is in Florida. We are seeking new and> previously published authors, so please adhere to the following-- guidelines.

All fiction: send brief <synopsis, first chapter, and include a self addressed, stamped envelope (SASE).
All nonfiction: brief synopsis, first chapter, SASE.
Short-Stories: brief synopsis, 3 pages, SASE.
Poetry: send 3 poems, SASE.
Please do not send complete manuscript unless we ask for it.

Send to: Woodside International Literary Agency>>
=33-29 58 Street>>>>>>>>
=Woodside, New York>>>>>>>>
=11377>>>>>>>
=Phone (main office):
=718--651-8145>>>>>>>

## 910. Re: ic -706mkII help mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: geoff <gefhor@bigpond.com>
Message-ID: <33bfa352.0@139.134.5.33>
Source record: 92620

Jack Albert <jwa@tellabs.com> writes: > geoff wrote:
> >
> > dear readers,
> > have just purchased ic706mkII and wish to modify to tx across band.
> > any one out there got any ideas... unsure if it same as ic-706 mkI
> > tks 73's
> > geoff
> > gefhor@bigpond.com
>
> try this web page
>
> http://www.qsl.net/k7on/index16.htm
>
>
> --
> Jack Albert WA9FVP (Fellow Radio Hacker)
> Tellabs Operations Inc.
> 1000 Remington Blvd Voice (630) 378-6201
> Bolingbrook, IL 60440 FAX (630) 378-5790

dear jack
the mod on that web page refers to 706mki and not the mkii.....
am unsure if the mod is the same .... tks anyways 73s
geoff

## 911. Re: ic -706mkII help mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: geoff <gefhor@bigpond.com>
Message-ID: <33bfa4ad.0@139.134.5.33>
Source record: 92621

Jack Albert <jwa@tellabs.com> writes: > geoff wrote:
> >
> > dear readers,
> > have just purchased ic706mkII and wish to modify to tx across band.
> > any one out there got any ideas... unsure if it same as ic-706 mkI
> > tks 73's
> > geoff
> > gefhor@bigpond.com
>
> try this web page
>
> http://www.qsl.net/k7on/index16.htm
>
>
> --
> Jack Albert WA9FVP (Fellow Radio Hacker)
> Tellabs Operations Inc.
> 1000 Remington Blvd Voice (630) 378-6201
> Bolingbrook, IL 60440 FAX (630) 378-5790

thanks jack om....
but still think that the ic 706mkii and 706mki require different modification
can any one help me on this ???
gefhor@bigpond.com
geoff

# 912. Re: need specs for 3CX1200A7/D7/Z7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0607970633370001@news.vcnet.com>
Source record: 92622

In article <01bc84c4$5e3c5540$b39ed8cc@km3g.cts.com>, "Lane C. Zeitler"
<km3g@cts.com> wrote:

> I have contacted Eimac but the spec sheets have not arrived yet. What is
> the max. plate voltage for the 3CX1200A7? What are the differences btwn the
> A7- D7 - Z7?
> I am building an hf amp but using an older ps I built a few years ago. It
> runs 6800vdc at about 1 amp ccs and don't know if this is too much for
> these tubes.
>It worked flawless with a 4-1000 in g.g. i built a while back.
...snip...
Indeed, 7kV is about right for the '4by1' However, IMO, it is too much V,
Lane. However, if the supply is C-filtered, you might be able to convert
it to a resonant-choke filter, which would decrease the voltage to about
the right amount for a 3cx1200... .
- A major problem with the A7 is relatively high anode-to-cathode feedback
C, which results in VHF parasite problems. The feedback C problem was
overcome in the Z7. The feedback C in a Z7 is about 1/10 that in an A7.
However, a special socket is required.

--
--Rich-- . . . 805-386-3734, ag6k

## 913. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <33BFCE50.74C0@mailhost.cyberramp.net>
Source record: 92623

http://www.cyberramp.net/~johnf

## 914. FM conversions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: Peter Neal <pneal@argonet.co.uk>
Message-ID: <na.988fce47a5.a40040pneal@argonet.co.uk>
Source record: 92624
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.shortwave

This is a posting for a friend who would be grateful for any help:

I require any information on how to convert the following to FM.
Realistick Navaho 40ch base.
General electric 3805.
President AR7.
Colt 210.

If anyone has any information can they please mail me.

I apologize in advance if this posting is not suitable for this newsgroup.
No mail on any other topic is welcome in any shape of form.

--
? Everything I say is true - I'm not a compulsive liar ?
,_, ,_,
,[illegible](_) Soft Option : Peter Neal pneal@argonet.co.uk (_)[illegible],
{_____) http://www.argonet.co.uk/business/pneal/softoption (_____}
(( (( )) ))

## 915. Circuits- TX RX ANT PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: Harry Lythall <lythall@ebox.tninet.se>
Message-ID: <33C07F97.1AFD@ebox.tninet.se>
Source record: 92625
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchor

Hi all,

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Telenordia tell me I have run out of disk space on the server.
You can find my homepage at:

http://user.tninet.se/~acz732k/

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Packing crate antenna
Frame antenna

RECEIVERS
Cigar box HF receiver - uses battery valves
IC HF receiver
HF direct conversion receiver
Regenerative HF receiver
HF and VHF receiver using ZN414 (ZN416)
Modifying domestic receivers for HF SSB
Modifying domestic receiver for 160 meters
Synthesized receiver

TRANSMITTERS
FM (88+108MHz) 'BUG' (can be modified for 30 MHz)
250mW HF bands CW TX
4 watt PS for the above
5 watt CW TX - dead easy to build
CW TX using voltage regulator
Single valve TX
Two valve TX
Cigar box transmitter (valve)
145MHz FM TX
QRP SSB TX
3 watt linear 1 - 30 MHz

Phasing method SSB exciter
500 watt linear amplifier
April 1st transmitter

USEFUL
VHF NBFM Crystal RX based on a coffee tin
250vDC for valves using modern components
Stereo enhancement for HF CW
CW filters
Self tuning CW filter
Q-multiplier
CW keyer using 'relay logic'

DATA/INFORMATION
QRP frequencies
Measuring micropowers
Making PCBs, several methods
G0TLAs QRP circuit database on packet
Coil winding and 'turns' calculation.

DOWNLOADING
Signal generator program
All my QRP@WW circuits in a ZIP file
PCB foil for BUG TX (later version)
'Adult' screen saver

BREWING BOOZE
Brewing beer, wine and 'mash'
Distilling the mash (3 methods)
Making liquours

---------- and more ----------

I will be adding more to the homepage constantly, as long as
I have the time available to do it.

Have fun with QRP (and QRO) de Harry, SM0VPO, Upplands V&#65533;sby.

---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

## 916. writers=seeking=publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: ftr45r@aol.com
Message-ID: <5pp06o$67e$7429@roadrunner.miracle.net>
Source record: 92626

We are a New York based international literary agency with two branch offices, one of which is in* Florida. We are seeking new and> previously published authors, so please adhere to the >following-- guidelines.>>>>>>>>>>>>>>>

All fiction: send brief <synopsis, first chapter, and include a self addressed, stamped envelope (SASE).
All nonfiction: brief synopsis, first chapter, SASE.>>>>>>>>>>>>>
Short-Stories: brief synopsis, 3 pages, SASE.>>>>>>>>>>>>>>>
Poetry: send 3 poems, SASE.>>>>>>>>>>>>>>>
Please do not send complete manuscript unless we ask for it.

<<Send to: Woodside International Literary Agency>>
=33-29 58 Street>>>>>>>>//
=Woodside, New York>>>>>>>>//
=11377>>>>>>>
=Phone (main office):
=718--651-8145>>>>>>>//

# 917. Re: PC controlled.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: Scott <smackay@epix.net>
Message-ID: <33C004E7.7E7AE52E@epix.net>
Source record: 92627

\

\David Nye wrote:

> Michael Gray Anthony <gray480@wilmington.net> writes:
> >Does anyone know if any work has been done on building a radio on an
> ISA
> >card or using a serial or parrallel interface to a PC?
>
> I read that such a transceiver for HF was demonstrated at the Dayton
> Hamfest
> but I can't remember the manufacturer. Kantronics maybe? The article
>
> mentioned that a couple of other manufacturers were working on similar
>
> transceivers. I've thought about this a little myself. It would
> greatly
> simplify the interface electronics and allow all sorts of neat
> additional
> features in software. I don't think it will work to do the DSP stuff
> in
> software, though -- too slow, although the PC would control the DSP
> chip. I
> also came to the conclusion that the easiest way to deal with the RF
> shielding problems is to use a separate box for the radio set at some
> distance from the PC and connected to it by a long serial cable.
> Cables for
> the microphone, speaker, and key would be bundled with the serial
> cable (you
> might be able to use unused pins of the serial cable for all but the
> microphone which needs to be shielded).
>
> David Nye, KB9PSL * Eau Claire, WI

The radio demo'd at Dayton was Kachina an HF co in Cottonwood , Az.
Search on Kachina to find their web site. Radio looked real interesting
at Dayton, specifications impressive for a $2K radio.Waiting for the
reviews to see what the lab reports say......Of course you need to
provide the PC; the interface is thru a box installed in a vacant drive
bay. I'm trying to avoid being enamoured by its novelty.
73
Scott

--
G. Scott Mackay W7GSM

1973 240Z

# 918. Re: Comb Generator versus Marker Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970706211500.RAA23054@ladder01.news.aol.com>
Source record: 92628

Ham Radio January 1986...A Frequency and level Standard by Hans Evers, PA0CX.

Sheeeesh I miss you Skip Tenney!

W4ZCB

# 919. K3FU PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C04453.6B55@novia.net>
Source record: 92629

http://www.novia.net/~pschleck/

# 920. K3FU PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C04466.271A@novia.net>
Source record: 92630

http://www.novia.net/~pschleck/

## 921. K3FU PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C04441.233A@novia.net>
Source record: 92631

http://www.novia.net/~pschleck/

## 922. writers/seeking/publication*

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: fre4e@msn.com
Message-ID: <5pp7hk$gic$869@roadrunner.miracle.net>
Source record: 92632

We are a New York based international literary agency with two branch offices, one of which is in* Florida. We are seeking new and> previously published authors, so please adhere to the following-- guidelines.>>>>>>>>>>>>>>>

All fiction: send brief <synopsis, first chapter, and include a self addressed, stamped envelope (SASE).
All nonfiction: brief synopsis, first chapter, SASE.>>>>>>>>>>>>>
Short-Stories: brief synopsis, 3 pages, SASE.>>>>>>>>>>>>>>>
Poetry: send 3 poems, SASE.>>>>>>>>>>>>>>>
Please do not send complete manuscript unless we ask for it.

<<Send to: Woodside International Literary Agency>>
=33-29 58 Street>>>>>>>>
=Woodside, New York>>>>>>>>
=11377>>>>>>>///
=Phone (main office):
=718--651-8145>>>>>>>

## 923. Notice to QRP'ers!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: khzcop@aol.com
Message-ID: <19970706232400.TAA00772@ladder01.news.aol.com>
Source record: 92633

Here's a web page that might be of interest to you:

http://www.glr.com/peanut

73, Willie

## 924. sell=Your=Photos$$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: dre4rw@msn.com
Message-ID: <5pph7j$knj$1145@roadrunner.miracle.net>
Source record: 92634

We are a New York based international photo agency representing professional and amateur photographers in search of having their work promoted in order to conduct their profession or hobby minus the time consuming inconvenience of presenting and selling their own work.
You do not have to be a professional photographer to sell your photographic work successfully, and as any pro will tell you, quite often throughout history an amateur stumbles on a scene that he or she photographs and ends up with a photo that becomes a classic. Those who publish magazines, books, newspapers, greeting cards, record albums, or just about anyone who works with images in their profession, are in desperate need of fresh material, and are more than willing to review photos submitted by professional photo representatives. Sometimes the photos of amateurs are sought after more so than professionals because of accidental originality and innovative >themes.
At Photo Phoenix International, we delight in and value the work of people who view photography as a fine art and understand a photo representative's significance in terms of a photographer's career, reputation, and monetary gain.
The photos we are seeking are some of the following: ANIMALS, ARCHITECTURE, ART, AUTOMOBILES, BUSINESS, CELEBRITIES, DOCUMENTARY, ENTERTAINMENT, EROTICA/NUDITY, FASHION, FOOD, HEALTH, HISTORY, HOBBIES, OUTDOORS, PEOPLE, POLITICAL, PORTRAITS, STILL LIFES, RELIGIOUS, SCIENCE, SPORTS, TRAVEL . . .
Whether your work portrays conservative, experimental, stylish, or innovative themes, your project proposal should be well thought out before submitting to us.
For first contact, submit a query letter and "SAMPLES ONLY" of your photos.
You must include "2" self addressed, stamped envelopes--one for correspondence, the other for the return of your material should we not be interested.
If we think your work is sellable, we will respond as soon as possible. Do not send entire portfolio unless we ask for it.
SEND TO: Photo Phoenix International

<33-29 58 Street>///
<Woodside, New York>
<11377>
<~Phone: 718-651-8145>....

## 925. K3FU PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: "Paul w. Schleck K3FU" <elmers-request@novia.net>
Message-ID: <33C0447A.7D3A@novia.net>
Source record: 92635

http://www.novia.net/~pschleck/

# 926. Much New on WWW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33C0922A.6EBD@primenet.com>
Source record: 92636

```
Much New on WWW
http://www.qsl.net/k7on
```

# 927. Re: WTB 866A Tube Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-06 00:00:00 UTC
From: arnoldg@vestdata.no
Message-ID: <5pp12f$rpk$2@bone.global-one.no>
Source record: 92637

I guess this is the ordinay American UX4 sockets. Have a look at my
web site. and you will probably find what you need.

Best regards,

Arnold Goks&#65533;yr

k9two@sprintmail.com wrote:

>I am looking for a couple of tube sockets for a 866A
>homebrew power supply project.

>73 Don Ferrill K9TWO

>--------------------==== Posted via Deja News ====-----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet

## 928. HP 86240B problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: Harke.Smits@net.HCC.nl
Message-ID: <5posae$gta$1@news.Eindhoven.NL.net>
Source record: 92638

I have a HP 8620C with a HP 86240B plug in. Functioned ok a year ago. Then suddenly after 9 months rest it remained silent. I have a manual and checked all voltages. Then I checked the output of the Yig oscillator. Seems dead. Has anyone experience with this kind of stuff? Can it be repaired somehow or am I losing a precious piece of HAM equipment?

Hope someone has an answer.

Best regards,

Harke Smits (PA0HRK)
harke.smits@net.hcc.nl

## 929. Power Tube Rejuvenation??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: w6kkt@frazmtn.com
Message-ID: <33c15410.419460@news.frazmtn.com>
Source record: 92639

Has anyone done emission rejuvenation on Thoriated tungesten
filaments in power tubes (4-1000, 3-500 etc). If so, what process, and
how successful did it turn out?
73, Jesse, W6KKT

## 930. Re: *Teenage School Girls * young1.jpg

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: nedrog@aol.com
Message-ID: <19970707041201.AAA15762@ladder02.news.aol.com>
Source record: 92640

ENOUGH OF THIS TRASH.. GO POST IT IN THE TOILET!!!!!!!!!!!!!!!

## 931. TNC Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5ppqra$eir$1@nr1.toronto.istar.net>
Source record: 92641
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.digital.misc

Can anybody recommend complete TNC2 plans (other than TAPR), that uses some of the following components (I already own those listed,and can't easily get other parts,so I'll have to use what I have.):

CPU:
Z80,6803,8088

SIO:
8250

Ram: 8K Sram

ROM: 2764,27256

Modem : TCM3105

I also have numerous TTL chips available.

Gary Tait, VE3VBF

# 932. Re: ! PROVEN PSYCHICS / FREE PREDICTIONS 800-677-8039

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33c36ca4.11930339@news.capital.net>
Source record: 92642

On Sun, 06 Jul 1997 07:57:54 GMT, la8ak@online.no (J M Noeding) wrote:

>On Sat, 21 Jun 1997 11:22:18 -0400, Steve <semann@nr.infi.net> wrote:
>
>>jerry williamson wrote:
>>
>>> They must be kept out of these newsgroups.
>>
>>Send them a mental message! If they're as good as they claim
>>they should get it!
>
>yes, send them some long text they have to read, in a style which
>causes them trouble to read and understand. Let them think that you
>are interested to talk about their proiduct, so they benefit from
>reading your text to learn what you are telling them.
>Change text somewhat next time you use it sending it to a spammer
>
>Perhaps someone English/American fellow could make some text we can
>use to cause them so much work reading the comments that they soon or
>later have to stop advertising in some newsgroups??
>
>
>Jan-Martin N&#65533;ding,

They won't see whatever you send them.
All there is at their end is an automatic bot that will send you
MORE junk mail if you send them ANYTHING!

--
Butch N2YMJ

To send mail,
delete the xyz
from my address.

## 933. *writers/seeking/publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: cdr43a@aol.com
Message-ID: <5pqkht$o9u$8573@roadrunner.miracle.net>
Source record: 92643

We are a New York based international literary agency with two branch offices, one of which is in Florida. We are seeking new and previously published authors, so please adhere to the following guidelines.

All fiction: send brief synopsis, first chapter, and include a self addressed, stamped envelope (SASE).
All nonfiction: brief synopsis, first chapter, SASE.
Short Stories: brief synopsis, 3 pages, SASE.
Poetry: send 3 poems, SASE.
Please do not send complete manuscript unless we ask for it.

Send to: Woodside International Literary Agency
33-29 58 Street>>>>>>>>
Woodside, New York>>>>>>>>
11377>>>>>>>
Phone (main office):
718-651-8145>>>>>>>

# 934. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: "John R. Wiseman" <johnw@dmsl.hitachi.com>
Message-ID: <01bc8adf$55f6a9a0$4ca192c0@tyrannosaurus>
Source record: 92644

WILLIAM E. SABIN <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<33BCAE2A.7B3F@crpl.cedar-rapids.lib.ia.us>...
> David Stockton wrote:
> >

>
> That was my further experience in my July 1997 QEX article. I put an
> enormous effort and considerable cost of materials into it. I was
> working for no more than 10 cents an hour net profit.

My July 96 QEX article on DSP filtering was a write-up of almost a
year's worth of learning and experimentation during my spare time.
The $650 dollars I received for the article was certainly not the reason
I did it. The main reason was that I saw a gap in the literature for this
type of tutorial, and I tried my best to fill it. From the correspondence
I've received (still, after a whole year) it seems to have worked.

> > Professionals have plenty to offer amateur radio. People like Bill,
> > myself, and many others can spread information about how some of the
> > things we've done can be applied to amateur radio.
>
> In retirement, I find this an interesting continuation of my electronics
> career.

I am not retired, but I do try to keep pace with cutting edge technologies
and how they might be applied to amateur radio. By completing a project
and formally writing up the results, I am helping my professional career
as well as my hobby. I sent a manuscript to QEX last month on the design
of an FPGA using VHDL and logic synthesis, to control a DDS & vacuum
fluorescent display module for my home-brew. We'll see what they do with
it.

> Each project that I do and write about is a big educational
> experience for me, if for no one else.

And in the end, that is all that really matters to me.

J.W.


==========
John Wiseman
Senior Researcher
Hitachi America, Ltd., Digital Media Systems Laboratory
Princeton, NJ
Email: johnw@dmsl.hitachi.com
Voice: (609)-520-0071 ext. 18 Fax: (609)-520-8953
Amateur Radio: KE3QG

==========

# 935. Re: PL Mod for IC-2AT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <33c106a5.5955899@news.cmc.net>
Source record: 92645

On Sun, 06 Jul 1997 00:19:47 -0700, The Hendra Family
<hendra@macscouter.com> wrote:

>Anyone out there have information on where to get the module and how to
>modify an Icom IC-2AT with a PL Generator?
>
>Please e-mail direct to hendra@macscouter.com.
>
>73 de Gary WA6SUW
Pick up the SS-32-SMP from Communications Specialists in Orange, CA.
Sorry I do not have their telephone number handy.

Gary
THIS REPLY DOES NOT REPRESENT ANY OFFICIAL POSITION of
MY EMPLOYER. It represents only MY PERSONAL opinion.

# 936. Please Link My Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33C1257E.55BA@primenet.com>
Source record: 92646

Please Link My Page

Please add a link to my home page:
http://www.qsl.net/k7on

Topics:
RTTY, Amtor, Pactor, Clover, Packet
Homebrew, QRP
Modifications
Scanning
Contesting
V/UHF
SSTV, ATV
DX
Mailing List FAQs
Equipment Manufacturer Information
BoatAnchors, Collecting
RTTY Terminal Units
HF Linear Amplifiers
...many, many more...

## 937. Free Amatuer Radio trading board. Visit http://www.cameraweb.com/hr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: bsw123@aol.com
Message-ID: <19970707150800.LAA10120@ladder01.news.aol.com>
Source record: 92647

```
Free Amatuer Radio trading board. Visit http://www.cameraweb.com/hr
```

## 938. swap page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: Danny <ko6oy@fishnet.net>
Message-ID: <33C1136C.328@fishnet.net>
Source record: 92648

```
Huge Swap Page, Buy, Sell, Want to Buy..
Check It Out
All Ham Related Adds Free..
Click Here ---------> http://www.fishnet.net/~ko6oy/swapage.htm
73 ... Danny... ko6oy
```

# 939. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970707213701.RAA03297@ladder01.news.aol.com>
Source record: 92649

Hi John--

>And in the end, that is all that really matters to me.

I'm with you, John. Getting a little money back to cover expenses is nice, but that's not why I write. The best amateur and professional electronic journal writers aren't in it for the money because there's never been a significant amount of money in it. They do it for information sharing, networking, and skill development.

As ham magazines go, QST pays pretty well, they pay on time, and they have excellent circulation. Of course, at a personal level, I'd rather see the good technical articles go to Communications Quarterly rather than QEX because my wife edits it. But the thing I really have a hard time with are "writers" who whine.

Rick K1BQT

## 940. HAWAII NTE Dealer???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: kelmgeo@saba.kuentos.guam.net
Message-ID: <5prn5v$be@lehi.kuentos.guam.net>
Source record: 92650

Looking for address/phone/email address for a parts dealer in
Hawaii that stocks NTE parts...

Any Ideas??

Thanks!

ghk

## 941. Re: Looking for mail order electronics tools.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: John Gbur <jgbur@pdt.net>
Message-ID: <01bc8b21$f2ac6fe0$4f13bacc@cable019079.cable.eph.ptd.net>
Source record: 92651

Try Contact East 1-508-682-2000
or Specialized Products Company 1-800-866-5353

Henry C. DeBey <debey@deltabeta.com> wrote in article
<33ba4e91.88705893@isdnhost>...
> I am looking for some mail order sources for electronics tools.
> Currently we need to purchase a desoldering station.
>
> Thanks, Henry
>

## 942. NEW i am, 2 qstns

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: all4all@netland.nl
Message-ID: <33c17737.5966715@news.netland.nl>
Source record: 92652

Hello reader,

I am new at this and i have 2 questions,
What does HAM mean !? ( i am on 27mc)
And how can i messeaure that my major CB and antenna are well !? (i have a SWR(?) meter, with doubble display, one is swr, the other power in watts)

Thanx,

Barend

# 943. TS-830 Freq Jump

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: wormser@osiris.cso.uiuc.edu
Message-ID: <868324320.6130@dejanews.com>
Source record: 92653
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Any hints on fixing my TS-830S? Here's what it does:
The freq jumps by about 100 Hz around the tuned freq on both receive
and transmit, with heaters on or off. The jumps up & down occur
every 1 to 10 seconds. The problem has "gone away" for a few days
or weeks then returns. When it acts up, it does it all the time.
I notice a crackling noise when the freq jumps.
I have checked the output voltages (9 and 3.7 V) from the AF/AVQ
board, and I have cleaned & re-seated the connectors on the VFO,
AF/AVQ, PLL, and Freq Counter boards. When the freq jumps, the
digital display does NOT blank out (service manual says that if the
PLL board loses its lock, the digital display will blank). I have
cleaned the wiper on the main VFO tuning capacitor. I have listened
to the AF/AVQ, RF, VFO, Counter, PLL, and Rectifier boards with a
stethoscope. I have tried to monitor output from the AF/AVQ & PLL
boards to see if VOM fluctuates. I'm a troubleshooting newbie!

Thanks for any help or ideas.
==> Alan, N5LF <==

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 944. Re: QST's antenna gain censorship policy, cont'd...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <33C0FA45.4684@hp.com>
Source record: 92654

Zack Lau wrote:
>

> Sure, if we spend enough money we can measure certain antennas--I'd like to
> have a microwave test range to measure high gain 10 and 24 GHz antennas :-)
>
> However, as the gain and frequency goes down to the kinds of antennas
> amateurs really want to know about, I seriously doubt that a realistic
> margin of error is achievable. A couple dB of error isn't unusual.

A couple of dB would be a very good repeatability for low-mounted VHF
beam, and positively amazing achievement on HF.

For HF antennae, few people can use them in anything even vaguely
like free-space conditions. There is plenty of room for eternal arguing
over what standard circumstances should be used for an attempt at a fair
comparison that might have any relevance to real users.

Substitution comparisons on HF aren't going to be particularly
repeatable. Creating (or finding) a signal from a distant source that
will allow the comparison to be done with the approach angle at the test
site to be typical of the signals that people are most interested in is
easy. There are beacons and commercial/government things in our bands
that output strong signals at reliable powers into stable antennae.
Unfortunately these are just the sorts of signals that will most suffer
variations in propagation. To try to separate antenna related changes
from propagation changes will need a carefully designed experiment,
probably with two similar sites. I'd still expect the uncertainty to be
comparable to the differences expected to be found between competing
brands.

> The measurement technique for antenna tuners was published in the April
> and May 1995 issues of QST. How long should we wait for people to comment?

Antenna tuner power rating can often have no single unique result.
Damage levels will depend on the impedence being tuned, worse, many
tuners have extra dimensions of freedom and can be set in many different
ways to tune the same impedence -- usually with different resonator
in-circuit-Q and thus very different power handling limits. I'm not sure
there is a "right" way to do this job, not without multidimensional
graphs. At least a reasonable compromise of tests in a few standardised
circumstances will be a vast improvement over the current anarchy.

> We tried a more direct approach with phase noise--I sent out letters
> to the manufacturers describing our technique and received silence
> in return. Of course, I needed to send out duplicates to at least

> two manufacturers after we published our first set of reviews...

Your techniques are very sensible, and the results are capable of allowing us to see the differences between competing radios at sideband frequencies appropriate to our usual modes. Sticking to a defined way of doing the measurement allows us to compare things reviewed at different times without having to try to also handle differences in ways of testing or expressing results.
To really comment on this matter with any confidence, someone needs a bit of experience with doing this sort of measurement, perhaps by developing their own phase noise testing rotine, or by developing a low-noise synthesiser. This isn't just professional territory. I have tried to make the point that useful phase noise tests could be done on a pocket-money budget with homebrew test gear, and that anyone who wanted to could make a useful contribution in low-noise oscillator development. Big budget lab equipment is convenient, but can be equalled at home by a smart amateur with shallow pockets and a little more time.
It may be that the people at some manufacturers have (as yet) little understanding of phase noise and its consequences, maybe some just buy/hire commercial automatic testers and just push the "GO" button without wondering what it does or what the results mean. Perhaps some do understand fully but didn't have time or the message didn't reach them.

Cheers
David GM4ZNX

## 945. 100's of citcuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-07 00:00:00 UTC
From: Harry Lythall <lythall@ebox.tninet.se>
Message-ID: <33C1A9E4.1DD4@no.where>
Source record: 92655
Cross-posted to: uk.radio.amateur,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,aus.radio.amateur.misc

Hi all,

My homepage is getting bigger and will continue to do so until
Telenordia tell me I have run out of disk space on the server.
You can find my homepage at:

http://user.tninet.se/~acz732k/

Amongst my constructional projects are:

BASIC INFO FOR BEGINNERS
How to solder
Component identification
tools

ANTENNAS
Remote tuning of tuneable antennas
Basic dipole information
Short antennas for the HF bands
A balcony/terrace antenna (worked JA on it)
Packing crate antenna
Frame antenna

RECEIVERS
Cigar box HF receiver - uses battery valves
IC HF receiver
HF direct conversion receiver
Regenerative HF receiver
HF and VHF receiver using ZN414 (ZN416)
Modifying domestic receivers for HF SSB
Modifying domestic receiver for 160 meters
Synthesized receiver

TRANSMITTERS
FM (88+108MHz) 'BUG' (can be modified for 30 MHz)
250mW HF bands CW TX
4 watt PS for the above
5 watt CW TX - dead easy to build
CW TX using voltage regulator
Single valve TX
Two valve TX
Cigar box transmitter (valve)
145MHz FM TX
QRP SSB TX

3 watt linear 1 - 30 MHz
Phasing method SSB exciter
500 watt linear amplifier
April 1st transmitter

USEFUL
VHF NBFM Crystal RX based on a coffee tin
250vDC for valves using modern components
Stereo enhancement for HF CW
CW filters
Self tuning CW filter
Q-multiplier
CW keyer using 'relay logic'

DATA/INFORMATION
QRP frequencies
Measuring micropowers
Making PCBs, several methods
G0TLAs QRP circuit database on packet
Coil winding and 'turns' calculation.

DOWNLOADING
Signal generator program
All my QRP@WW circuits in a ZIP file
PCB foil for BUG TX (later version)
'Adult' screen saver

BREWING BOOZE
Brewing beer, wine and 'mash'
Distilling the mash (3 methods)
Making liquours

---------- and more ----------

I will be adding more to the homepage constantly, as long as
I have the time available to do it.

Have fun with QRP (and QRO) de Harry, SM0VPO, Upplands V&#65533;sby.

---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

## 946. FS: Teflon Wire #20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <33c189f5.0@207.168.31.4>
Source record: 92656
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I have the following sizes/colors available:

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Limit is 100ft./size/color for each order. Shipping is $3.00 for any amount.

Thank you,
Dale

# 947. Re: FS: Teflon Wire #20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <33c19536.24499241@news.erols.com>
Source record: 92657
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

On Tue, 08 Jul 1997 03:29:35 GMT, radiodale@dclink.com (Dale B. Allen)
wrote:

What is the wire material? Solid or stranded? Is 100 ft limit minimum
sale or maximum unbroken length? Any idea of #20 breaking strain?

73/Jim/AC4CZ

>I have the following sizes/colors available:
>
> Size Color Price/ft.
>
> 20 1,4,7 .10
>
> 22 0,2,3,4,6,7 .07
>
> 24 0,5,7 .07
>
> 26 2,6 .07
>
>Limit is 100ft./size/color for each order. Shipping is $3.00 for any
>amount.
>
> Thank you,
> Dale
>

# 948. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: USE_MY@Sig.Address.At.Bottom
Message-ID: <33c1a8c6.45797555@news2.bga.com>
Source record: 92658
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

Hello KR4WM:

I'll bet you have nice neighbors! I know several hams that transmit at high power (yes that is HIGH and not reletively high). Most have needed to buy high pass filters for various equipment for themselves and their neighbors. You can build these, but it's much easier to buy them.

I am supposing that you are running HF. If you are running VHF/UHF at these power levels, then other fixes are required.

Good luck.

Kent - KC5WPW

On 25 Jun 1997 16:49:16 GMT, "Dave Burr" <dtburr@mcs.com> wrote:


---
Kent Farnsworth
Note: Anti-spam address above.
Use: akent@bga.com for email.
---

## 949. HAWAII NTE Dealer???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: eugene.welcome@rook.wa.com
Message-ID: <222589156-970707204807@rook.wa.com>
Source record: 92659

>From: kelmgeo@saba.kuentos.guam.net (George Kelm)
>Newsgroups: rec.radio.amateur.homebrew
>
>Looking for address/phone/email address for a parts dealer in
>Hawaii that stocks NTE parts...
>
>Any Ideas??

Hi George, Here are the Web Sites for NTE. I used the third one for
the answer to your question. I saw Guam had a dealer and included
it also. You can access the cross reference from any web site but
the site listed is for convience. I sent this direct to you plus
posting it to, Newsgroups: rec.radio.amateur.homebrew. So that anyone
can grab this info for future use.
_ ,,/|
\'o 0'
73, Gene, K7"EEK" !! a =(_"_)= ?? He ate my Mouse !
U
eugene.welcome@eagles.wa.com
eugene.welcome@rook.wa.com

Linkname: NTE Electronics, Inc. Product Information
URL: http://www.nteinc.com/Web_pgs/Prodindex.html

Linkname: Cross Reference Search
Filename: http://www.nteinc.com/cgi-bin/nte

Linkname: Locate Nearest Distributor
Filename: http://www.nteinc.com/NET_St_lst/Disty.html

United States (Including US Possessions) Alabama Georgia Louisiana
Nebraska Oklahoma Utah Alaska *Guam* Maine Nevada Oregon Vermont
Arizona *Hawaii* Maryland New Hampshire Pennsylvania Virginia
Arkansas Illinois Massachusetts New Jersey Puerto Rico Virgin Islands
California Idaho Michigan New Mexico Rhode Island Washington Colorado
Indiana Minnesota New York South Carolina West Virginia Connecticut
Iowa Mississippi North Carolina South Dakota Wisconsin Delaware
Kansas Missouri North Dakota Tennessee Wyoming Florida Kentucky
Montana Ohio Texas
---

City Name Product Line Phone Fax Honolulu Electrical Equipment Co.(S)
808-591-2884 808-596-0281 Honolulu IC Supply, Inc. (ALL) 808-839-1966
808-837-7718 Honolulu Precision Radio Ltd. (S,R,RL) 808-593-9473
808-593-9476
---

GUAM DISTRIBUTOR LIST

S = Semiconductors, C = Capacitors, R = Resistors, RL = Relays, F =
Flyback Transformers, W = CAD Software Name Product Line Phone Fax
Pereda's Electronics
RT.O Barrigada, NX Church
P.O. Box 4281
Agana, Guam (ALL) 671-734-8653 671-734-8653 Revised: 9/96

## 950. Re: FM conversions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5psfjo$57c$1@nr1.toronto.istar.net>
Source record: 92660
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.shortwave

In article <na.988fce47a5.a40040pneal@argonet.co.uk>,
Peter Neal <pneal@argonet.co.uk> wrote:
#This is a posting for a friend who would be grateful for any help:
#
#I require any information on how to convert the following to FM.
#Realistick Navaho 40ch base.
#General electric 3805.
#President AR7.
#Colt 210.
#
#If anyone has any information can they please mail me.
#
#I apologize in advance if this posting is not suitable for this newsgroup.
#No mail on any other topic is welcome in any shape of form.
#
#
You can modify a CB to transmit FM if it is a PLL rig (I doubt you could
convert a crystal rig for fs transmit). All you do is disable the AM
modulator, and feed audio from the amplifier to the PLL.

To make it recieve FM (this can be done on crystal tuned rigs), take IF off
,and feed it through an FM limiter/discriminator,and feed it into the audio
amp (or squelch gate).

Gary Tait, VE3VBF

## 951. Ham/Police Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: terryh@iamerica.net
Message-ID: <5psie4$g4l@news1.iamerica.net>
Source record: 92661

http://cust.iamerica.net/terryh/

73's

# 952. HELP!! NEC pagers (Cyrillic) WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: "D.Ivanov" <divanov@dol.ru>
Message-ID: <01bc8b97$f54825c0$aa1f57c2@ppm-comm>
Source record: 92662
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

2Moderator: Sorry if out of conference.

Hello All,

Your help is heavily requested!!!

Our company named "Multi-Communication". We were established at January 1994. Our business - trade. We have a number of branches in different countries. We employ Russian-speaking staff there. We use office alpha-numeric paging system to organise its work. We would like to buy NEC paging receivers (pagers) from you.
We would like to receive the price on NEC-21A, NEC-26B, NEC-20B and, possibly, other 2-language Cyrillic-Latin alpha-numeric pagers. Please, send us by fax delivery terms and conditions on them, too.
We consider to place an order on
1000 NEC-21A (100-200 monthly - depending on prices),
1000 NEC-20B (100-200 monthly - depending on prices),
1000 NEC-26B (100-200 monthly - depending on prices).
System:
Frequencies: 159,825+MHz and 161,950+MHz,
Rate: 1200 baud,
Format: POCSAG.
Please, call us:
007 095 921-4709,
007 095 971-5514,
007 095 971-5328.
Our fax:
007 095 921-7780.

Our email:
m-comm@dol.ru

If you have no possibility to deliver such volumes directly, please give us the list of distributors with contact numbers.

Best regards,

Dmitri Ivanov
Multi-Communication

# 953. Re: TS-830 Freq Jump

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <33C234FD.3476@magg.net>
Source record: 92663
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

wormser@osiris.cso.uiuc.edu wrote:
>
> Any hints on fixing my TS-830S? Here's what it does:
> The freq jumps by about 100 Hz around the tuned freq on both receive
> and transmit, with heaters on or off. The jumps up & down occur
> every 1 to 10 seconds. The problem has "gone away" for a few days
> or weeks then returns. When it acts up, it does it all the time.
> I notice a crackling noise when the freq jumps.
> I have checked the output voltages (9 and 3.7 V) from the AF/AVQ
> board, and I have cleaned & re-seated the connectors on the VFO,
> AF/AVQ, PLL, and Freq Counter boards. When the freq jumps, the
> digital display does NOT blank out (service manual says that if the
> PLL board loses its lock, the digital display will blank). I have
> cleaned the wiper on the main VFO tuning capacitor. I have listened
> to the AF/AVQ, RF, VFO, Counter, PLL, and Rectifier boards with a
> stethoscope. I have tried to monitor output from the AF/AVQ & PLL
> boards to see if VOM fluctuates. I'm a troubleshooting newbie!
>
> Thanks for any help or ideas.
> ==> Alan, N5LF <==
>
> ----------------====Posted via Deja News====----------------------
> http://www.dejanews.com/ Search, Read, Post to UsenetHi Alan,

You've done pretty well for a newbie!
Although I have not seen this problem in a Kenwood, I have seen it in
Icom and Yaesu- both with the same cause- small single turn variable
caps. In case of the Yaesu it was a frequency netting cap on a
heterodyne oscillator- drove me nuts. It occurred randomly and never
when I had the rig open. A hint from another ham sent me looking in that
direction. Replaced 2 or 3 and that was the end of it. Hope this helps.

Dale
W4OP

# 954. Re: FS: Teflon Wire #20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <33C251C9.5FF1@boeing.com>
Source record: 92664
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Dale B. Allen wrote:
>
> I have the following sizes/colors available:
>
> Size Color Price/ft.
>
> 20 1,4,7 .10
>
> 22 0,2,3,4,6,7 .07
>
> 24 0,5,7 .07
>
> 26 2,6 .07
>
> Limit is 100ft./size/color for each order. Shipping is $3.00 for any
> amount.
>
> Thank you,
> Dale
What is the plating? Silver plated is a battery and commits suicide
when exposed to moisture.

## 955. Check This Out!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: Darryl Hill <drhill@mts.net>
Message-ID: <5ptng2$7vd2@top.MTS.Net>
Source record: 92665

http://freedomstarr.com/?HI3009665

# 956. Re: TNC Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33c2663c.13433146@news.atl.bellsouth.net>
Source record: 92666
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.digital.misc

On Mon, 07 Jul 97 04:22:39 GMT, tait@primeline.net (Gary Tait) wrote:
>Can anybody recommend complete TNC2 plans (other than TAPR), that uses some of
>the following components (I already own those listed,and can't easily
>get other parts,so I'll have to use what I have.):
>
>CPU:
>Z80,6803,8088

If you want to be TNC2 code compatible, you'll have to run the Z80.
If you don't need to be code compatible, any of the three will do.

>SIO:
>8250

This is a problem. You need a USART, not a UART, because packet uses
synchronous transmission. The TNC2 uses the Z80 SIO chip, other designs
use the 8530. The 8250 won't do, it's only a UART. If you don't care about
code compatibility, you can implement a software USART in the Z80. GLB
did this for their PK-1.

>Ram: 8K Sram

That's enough to run earlier versions of the TNC2 code, but you
need 16k or 32k to run later versions.

>ROM: 2764,27256

The 27256 will do.

>Modem : TCM3105

That'll work.

As noted above, if you want to be code compatible with the TNC2, you'll have to
have a Z80 SIO chip. That's a USART. The 8250 is a UART and can only handle
asynchronous data. Packet is synchronous.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 957. Schematics needed A and B supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: gpewitt@execpc.com
Message-ID: <NEWTNews.868388663.21460.gpewitt@execpc.com.execpc.com>
Source record: 92667
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

I am trying to restore a couple of battery eliminators.
The A eliminator is a "Majestic A Current Supply"
made by Grigsby-Grunow-Hinds Co. in Chicago.
It has a selenium rectifier on the front with 5 taps
which makes me think it might be set up as a bridge
rectifier. It is marked 110v ac 60 cycles with DC output
of 6 volts at 2.5 amps max. It has a seven position rotary
switch marked A through G. I'm puzzled by the switch.

The B supply is labeled Speedway B Battery Eliminator.
It was made by the Prestolite Corp. It has a BH rectifier
tube which seems to be a full wave rectifier. It has
binding posts marked I, 22, 45, 60, 130, and 180.
Puzzled by the "I" post.

The selenium rectifier is a dead short both ways. The
BH tube heats up on one side. I think I could replace
the selenium rectifier with 4 silicon diodes and some
dropping resistors if I had a schematic.

I want to get these power supplies working to use with
a couple of very nice old TRF receivers I am restoring.
One is a Cascade made here in Milwaukee in 1926 and the
other is a Blandin Phonograph Co. made in Racine WI.
about the same period.

Any Ryders, schematics, manuals (ha,ha), advise, parts,
war stories, etc. welcomed. Happy to pay for copies
of any info or paperwork.

Thanks again to all who helped with my RCA Radiola 18.
It's coming along nicely.

73 Gary N9ZSV/KT gpewitt@execpc.com

## 958. Storno stoftware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: gatsby@dircon.co.uk
Message-ID: <5pu202$nu5$2@newsserver.dircon.co.uk>
Source record: 92668

Wanted software for pc to program storno 6000 series radio
or info on programming frequencies using front panel

## 959. This is here to stay !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: OE3V1@JNE31.GZ82O
Message-ID: <5ptvko$3n$14@talia.mad.ibernet.es>
Source record: 92669

Dear Friend,

Greetings! I am a retired Attorney, and about two years ago a man came to me with a letter. The letter he brought me is basically the letter in your hands. He asked me to verify the fact that this letter was legal. I told him that I would review it and get back to him. When I first read the letter my client brought me I thought it was some off-the-wall idea to make money. However, a week and-a-half later we met in my office to discuss the issue. I told him the letter he originally brouht to me was not 100% legal. I suggested a few changes with which the letter would be 100% legal.

I was curious about this letter, and my client told me how this plan works and suggested that I give it a try. I thought it was a long shot and would be a wast of time, so I decided against participating. However, before my client left, I asked him to keep me updated of his results. About two months later he called me to tell me he had received over $800,000 in cash!! I didn't believe him, so he suggested that I try this idea and find out for myself. I thought about it for a couple of days and decided that I didn't really have anything to lose, so I asked my client for a copy of the letter. I followed the instructions exactly, sent out 200 copies, and sure enough, the money started arriving! It came slowly at first, but after 3 weeks, I was getting more mail than I could open in a day! The money stopped coming after about three months. I kept a precise record of my earnings, and they totaled $968,498.00!!

I was earning a good living as a lawyer, but anyone in the legal profession, or even anyone who owns their own business will tell you, there is a lot of stress that comes with the job. I told myself that if things worked out, I would retire from my job and travel. I decided to try the letter again, but this time I sent out 500 letters. Well , three months later, my earnings totaled $2,344,178.00!!! I just could not believe it. I met with my former client (and now my friend) for lunch to find out how it worked. He told me there are quite a few similar letters going around. What made THIS ONE DIFFERENT WAS THE FACT THAT 6 ADDRESSES APPEAR ON THE LIST, AND NOT 5 LIKE MOST OF THE OTHERS. This fact alone results in your name being on far more returns. Of course I was thankful that he had shown this plan to me, but he was just as thankful that I had suggested the changes to ensure that this plan was legal since most people don't want to risk doing something illegal.

I'll bet that by now you are curious to know the little change I suggested in my friend's original letter. Well, if you send a letter like this out, to be legal you must actually sell a product or service

if you expect to receive a dollar. I told my friend that anyone sending a dollar back to him must receive something in return. You have received this letter due to the participation of each of the 6 persons given below. This letter and the plan given within this letter are a "product" that you have received. Thus, you will be sending $1.00 to each of the 6 persons given below in exchange for receiving this letter and for asking them to provide the "service" of adding you on their mailing list.

THIS IS A SERVICE AND IS 100% LEGAL BUSINESS OPPORTUNITY WHICH IS COVERED IN TITLE 18, SECTION 1302 AND 1342 OF THE POSTAL AND LOTTERY LAWS.

NOW, PLEASE FOLLOW THESE TRIED AND TRUE STEPS TO OBTAIN THE AMOUNT YOU DESIRE:

1) Immediately send a $1 dollar bill to each of the 6 people on the list below. Wrap this dollar in a note with the words: "Please put me on your mailing list." (Remember, in this way, you're not just sending a dollar to someone; you're paying for a legitimate service.) Include your address. You do not need to include your name. This is the key to the program! Also, let each person know what number they are in the letter so he/she knows which cycle he is receiving the $1.00 from. Make sure that you retain EVERY name and or address sent to you, either on computer or hard copy, but do not discard the names and notes that people send to you. This is PROOF that you are truly providing a service, and should the I.R.S. or some other government agency question you, you can provide them with this proof! Therefore you will start a list of all the people who send you a dollar requesting to be added on a mailing list. Actually, you will want to safeguard this list because it can generate even better responses and much more money later! See step #4 below.

2) Remove the name next to the #1 on the list, and move the rest of the names up one position. Then place your name in the #6 spot. Thus, #6 becomes #5, #4 becomes #3, etc., and YOU will be #6 on the list. DO NOT EDIT THIS LETTER ANYMORE BEYOND THIS POINT. When you are mailing this letter, you may edit the references to the internet.

3) Post this letter in at least 250 newsgroups, I do 5 groups per post. You can simply copy the contents of this letter and past it to the newsgroups of your choice.
IMPORTANT NOTE: Please pay attention to the newsgroups in which you post. If there is an abundance of similar letters, you may want to seek another newsgroup. Thus, pat respect to the harmony of the newsgroup and use common sense. There are plenty of newsgroups on the Internet. (I think there are close to 18,000 of them.) ALSO, PLEASE POST IN APPROPRIATE GROUPS AND SPREAD YOUR POSTINGS OVER MANY DIFFERENT LOCAL & INTERNATIONAL AREAS (SPREAD THE WORD)!
For added success, you can also mail this letter as well, in addition to posting in newsgroups. Order 200 (or more) names from a mailing list company. Two that have been most effective for these names are:

S.E. Mailing List Advon Distributors
P.O. Box 15061 P.O. Box B-11
Ft. Lauderdale, FL 33318S Helly, ID 83274
(954) 742-9519 (800) 992-3866

4. Keep a copy of this letter so you can use it a second time. Also keep EACH AND EVERY NAME AND ADDRESS SENT TO YOU as instructed in #1. Then, send out more copies in about 6 months, but mail it to the addresses you receive (your new mailing list) with each dollar! It will work again, only much better!

Here are the addresses that you must send a dollar to with your slip of paper requesting placement on their mailing list, as instructed above:

1. Ron van Hoof
14 Moshier St.
Greenwich, CT 06831
USA

2. Richard Blanchette
Pob 455
Palisade, Colorado
81520
USA

3. Caroline Mowinckel
Molnar Utca 21
2 Em Nr-10
H-1056 Budapest
Hungary

4. Odd Hilsen
Avda Espana 93
Sitio de Calahonda
Mijas Costa - Malaga
Spain

5. Peter Kjoge
Camino de la Condesa 9, 5-A
E-29640 Fuengirola
Spain

***THIS PLAN WILL NOT WORK UNLESS YOU SEND $1.00 TO EACH OF THE ABOVE PERSONS AS DIRECTED.

How do the numbers work for potential income earnings?
Assume for the sake of example that you get a 7.5% return rate. This is a very conservative, my first attempt was about 9.5%, and my second was over 11%.

1. You send out 250 letters, and 18 people (250 x 7.5% = 18) will send $1 each. $18.00

2. Those 18 send out 250 letters each, and 337 people (18 x 250 = 4,500x 7.5% = 337), send you $1 each. $337.00

3. Those 337 send out 250 letters each (337 x 250 = 84,250 x 7.5% = 6,318), and 6,318 people send you $1 each. $6,318

4. Those 6,318 send out 250 letters each (6,318 x 250 = 1,579,500 x 7.5% = 118,462), and 118,462 people send you $1 each. $118,462.00

5. Those 118,462 send out 250 letters each (118,462 x 250 = 29,615,500 x 7.5% = 2,221,162), and 2,221,162 people send you $1 each. $2,221,162.00

ADD 1-5 AND TOTAL AT $2,346,297.50

ALL THIS IS AT A 7.5% RETURN ON YOUR LETTERS. THAT'S 18 REPLIES ON YOUR ORIGINAL 250 POSTINGS.

Some valuable, general suggestions:

1. DO NOT TRY AND CHEAT THIS PROCESS. IF YOU DO, YOU WILL NOT ACHIEVE THE DISIRED RESULTS.

2. The Internet is a very effective medium for exposing this vehicle. However, pay attention to newsgroups, and avoid posting this letter in the newsgroups where there are a lot of upset epeople complaining about "spamming." In other words, we are asking that you use common sense, and have courtesy to others on the Internet. This may be opposite of what many other similar postings may be saying. Keep in mind that there are plenty of people out there who believe and want this as much as you do.

3. Keep a positive frame of mind while engaging in this process, and you will receive the amount of money you desire.

4. In order to achieve maximum results DO NOT CHANGE THE CONTENTS OF THIS LETTER. However, you may edit applicable portions relating to Internet when sending this letter via regular mail.

5. When the money begins to arrive, it is a good gesture to give 10% or more to your church or favorite charity with a joyful spirit.
The Internet has proved to be a very quick and effective means to reach millions of people with your message. This message exemplifies a UNIVERSAL LAW OF ABUNDANCE that there is plenty to go around for everyone. You will not be hurting anyone and will be creating the opportunity for those who read your message to benefit--just as you will--from the abundance that exists in this universe.

# 960. Re: TS-830 Freq Jump

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <u7DoECAG1nwzEwiY@ifwtech.demon.co.uk>
Source record: 92670
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

N5LF wrote:

>Any hints on fixing my TS-830S? Here's what it does:
>The freq jumps by about 100 Hz around the tuned freq on both receive
>and transmit, with heaters on or off. The jumps up & down occur
>every 1 to 10 seconds. The problem has "gone away" for a few days
>or weeks then returns. When it acts up, it does it all the time.
>I notice a crackling noise when the freq jumps.
>I have checked the output voltages (9 and 3.7 V) from the AF/AVQ
>board, and I have cleaned & re-seated the connectors on the VFO,
>AF/AVQ, PLL, and Freq Counter boards. When the freq jumps, the
>digital display does NOT blank out (service manual says that if the
>PLL board loses its lock, the digital display will blank). I have
>cleaned the wiper on the main VFO tuning capacitor. I have listened
>to the AF/AVQ, RF, VFO, Counter, PLL, and Rectifier boards with a
>stethoscope. I have tried to monitor output from the AF/AVQ & PLL
>boards to see if VOM fluctuates. I'm a troubleshooting newbie!

That's a pretty thorough job you did! It's a common problem - I had it too - and is due to poor grounding on the AF board whoich also carries the main voltage regulators for the whole rig. The Kenwood recommended solution is to insert extra-vicious star washers under each of the ground pillars.

Some people suggest a separate ground lug to a new hole in the chassis, but the simple solution worked for me.

You can certainly find out more about this and other modifications by searching both the Web and Usenet for "TS-830".

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
www.ifwtech.demon.co.uk/g3sek

# 961. http://www.potg.com/ = Free, Acclaimed Comedy Radio on the Web

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970708205900.QAA14494@ladder01.news.aol.com>
Source record: 92671

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.

Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."

Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.
The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 962. Re: TNC Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5puaik$gif$1@nr1.toronto.istar.net>
Source record: 92672
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.digital.misc

In article <33c2663c.13433146@news.atl.bellsouth.net>,
ke4zv@bellsouth.net (Gary Coffman) wrote:
#On Mon, 07 Jul 97 04:22:39 GMT, tait@primeline.net (Gary Tait) wrote:
#>Can anybody recommend complete TNC2 plans (other than TAPR), that uses some
of
#>SIO:
#>8250
#
#This is a problem. You need a USART, not a UART, because packet uses
#synchronous transmission. The TNC2 uses the Z80 SIO chip, other designs
#use the 8530. The 8250 won't do, it's only a UART. If you don't care about
#code compatibility, you can implement a software USART in the Z80. GLB
#did this for their PK-1.
#
#Gary
#Gary Coffman KE4ZV | You Make It | Email:
#Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
#534 Shannon Way | Guaranteed | or
#Lawrenceville, GA 30244 | | ke4zv@radio.org

How about a COM 2017 (SMC #19-10459-01),would that be suitable?

BTW I have no interst in writing code,so writing code to make something
seem it is someting else is out of the question.

Gary Tait, VE3VBF

## 963. Re: AA7 Superhet Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970708222700.SAA20463@ladder01.news.aol.com>
Source record: 92673

Everyone (HAMS) should do this at least once.

## 964. Re: NEW i am, 2 qstns

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970708223501.SAA17589@ladder02.news.aol.com>
Source record: 92674

A good swr readind does't always mean your anntena system is good.(a lossy coax can make your swr read nearly perfect (1:1). The best indication of how your antenna is working is how far you can talk locally.(no Skip)

# 965. Re: HELP!!! RF interfering with VCR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <33C2C780.6BDE9F85@juts.ccc.amdahl.com>
Source record: 92675
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.production

Kent Farnsworth wrote:
>
> Hello KR4WM:
>
> I'll bet you have nice neighbors! I know several hams that transmit at
> high power (yes that is HIGH and not reletively high). Most have
> needed to buy high pass filters for various equipment for themselves
> and their neighbors. You can build these, but it's much easier to buy
> them.
>
> I am supposing that you are running HF. If you are running VHF/UHF at
> these power levels, then other fixes are required.
>
> Good luck.
>
> Kent - KC5WPW
>
I would also suggest a number of other things to look at.....
1. check your earthing is OK, if you are a way up from a reasonable
ground then run 1/4 wave radials for each band, though I use ones for
80, 20 and 10 they seem to keep RF quiet on all bands. Remember to tape
off the ends from pets or anyone who may accidentally touch them and get
a nasty RF shock.
2. Be conservative in the amount of speech compression you use on SSB or
excessive harmonics can be generated, on a high power amp, keep the ALC
well back.
It's not always the fault of the amateur, the equipment makers
sometimes design nice looking cases with front-ends that have very
little immunity to RF. It's been a problem for years with domestic
equipment, the Regs. here in Europe were supposed to be tightened some
years ago, making the makers responsible if it could be shown that your
RF output is "clean".
Regards
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375
---
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

## 966. antenna gain and the ARRL stance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: Fred <peerenbf@dma.org>
Message-ID: <Pine.LNX.3.95.970708204335.12251B-100000@dmapub.dma.org>
Source record: 92676

I agree that there should be some standards set up. And by our leadership or those that claim leadership. Most ads mean nothing as far as antenna performance in the field is concerned.

The biggest problem with antenna gain figures is not in the manufacturer or the field testing though. It is not in the leaderships stance on whether to publish or not publish them. It is in the mounting, erecting and using pratices that the every day ordinary Joe ham uses. We all take a test to get this license. And then we seem to set that all aside when that piece of paper comes and just do what "looks good" for an antenna and then get bent out of shape when it "jest dont work dang it" and you can't imagine why that 100000 Dbi super cloud burner beam won't get a good signal into the next neighborhod, let alone town.

So until the manufacturer can come up with a set of figures to approximate the average installation, no published gain figures will mean anything at all except to a ham that has access to a test range with controlled conditions to work in. If you want some insight into this talk to some of the folks that design and build commercial FM antenna installations. Like ERI for example. I have had the chance from my work as an engineer in radio. It is very eye opening to say the least. Gain figures on paper are one thing, in practice they can be something very differant.

I guess this soap box is getting mighty slippery for me here so I had better step down and let others speak there piece. Hey, if the leadership is not leading, it is time to change that leadership. But if none of us step forward to be counted and run for any office, well just who do you think will be the leaders next year???? Yer right, the ones from last year!!!! I am as guilty as the next when it comes to talk. Talk is cheap so I guess it is time to put up or shut up. Start at the local level and run for your club prez spot, and then do something good for the club when you get railroaded in because no-body else wants the spot as it involves work. (ugh, that 4 letter word) If the national movement will not provide some testing sites, how about a local campaign to get one. I see the various vhf/uhf societies around comming up with solutions to that one. There has to be an answer other than just complaining about it.

Fred ke8tq and Lorraine kc8hwv Sunny Dayton, Ohio

An Firinne in aGaidh an tSaoil
/I\

## 967. FS: Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: "kevin@emodus.com" <murrayp@MCI2000.com>
Message-ID: <01bc8bfa$047cbda0$0dfd11ce@kevin--home>
Source record: 92677

Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $1.00
6AH6 $0.50
6AL5 $0.50
6AN8A $1.00
6AU6A $0.50
6CL6 $1.00
6X4 $1.00
12AT7 $2.00
12AU7A $3.00
12AX7A $3.00
5651A $0.75
5963/12AU7A $3.00
6080 $3.00
6201/12AT7 $2.00
8068 $14.00
8136 $0.75
8532W $1.00

Shipping in the USA: 1 - 6 tubes $4.00, 7 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
---
(5) TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
---
(4) Hewlett Packard 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz, $475ea, working but may
need minor repairs and/or calibration.
Units reconditioned and calibrated $675 ea with 120 day
warranty. Any unit free shipping in USA.
---
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!

## 968. Dead or Dying Yaesu Stuff?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33C2F549.7801@primenet.com>
Source record: 92678

```
Dead or Dying Yaesu Stuff?
Looking for some dead Yaesu gear of all types:
FT-101s, accessories, parts, junk, etc

-k7on@qsl.net
```

# 969. $$$HOME PC WORK$$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: Home PC <groucho1@juno.com>
Message-ID: <33C2F56B.67C7@juno.com>
Source record: 92679
Cross-posted to: rec.radio.amateur.misc,rec.models.rc.air,rec.radio.amateur.policy,rec.audio.car,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.models.rc.land,alt.conspiracy,misc.jobs.resumes,rec.aviation.student,alt.revisionism,rec.models.rc.water,comp.robotics.misc,alt.journalism,alt.alien.visitors,rec.arts.sf.starwars.collecting,alt.privacy,alt.fan.alan-keyes,rec.audio.opinion,sci.electronics.misc,rec.aviation.piloting,alt.human-brain,alt.politics.correct,rec.toys.misc,alt.radio.pirate,tw.bbs.sci.finance,us.jobs.resumes,rec.arts.sf.written,alt.test,tw.bbs.test,k12.ed.science,sci.skeptic,sci.physics,rec.games.trading-cards.marketplace,misc.education.science,rec.arts.sf.tv,nctu.talk,tw.bbs.campus.nctu,tw.bbs.comp.hacker,sci.environment

Make MONEY...
The fact that so many people have taken the time to post to 250 newsgroups
or more should convince you that this one REALLY works!!!!! Look at this
man's story, then the rest of the original:

I thought, what the heck, I'll try it. It's only six dollars. I didn't do
it right at first, I only sent out to about 30 newsgroups. But, I got back
my six dollars and actually made $159.37 in a week (someone put
some change in the envelope). Anyway, now I'm going to do this the
right way; send out to 250 newsgroups! The rest of this letter is just a
cut and paste from the original. All I can say is that it works. I
would never have believed it if it didn't happen to me. Just remember, we
must all follow the rules. Be HONEST and FAIR and you will make money!
Sure is a lot of mail though!

Thanks for reading!
C.L.
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
MAKE A FORTUNE - AND THIS IS THE ABSOLUTE TRUTH!

IF YOU HAVE READ THIS FAR YOU HAVE ALREADY PROVED IT WORKS!!

Take just 5 minutes to read this and see.

This is the newest updated version.

As I was surfing the net, I read all these postings on how you can make
over $50,000, even $800,000.
Well I believe that if all goes well, and you follow the rules EXACTLY,
it
will work. Just follow the
instructions given in this letter, and you to can make over $800,000,
perfectly legally according to USA
Post Office Laws (read on for specifics). Don't look at this as a
money-making scam, but rather a true-to-
life example to test the above statement. It will only cost you $6
dollars
plus 6 stamps, and a few hours of
your time. Thus, there is some effort involved, because nothing in life
is
absolutely free. Are you ready

and willing to accept that you deserve to receive a fair amount of money?
If so, please continue reading.
But if you think this is just another scam, I suggest that you don't try it.

PLEASE NOTE: THIS IS A 6-PERSON LIST, NOT THE USUAL 5. PLEASE DO NOT TRY
TO CHEAT THIS PROGRAM. JUST ADD ONE NAME AND REPOST THE ARTICLE. IF YOU DO
NOT IT WILL NOT WORK, AND YOU WILL BE REMOVED. FROM THE LIST! FOLLOW THESE
DIRECTIONS AND JOIN US IN A GREAT OPPORTUNITY!

The program has been revised and you will notice six names instead of five.
The reason for this is the
flood of five name programs and the sixth name will add $50000 to $100000.
This is proven mathematically and in my bank account. I never really thought that this program would work, but IT DOES and it will for you too.
Just be patient and follow the directions exactly. Print this article now,
so you have all the information for your version. Remember to keep the names right. Let's go!

STEP 1

Invest your $6 by writing your name and address on six separate pieces of
paper along with the words:
"PLEASE ADD ME TO YOUR MAILING LIST".
(In this way, you are not just sending a dollar to someone; you are paying
for a legitimate service.)

People have asked me if this is really legal. It is! You are using the Internet to advertise your business. What is that business? You are assembling a mailing list of people who are interested in home based computer and on-line businesses and methods of generating income at home.
Remember - people send you a small fee to be added to your list. It is legal. What will you do with your list of thousands of names? That's up to
you, but this is how it becomes legal. To be legal you must actually sell a
product or service if you expect to receive a dollar. Anyone sending a dollar back to you must receive something in return. You have already received this letter due to the participation of each of the 6 persons listed below. This letter and the plan given within this letter are a "product" that you have received. Thus, you will be sending $1.00 to

each
of the 6 persons given below in exchange for receiving this letter and
for
asking them to provide the "service" of adding you to their mailing
list.

THIS IS A SERVICE AND IS A 100% LEGAL BUSINESS OPPORTUNITY WHICH I
COVERED
IN TITLE 18, SECTION 1302 AND 1342 OF THE POSTAL AND LOTTERY LAWS.

Now, please follow the given steps exactly to receive your desired
amount
of money:
Immediately send $1 US cash (a one dollar bill, no checks, no money
orders)
to each of the 6 people on the list below. Wrap this dollar in a note
with
the words: "Please add me to your mailing list." (In this way, you're
not
just sending a dollar to someone, you're paying for a legitimate
service.)
Also, to discourage those who prey on cash in the mail, be sure the bill
is
completely hidden by the note. A woven envelope is recommended. Include
your address. You do not need to include your name. This is the key to
the
program! Also, let each person know what number they are in your letter
so
he/she knows which cycle he is receiving the $1.00 from. Make sure that
you
retain EVERY name and address sent to you, either on computer or hard
copy,
but do not discard the names and notes that people send to you. This is
PROOF that you are truly providing a service, and should the IRS or some
other government agency question you, you can provide them with this
proof.
Therefore, you will start a list of all the people who send you a
dollar
requesting to be added to a mailing list. Actually, you will want to
safeguard this list because it can generate even better responses and
much
more money later! Fold a $1 bill inside each paper, and mail them by
standard mail to the following six addresses:

1) Rudolfs Osins
Aspazijas 37-4
Jelgava, LV 3001
Latvia
2) J. DiMauro
89 East Squire Dr. Apt. 1
Rochester, NY 14623

USA
3) D. Fenter
24 Hornsilver Place
The Woodlands, TX 77381
USA
4) R. LAWSON
P.O. BOX 842
BRISTOL,VA.
24203-0842
USA
5) B. Cody
1156 Auraria Rd.
Dawsonville , GA
30534
U.S.A.
6) C.L.W.
3015 So. Coker St.
Greenwood, AR.
72936
USA

STEP 2

Now remove the top name from the list, and move the other names up. This
way #6 becomes #5 and so on. Put your name in as the #6 on the list
(Remember to take #1 off and change the numbers so #2 becomes #1, #3
becomes #2, #4 becomes #3, #5 becomes #4 and #6 becomes #5 and you become
#6.)

STEP 3

LET ME TELL YOU HOW MUCH MONEY YOU CAN MAKE.

How do the numbers work for potential income earnings? Assume for the sake
of example that you get a 7.5% return rate. This is very conservative; my
first attempt was about 9.5%, and my second was over 11%.
1. You send out 200 letters, and 15 people (7.5% x 200) will send you $1
each. $15.00
2. Those 15 send out 200 letters each, and 225 people send you $1 each.
$225.00
3. Those 225 send out 200 letters each, and 3,375 people send you $1
each.
$3,375.00.
4. Those 3,375 send out 200 letters each, and 50,625.00 people send you
$1
each. $50,625.00
5. Those 50,625 send out 200 letters each, and 759,375 people send you
$1

each. $759,375.00
6. Those 759,375 send out 200 letters each, and 11,390,625 people send you
$1 each. $11,390,625

TOTAL $12,204,240.00!! That's 12 million dollars. If those figures sound
incredibly high, figure
that even with half the return rate, or even a quarter, the total is still
spectacular. It works every time, but how well will depend on how many
letters you send. In the above example you mailed out 200 letters. This
sounds like "pie in the sky," but the numbers add up, and with over 40
million people on the NET, it works! TIP: For an even greater return,
post to MORE than 250 newsgroups initially; try for 300-350. When your
name drops off a list, simply access another message from a newsgroup and
start the process over again. Post the new article to at least 250
newsgroups. remember, the more you post, the more people see, and the more
you get. There are at least 25,000 newsgroups at any one time. This is a
$7.92 investment. It takes about a week or so to start seeing a return-so
be patient. The money should flow for about 3 months. At that point, simply
add your name to the list and start over. I've done this three times and
now I can quit my job and start investing in real estate full time. I
assure you this can work. If you mailed out 500 letters, you could have
received even more! Check the math yourself, but I guarantee it's correct.
With this kind of return, you have got to give it a try! Try it once, and
you'll do it again. Just make sure you send a dollar to each of the
addresses on the list above with a note asking to be added to their mailing
list. Together we will all prosper and we will be able to share our wealth
with those less fortunate than ourselves.

GOOD LUCK!!

GENERAL STEPS ON AUTOMATING THE PROCESS
---
If you have Netscape 3.0 do EXACTLY the following:
1) Click on any newsgroup like normal, THEN click on 'TO NEWS', which is
on the far left when you're in the newsgroups page. This will bring up a
box to type a message in.

2) Leave the newsgroup box like it is, CHANGE the subject box to
something
flashy, like, "NEED
CASH $$$ READ HERE $$$ or "FAST CASH"!!!

3) Tab once and you should be ready to type. Now, retype (only once)
THIS
whole article WORD FOR WORD, except insert your name at #6, and remove
#1
off the list, plus any other small changes you think you need to make.
Keep almost all of it the SAME!

4) When you're done typing the WHOLE article, click on FILE in THIS
BOX,
RIGHT ABOVE SEND, NOT WHERE IT SAYS NETSCAPE NEWS ON THE FIRST BOX.
Click
on SAVE AS when you're under FILE. Save your article as a text file to
your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIL YOU DO
THIS.
Once saved, move on to number 5 below. NOTE: If you don't want to type
in
the whole article by hand, AND you know how to use a plain text editor
(like Notepad), you can edit the file ahead of time, then attach it as
shown in step 6.

5) If you still have all of your text, send or post to this newsgroup
now
by just clicking send, which is right below FILE, and right above Cc:

6) Here's where you're going to post all 200. OK, click on any
newsgroup
then click on 'TO NEWS', again in the top left corner. Leave the
NEWSGROUPS BOX alone again, put a flashy subject title in
the SUBJECT BOX, hit TAB once you're in the body of the message. Click
on
ATTACHMENTS, which is below the SUBJECT BOX. You will get another box
to
come up. Click on ATTACH FILE, then find YOUR file that if you did this
right, you should see your file name in the attachments box, and it will
be
shaded green. NOTE: If you don't want to type in the whole article and
you know how to use a plain text editor (Notepad), you can edit the file
ahead of time, then attach it.
**********
1) IF YOU USE I.E. EXPLORER IT'S JUST AS EASY...HOLDING DOWN THE LEFT
MOUSE BUTTON, highlight this article. Then press the "ctrl" key and the
"c" key at the same time to copy this article. Then print this article
for
your records, to have the names of those you will be sending $1 bills
to.

2) Go to the news groups and press "post an article". A window will
open. Type in your headline in the subject area and then click in the

large window below. Press "ctrl" and then "v" and the article will be placed in the window. If you want to edit the article, do so and then highlight and copy it again. Now every time you post the article in a new
newsgroup all you have to repeat is "ctrl" and "v" and press post.

3) That's it. Each time you do this, all you have to do is type in a different newsgroup, so that way it posts to 200 DIFFERENT newsgroups, or
more. You see? Now you just have 249 to go!! (Don't worry, each one takes
about 30 seconds, once you get used to it. REMEMBER 250 IS THE MINIMUM. But the more you post the more money you will receive. AND THAT'S IT!! THEY ARE ONLY STEPS!!!
---
(this is a later addition for extra ease of posting)

EXTRA TIPS:

(ONLY) IF YOU ARE CONFIDENT WITH YOUR COMPUTER YOU CAN AUTOMATE YOUR POSTINGS (and prevent spamming) AS FOLLOWS: (THIS Replaces the previous section only i.e. 'GENERAL STEPS ON AUTOMATING THE PROCESS') (using Netscape):

As you are reading this message click on "file" - "save message as", enter
a filename in the 'save as' dialog box, press "enter". Now open "Notepad"
(usually from "start" - "programs" - "accessories") and open the message (
"file" - "open" ) you just saved. (You will find it in the same folder you
saved it and you may also find it has a '.html' file extension). Then edit
the letter EXACTLY as you have been directed above.
Just make sure you delete the 'system-message' that appears at the top so
that it makes sense when you read it! Click on "edit" - "select all" (all
the text should now be highlighted) then again "edit" - "copy".
Leave Notepad alone for now and return to the Netscape News program:
Click on "options" - "show all newsgroups". Now select (subscribe to) whichever groups you think are suitable by moving down the entire listing
and clicking in the appropriate empty boxes. Once you have finished click
"options" - "show subscribed newsgroups". Now simply click on the first group you want to post to, to highlight it. Then choose the group about 10
further on and WHILE HOLDING DOWN
THE SHIFT KEY click on it. Next click on "file" - "new news message". A

message box will appear and after entering the "flashy" subject line, position the cursor in the main message area. Click on "edit" -"paste"; the message will appear.
NOW CHECK IT!!
When you are satisfied everything is correct click "send" and it will be sent to all 10 groups. Now repeat as many times as you need- very simple!
PLEASE NEVER post to many more than 10 with any one message since the resulting long lines of newsgroup listings at the top of EVERY message will
annoy many AND will vastly reduce the effectiveness of your posting.

JUST ONE OTHER THING:

Let's remember that there are many people far less fortunate than ourselves
who will never be able to afford a computer and hence will be unable to join in our enterprise. Therefore please consider donating a (significant)
portion of your earnings from the venture to charity.

NOTE -- "edit" - "copy" is exactly the same as pressing "ctrl" with "c"
"edit" - "paste" is exactly the same as pressing "ctrl" with "v"

---

## 970. FS:Teflon Silver Wire #18

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <868427127@infoway.com>
Source record: 92680

I will sell Teflon insulated, Silver coated stranded #16 (19/29)
wire, orange with white stripe, to good home.
Minimum order is price of 50 ft, maximum unbroken length is 1000 ft
to first order etc. (max length of reel gets shorter with each order)
This #16 is tougher and stronger due to Teflon,
yet pliable and easy to work with due to stranded.

Price per foot $ 0.20/ft
Shipping is at cost,
e-mail me at don.phelps@juno.com
to discuss what you want shipped how, etc.
See my local ARC at http://www.qsl.net/w6sg
I am at http://www.qsl.net/n6mce

Js> What is the wire material? Solid or stranded? Is 100 ft limit minimum
Js> sale or maximum unbroken length? Any idea of #20 breaking strain?

Js> 73/Jim/AC4CZ

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

# 971. FS: Test Equipment and Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5pvbt9$g3p$4@news01.deltanet.com>
Source record: 92681

Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $1.00
6AH6 $0.50
6AL5 $0.50
6AN8A $1.00
6AU6A $0.50
6CL6 $1.00
6X4 $1.00
12AT7 $2.00
12AU7A $3.00
12AX7A $3.00
5651A $0.75
5963/12AU7A $3.00
6080 $3.00
6201/12AT7 $2.00
8068 $14.00
8136 $0.75
8532W $1.00

Shipping in the USA: 1 - 6 tubes $4.00, 7 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
---
(5) TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
---
(4) Hewlett Packard 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz, $475ea, working but may
need minor repairs and/or calibration.
Units reconditioned and calibrated $675 ea with 120 day
warranty. Any unit free shipping in USA.
---
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!

## 972. Hombrew Amplifier Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-08 00:00:00 UTC
From: mentor@cin.net
Message-ID: <33c278e0.1082058@news.cin.net>
Source record: 92682

Thanks for reading this. After many years of homebrew INactivity, I'd like to tackle a homebrew HF amplifier project. I have the ARRL Handbook, Radio Handbook, and some articles from QST, etc., but I'd like your advice on what are the best amplifier configuration is these days. Are the 3 x 500Zs still the best value or are the new generation zero bias tube (expensive!) better? I would be grateful for any construction plans or articles.

Thanks in advance for your reply. Jim K9RII

# 973. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: grimm@alison.sbc.edu
Message-ID: <33c4008e.24874744@alison.sbc.edu>
Source record: 92557

On Fri, 04 Jul 1997 15:50:45 GMT, n7ws@azstarnet.com (Wes Stewart)
wrote:

much snipped....

>
>Question: Should I leave ham radio and take up
>astronomy?
>
>N7WS
>

Absolutely not! Your split band processor was a classic. I had a lot
of fun building it and look forward to seeing more of your projects in
print. If the publishers are too cheap to pay, and too uncivilized to
even say "thank you," or otherwise acknowledge your efforts, then it
is up to those of us who take your ideas and either copy them or adapt
them to our needs to let you know how much we appreciate what you have
done. Thanks Wes, very much!

73,
Ken K4XL
grimm@alison.sbc.edu

## 974. Re: 811A amplifier schm ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <33c414fa.374423@news.zippo.com>
Source record: 92558

On Wed, 09 Jul 1997 07:45:12 +0200, phil -F5IYJ <iyj@usa.net> wrote:

>who have got a schematic for a 811A amplifier ?
>Thanks.
>F5IYJ
>iyj@usa.net
>

Try the 1964 ARRL handbook.

Steve Carlisle

# 975. My Web Page Needs Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33C44791.6BA3@primenet.com>
Source record: 92559

My Web Page Needs Help!

And if you don't beleive me,
just take a look:
http://www.qsl.net/k7on

Anyway, I am looking for new
materials to add to my web
page: computer, electronics,
amateur radio, swl, scanning,
experimenting, homebrew, etc.

All contributors will receive
proper credit for their work
and I will maintain on WWW at
my site for you.

You may submit any text files,
GIF or JPG pictures, WAV sounds,
etc. I can also accept photographs
and text via snail mail (see below).

Please contribute your knowledge to
this worthwhile project.

Brian Short
1994 E Laguna Dr
Tempe, Az 85282

## 976. Gunnplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: p06288@email.mot.com
Message-ID: <5q1489$2u8$1@trotsky.cig.mot.com>
Source record: 92560

I'm looking to buy a couple of operating 10 GHZ Gunnplexors. Anybody got 2 or
3 laying around unused at a reasonable price?
Jim
N7QHK

------> gerwitz@inficad.com

## 977. johnson fleetcom> 440 repeater?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: hacker@flash.net
Message-ID: <33c929e3.17646082@news.flash.net>
Source record: 92683

I have a johnson 18 watt 486mhz crystal radio. I would like info on how to convert to 440, and if possible to rekindle some life and use as repeater....is this feasable with this FREE radio

I need to know if it is going to take some surgury to the radio to make it work in the 440 band. If so, how much/how expensive.

I have exactly no $ in it so far> thanks in advance for any/all comments

# 978. Re: How to build a VFO with an output freq of 23.000 MHZ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33c2fee0.25266982@news.mnsinc.com>
Source record: 92684

On Sat, 5 Jul 1997 21:51:42 +1000, jarad@nbnet.nb.ca (jarad) wrote:

>I need a stable VFO with a output freq of 23.000 mhz- 23.500 mhz
>I don't know what to look for
>Would a digtal VFO be the answer, I would like it to go in 5 khz steps
>If there is a place to buy or a kit available please let me know
>Thanks Jarad
>jarad@nbnet.nb.ca

S&S Engineering in Maryland have such a kit for about $130-200 USD
depending on features.

You can get their address and phone number from my list at:

http://www.mnsinc.com/bry/hamfiles.htm

Click on kits for te list of suppliers

Regards - Bry AF4K

## 979. Need source for HF amp parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bc8c2c$abf76c60$3c9dd8cc@km3g.cts.com>
Source record: 92685

I am building an HF amp and need some vacuum variables, large air variables, roller coil, coil stock, etc. Any names of potential parts suppliers would be appreciated.

Lane C. Zeitler
KM3G
San Diego
km3g@cts.com

## 980. Yaesu YO-101 scope $225.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bc8c2c$d287dc20$3c9dd8cc@km3g.cts.com>
Source record: 92686

Works great. $225.00

Lane KM3G
San Diego
km3g@cts.com

# 981. Re: 2m/70cm anti-duplexor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <33C36402.31C0@magg.net>
Source record: 92687

Jason T. Zawodny - PCD ~ wrote:
>
> Here's the question, is there a filter arrangement or some other
> means to do the following... I have a Yeasu FT5100 with the duplexor built in,
> but to use it for psuedo base station use, I would like to be able to
> use beam antennas. They all appear (as I would expect) to be single band
> models. Even the Cushcraft "dual band" appears to have two feedpoints. So,
> is there an arrangement that will filter the output signal of the radio
> to the appropriate antenna and also allow both bands to be received????
>
> Thanks in advance..
>
> jtz
>
> --
>
> Jason T. Zawodny Summer Intern, PCD SLS Department
> Phone (916)356-9220 Loc:FM5-2-H2, MS FM5-45

Use a diplexer in reverse.

Dale
W4OP

# 982. Re: WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: Harry Lythall <no.one@no.where>
Message-ID: <33C40C59.24FE@no.where>
Source record: 92688

```
Demolition Man wrote:
> =

> unit77 wrote:
> >
> > johnsi wrote:
> > >
> > > People are so paranoid about CB'ers getting a hold of 10 meter amps t=
hat they
> > > are as rare as chicken's teeth.
> > > Where does a legitimate ham get a 10 meter amp?
> > > Please email me directly if you know where I should look for one.
> > > Thanks,
> > > John N7MTB
> > WHY do you NEED an amp on 10 mtr?
> why do you need an amp on any band?
> --
> A.C.Curtis
> KB0WLF
> =

> mailto:demoman@rollanet.org
> http://www.rollanet.org/~demoman/I need an HF Amp to get over the inconsi=
derate hams using Amps on an
already occupied frequency - now building a bigger Amp.

Harry, SM0VPO / G4VVJ, Upplands V=E4sby, Sweden.
```

## 983. Lots of cct ideas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: Harry Lythall <no.one@no.where>
Message-ID: <33C418C6.4A1C@no.where>
Source record: 92689
Cross-posted to: uk.radio.amateur,rec.radio.shortwave,rec.radio.cb,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,aus.radio.amateur.misc,nl.radio.amateur

Hi all,

My homepage is getting bigger and will continue to do so until Telenordia tell me I have run out of disk space on the server. I am currently building an HF bands general coverage receiver using valves. When I can get a 'round-twit' I will be posting this as well as the others listed below. I will present it in several logical stages, each of which is a complete project in its own right.

You can find my homepage at:

http://user.tninet.se/~acz732k/

I make no apologies for the NO.ONE@NO.NAME address. My address is freely available on my homepage - I just don't want all the adverts and junk mail that goes with a correct address.

Amongst my constructional projects are:

BASIC INFO FOR BEGINNERS
How to solder
Component identification
tools

ANTENNAS
Remote tuning of tuneable antennas
Basic dipole information
Short antennas for the HF bands
A balcony/terrace antenna (worked JA on it)
Packing crate antenna
Frame antenna

RECEIVERS
Cigar box HF receiver - uses battery valves
IC HF receiver
HF direct conversion receiver
Regenerative HF receiver
HF and VHF receiver using ZN414 (ZN416)
Modifying domestic receivers for HF SSB
Modifying domestic receiver for 160 meters
Synthesized receiver

TRANSMITTERS
FM (88+108MHz) 'BUG' (can be modified for 30 MHz)

250mW HF bands CW TX
4 watt PA for 250mW HF bands CW TX
5 watt CW IC TX
CW TX using voltage regulator
Single valve TX
Two valve TX
Cigar box transmitter (valve)
145MHz FM TX
QRP SSB TX
3 watt linear 1 - 30 MHz
Phasing method SSB exciter
500 watt linear amplifier
April 1st transmitter

USEFUL
VHF NBFM Crystal RX based on a coffee tin
250vDC for valves using modern components
Stereo enhancement for HF CW
CW filters
Self tuning CW filter
Q-multiplier
CW keyer using 'relay logic'

DATA/INFORMATION
QRP frequencies
Measuring micropowers
Making PCBs, several methods
G0TLAs QRP circuit database on packet
Coil winding and 'turns' calculation.

DOWNLOADING
Signal generator program
All my QRP@WW circuits in a ZIP file
PCB foil for BUG TX (later version)
'Adult' screen saver

BREWING BOOZE
Brewing beer, wine and 'mash'
Distilling the mash (3 methods)
Making liquours

---------- and more ----------

I will be adding more to the homepage constantly, as long as
I have the time available to do it.

Have fun with QRP (and QRO) de Harry, SM0VPO, Upplands V=E4sby.

---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

# 984. Re: TNC Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33c39a7f.5775675@news.atl.bellsouth.net>
Source record: 92690
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.digital.misc

On Tue, 08 Jul 97 21:15:19 GMT, tait@primeline.net (Gary Tait) wrote:
>In article <33c2663c.13433146@news.atl.bellsouth.net>,
> ke4zv@bellsouth.net (Gary Coffman) wrote:
>#On Mon, 07 Jul 97 04:22:39 GMT, tait@primeline.net (Gary Tait) wrote:
>#>Can anybody recommend complete TNC2 plans (other than TAPR), that uses some
>of
>#>SIO:
>#>8250
>#
>#This is a problem. You need a USART, not a UART, because packet uses
>#synchronous transmission. The TNC2 uses the Z80 SIO chip, other designs
>#use the 8530. The 8250 won't do, it's only a UART. If you don't care about
>#code compatibility, you can implement a software USART in the Z80. GLB
>#did this for their PK-1.
>
>How about a COM 2017 (SMC #19-10459-01),would that be suitable?
>
>BTW I have no interst in writing code,so writing code to make something
>seem it is someting else is out of the question.

If you don't want to write code, then you *must* use the parts that the
code you'll use is written to support. If it is TAPR code you'll be using, then
you must use the USART TAPR used. You can't even substitute a better
USART, like the 8530, because it isn't code compatible at the register level
with the Z80 SIO. You can take some liberties with things which aren't
directly code driven, such as the modem chip, but those things which are
code driven must be exactly what the code expects to see. Firmware driven
systems are totally unforgiving in that respect.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 985. FS New SMA Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: Mike Kulyk <mkulyk@worldnet.att.net>
Message-ID: <01bc8c77$dbde3120$466974cf@default>
Source record: 92691

48 pcs new in the package Connecting Devices Inc. CDI 5762CC 9130 SMA female chassis mount 4 hole gold in color

9 pcs new in the package Omni Spectra 2051-1618-02 chassis mount 4 hole mount SMA connector Male silver in color

$3.50 each $175.00 for all 57 pcs

Mike

## 986. WTB:sp-10 ssb adapter for heathkit rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: kf4dte@aol.com
Message-ID: <19970709162900.MAA07351@ladder02.news.aol.com>
Source record: 92692

hello and tnx for reading,
i am looking for a sideband adapter for the heathkit seneca.
model is sp-10. if you have one and want to sell it, please e-mail me with
price and condition.

tnx and 73
kf4dte
mike prevatt
mulberry, florida

# 987. ! FREE PREDICTIONS BY PTOVEN PSYCHICS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: dov@superlink.net
Message-ID: <5q0jhp$aec$4873@earth.superlink.net>
Source record: 92693

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

# 988. Re: 2m/70cm anti-duplexor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33c3c388.16282825@news.atl.bellsouth.net>
Source record: 92694

On 5 Jul 1997 23:40:28 GMT, jzawodny@pcocd2.intel.com (Jason T. Zawodny - PCD ~) wrote:
> Here's the question, is there a filter arrangement or some other
>means to do the following... I have a Yeasu FT5100 with the duplexor built in,
>but to use it for psuedo base station use, I would like to be able to
>use beam antennas. They all appear (as I would expect) to be single band
>models. Even the Cushcraft "dual band" appears to have two feedpoints. So,
>is there an arrangement that will filter the output signal of the radio
>to the appropriate antenna and also allow both bands to be received????

Sure, just use an external duplexer oriented so the "antenna" connection
goes to the radio, and the VHF and UHF connections go to their respective
antennas. A duplexer works in either direction. You'll get a little more insertion
loss because you now have two duplexers (the one in the radio, and the
one external to the radio) in series, but that shouldn't matter much unless
you're contemplating real weak signal work.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 989. Re: This is here to stay !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: codyspc@aol.com
Message-ID: <19970709192601.PAA17268@ladder02.news.aol.com>
Source record: 92695

In article <5ptvko$3n$14@talia.mad.ibernet.es>, OE3V1@JNE31.GZ82O writes:

>Here are the addresses that you must send a dollar to with your slip of
>paper requesting placement on their mailing list, as instructed above:
>
>
> 1. Ron van Hoof
> 14 Moshier St.
> Greenwich, CT 06831
> USA
>
>
> 2. Richard Blanchette
> Pob 455
> Palisade, Colorado
> 81520
> USA
>
>
> 3. Caroline Mowinckel
> Molnar Utca 21
> 2 Em Nr-10
> H-1056 Budapest
> Hungary
>
>
> 4. Odd Hilsen
> Avda Espana 93
> Sitio de Calahonda
> Mijas Costa - Malaga
> Spain
>
>
> 5. Peter Kjoge
> Camino de la Condesa 9, 5-A
> E-29640 Fuengirola
> Spain
>
>

Someone had better talk to these people....
~~~ A note from the Litter box : ~~~~~~~
|\w^w/| *73* to you and yours |\^v^/|
( -- -- ) from all of us..... ( O -- )
` =^=' :+> Andy and Alpha<+: `=^='
~~~

Squeaky =======&========Screamy
The Feline controlling interests...;-)

# 990. ! TROUBLE WITH LOVE? TRY A PSYCHIC FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: dov@superlink.net
Message-ID: <5q0qfn$eik$4873@earth.superlink.net>
Source record: 92696

What does Cupid have in store for you? Find out now -
try a psychic, it's free right now on 1-800-677-8052.
You'll hear about your romantic future and fate, so
take control. Try it free and see for yourself.
Adults over 18 only.

Dial 1-800-677-8052

# 991. Wanted: Urgent: WG16 waveguide relay/transfer relay and dishes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <yEUsddAdy+wzEwSS@pacsat.demon.co.uk>
Source record: 92697

```
Wanted
------
VERY URGENTLY!

WG16 Waveguide relay or transfer relay. Coil voltage not important.

0.5M prime focus dishes. Condition not important as long no big dents!

Email below

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+
```

# 992. Re: Need source for HF amp parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <33C3F502.11296ECD@juts.ccc.amdahl.com>
Source record: 92698

Lane C. Zeitler wrote:
>
> I am building an HF amp and need some vacuum variables, large air
> variables, roller coil, coil stock, etc. Any names of potential parts
> suppliers would be appreciated.
>
> Lane C. Zeitler
> KM3G
> San Diego
> km3g@cts.com
There is Surplus Sales of Nebraska, they are at 1502 Jones Street,
Omaha, NE 68102, tel. 1-800-244-4567, excellent for all the stuff you
need and quick turnaround of orders, even to me here in the UK.
Regards...G3VBV.
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375
---
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

## 993. A name if just a name...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: jimobrein@aol.com
Message-ID: <19970709213400.RAA26376@ladder01.news.aol.com>
Source record: 92699

Unless it is this one. It says: "STAY CLEAR - NUTCASE READY TO EXPLODE"

His threats abound. Attorneys. Attacks. Fist fights. Police reports. Court cases. It is all just hot air.

All except for his obsessive interest in other guy's "balls." That seems pretty real.

## 994. Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: Yvon <rextel@sympatico.ca>
Message-ID: <33C44583.5B22@sympatico.ca>
Source record: 92700

I am trying to build a high temperature oven for a mechanical filter measuring 1.25''X 3/4''X 3/8''. The filter is placed in a metal box with plenty of room for insulation. I have tried many types of insulation material but I still have too much heath loss. Can any one suggest me a very efficient type of insulation material. My metal box is 2 X 2 X 1.5 inches. Thanks. VE2 AUC <rextel@sympatico.ca>

## 995. Re: Micor PA as aplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: cas@marconi.ih.lucent.com
Message-ID: <5q0i6e$oj1@ssbunews.ih.lucent.com>
Source record: 92701

Originial question was how to modify a Micor PA for SSB...

>The Micor PA is a class-C amplifier, class-C amplifiers are non-linear.
>You need a linear amplifier for SSB. You *can* convert some class-C
>amplifiers into reasonable class-AB (linear) amplifiers, but this is
>not something I'd even attempt with the older Micor PA.

I asked this question a while back to a friend of mine that works at moto.
(he designs PAs) He told me not to even consider it.

chuck sherwood

## 996. Re: 6M transceiver projects???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: cas@marconi.ih.lucent.com
Message-ID: <5q0ibl$ojb@ssbunews.ih.lucent.com>
Source record: 92702

>I am looking for a six meter ssb project to build. Any old plans out
>there? QRP is fine, regenerative receiver ok, I would like to build
>something from scratch, homebrew if you will. Sorry nothing for sale. Any
>help would be appreciated. 73. Bill, KB7MRF

How about the Ten Tec kit?? For 100 bucks you get all the parts, and
no hassle.

chuck sherwood

## 997. 811A amplifier schm ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: phil -F5IYJ <iyj@usa.net>
Message-ID: <33C31757.CED0A348@usa.net>
Source record: 92703

who have got a schematic for a 811A amplifier ?
Thanks.
F5IYJ
iyj@usa.net

## 998. STF Electronics Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5q11hh$t4c@news.teleplex.net>
Source record: 92704

Check Out www.stf-electronics.com

Hammond transformers, Tubes , Parts for Tube projects and more.

Still under construction

If there is interest, possibly some Vacuum Tube Transmitter and Receiver Kits.

Pat Bunn, N4LTA
STF Electronics

# 999. Re: Need PC board software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: pylon@mindless.com
Message-ID: <5q0srd$se0@snews1.zippo.com>
Source record: 92705

"Mark Mumaw" <nu6x@sedona.net> wrote:

>I have designed a mixer/converter that allows the Kenwood SM220/SM230
>monitor scope to be used with the Yaesu FT1000MP or FT1000D. I have many
>request to make up a PC board and parts kit.

>I am looking for some inexpensive software to do the layout/artwork for a
>simple printed circuit board. I'm looking for either shareware, something
>preowned, or a cheap new package.

>Can anyone help me?????

There is a GREAT program out there called PADS PCB that is a
full-featured PCB-CAD program. The demo is limited to about 70 IC's,
but thats usually more than enough. It's a bit tricky to learn, but
read the enclosed docs and you'll be set.

James
KC7YJJ

# 1000. Re: 2m/70cm anti-duplexor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-09 00:00:00 UTC
From: jzawodny@pcocd2.intel.com
Message-ID: <5q0sud$a5c$1@news.fm.intel.com>
Source record: 92706

Okay... first thanks to all that replied via email or back here.
But my question new question is.... is there a point (this is going to get complicated) where it is possible to pull a low-power RF signal out of my FT-5100 ( I know things are really small in there, but its worth asking), use an external linear for each band and skip the internal duplexor???? I have looked at the schematics in an effort to find likely candidates, but again, Im not trained enough in RF or analog signals to be able to determine....

jtz

ps, yes, I only have a "affirmative action" license, but the fact that Im trying to do this stuff and learn how should indicate that I'm not merely trying to leech off the knowledge of the veterens.

Gary Coffman (ke4zv@bellsouth.net) wrote:
: Sure, just use an external duplexer oriented so the "antenna" connection
: goes to the radio, and the VHF and UHF connections go to their respective
: antennas. A duplexer works in either direction. You'll get a little more insertion
: loss because you now have two duplexers (the one in the radio, and the
: one external to the radio) in series, but that shouldn't matter much unless
: you're contemplating real weak signal work.
:
: Gary
: Gary Coffman KE4ZV | You Make It | Email:
: Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
: 534 Shannon Way | Guaranteed | or
: Lawrenceville, GA 30244 | | ke4zv@radio.org

--

Jason T. Zawodny Summer Intern, PCD SLS Department
Phone (916)356-9220 Loc:FM5-2-H2, MS FM5-45

## 1001. Product Annoucement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: donwaun@bellatlantic.net
Message-ID: <5q18t2$6da$28@nw003.infi.net>
Source record: 92561

Hey, just thought i'd share with everyone,
I found a site with loads of nude CHEERLEADERs. The
address is:

http://www.mid-night.com/

--Jason--

(Sorry for the intrusion, everyone needs some short skirts in their life)

P.S. They also a have spanish / latina women archive

# 1002. Re: Comb Generator versus Marker Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: jlkolb@sd.cts.com
Message-ID: <868510058.242380@optional.cts.com>
Source record: 92562

David Shalita (af389@lafn.ORG) wrote:
: Hi,

: My question is what is the easiest or best way to produce a series of
: known frequency markers from 10 mhz to above 900 mhz?
: I want to generate 25mhz markers and harmonics or 50 mhz and harmonics
: or
: 100 mhz and harmonics to bracket a signal.

: Is a Comb Generator ckt useful for producing known frequency markers?
: If Comb is useful for markers, where can I obtain design info or who
: sells it as a kit? I'd rather build my own.

A comb generator can be easily made from digital logic, although
very fast logtic will be required at the freqs of interest to you.

If memory serves, a perfect square wave would have only odd hormonics,
and the amplititude falls off very rapidly. To get both odd and
even hormonics, and a flatter freq response, you need to turn the
square wave from the xtal oscillator into a digital pulse, as narrow,
as possible, and with as fast a rise time as possible.

Take the sq wave, and connect it to one input of a 74AS00 gate and
also to an input of an inverter, a 74AS04, or another section of
the 74AS00 with the inputs tied together. Tie the output of of the
inverter to the other input of the 74AS00. Most of the time, input
A will be high and B low or vice versa, and output Y will be high.
Only when the oscillator switches from low to high, A will be high,
and B will still be high because of the delay of the inverter will
the output go low. Thus a narrow spike is created. It may be necessary
to put 3 inverters in series to get the proper delay for this to work.

John Kolb KK6IL

## 1003. Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: Harry Lythall <stop@spam.forever>
Message-ID: <33C4F495.584F@spam.forever>
Source record: 92563

Hi all,

My homepage is getting bigger and will continue to do so until Telenordia tell me I have run out of disk space on the server. I am currently building an HF bands general coverage receiver using valves. When I can get a 'round-twit' I will be posting this as well as the others listed below. I will present it in several logical stages, each of which is a complete project in its own right.

You can find my homepage at:

http://user.tninet.se/~acz732k/

I make no apologies for the NO.ONE@NO.NAME address. My address is freely available on my homepage - I just don't want all the adverts and junk mail that goes with a correct address.

Amongst my constructional projects are:

BASIC INFO FOR BEGINNERS
How to solder
Component identification
tools

ANTENNAS
Remote tuning of tuneable antennas
Basic dipole information
Short antennas for the HF bands
A balcony/terrace antenna (worked JA on it)
Packing crate antenna
Frame antenna

RECEIVERS
Cigar box HF receiver - uses battery valves
IC HF receiver
HF direct conversion receiver
Regenerative HF receiver
HF and VHF receiver using ZN414 (ZN416)
Modifying domestic receivers for HF SSB
Modifying domestic receiver for 160 meters
Synthesized receiver

TRANSMITTERS
FM (88+108MHz) 'BUG' (can be modified for 30 MHz)
250mW HF bands CW TX
4 watt PA for 250mW HF bands CW TX

5 watt CW IC TX
CW TX using voltage regulator
Single valve TX
Two valve TX
Cigar box transmitter (valve)
145MHz FM TX
QRP SSB TX
3 watt linear 1 - 30 MHz
Phasing method SSB exciter
500 watt linear amplifier
April 1st transmitter

USEFUL
VHF NBFM Crystal RX based on a coffee tin
250vDC for valves using modern components
Stereo enhancement for HF CW
CW filters
Self tuning CW filter
Q-multiplier
CW keyer using 'relay logic'

DATA/INFORMATION
QRP frequencies
Measuring micropowers
Making PCBs, several methods
G0TLAs QRP circuit database on packet
Coil winding and 'turns' calculation.

DOWNLOADING
Signal generator program
All my QRP@WW circuits in a ZIP file
PCB foil for BUG TX (later version)
'Adult' screen saver

BREWING BOOZE
Brewing beer, wine and 'mash'
Distilling the mash (3 methods)
Making liquours

---------- and more ----------

I will be adding more to the homepage constantly, as long as
I have the time available to do it.

Have fun with QRP (and QRO) de Harry, SM0VPO, Upplands V=E4sby.

---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

# 1004. Q: schematics/pcb for 6M SSB PA...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: Nanno van Haaften <vhaaften@beatrix.philips.nl>
Message-ID: <33C4A3DA.3752@beatrix.philips.nl>
Source record: 92564

Hi there,
I'm almost finished building an 6M transverter to connet to my old but still working TS700.
This transverter has only 1 - 1 1/2 Watt output power. I'm looking for schematics and PCB layout for a small PA (e.g. 25 Watts) running on 12 Volts. (Another voltage e.g. 28V is also OK, but I prefer 12V so I'm able to run it in my car).
Who can help me?
--
regards,

Nanno van Haaften PE1OLQ

vhaaften@iaehv.nl http://www.iaehv.nl/users/vhaaften
pe1olq@amsat.org
---

# 1005. If You've Got $3-5k Rig, Stay Away From Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580001007970139190001@news.primenet.com>
Source record: 92565

I had thought Sherwood Engineering had gone out of business. They used to make all sorts of filters for the R4-C, along with some other items.

But they are still around, with a nice web page at:

http://sherweng.com/table.html

This particular page lists 2khz spacing IMD results for old and modern rigs. No wonder the ARRL deleted this list from the back of the Low Band DXing Book! Its positively embarrassing for anyone promoting the latest Japanese rigs!

The R4-C with narrow first IF filters still reigns supreme in real-world contest and DXing conditions with the highest narrow spacing dynamic range.

Of course, the R4-C with the special filters works the best because it is equivalent to a single-conversion receiver. The latest Japanese rigs all use roofing filters and up-conversion, which means if you are working DX in a pileup you get "crunch-crunch-crunch".

You can still build your own receiver with much higher performance than even the Drake. One of my receivers has 110db dynamic range at 2khz spacing, with a narrow filter.

If I owned one of those $3000 or more transcievers, I'd be asking some serious questions. I guess if you've spent the money though, its easy to "suspend the disbelief". :) :)

Happy operating, suckers!

Rob.

# 1006. Re: Gunnplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: Joseph M Zawodny <J.M.Zawodny@LaRC.NASA.gov>
Message-ID: <33C4D468.6BFB@LaRC.NASA.gov>
Source record: 92566

Jim Gerwitz wrote:
>
> I'm looking to buy a couple of operating 10 GHZ Gunnplexors. Anybody got 2 or
> 3 laying around unused at a reasonable price?
> Jim
> N7QHK
>
> ------> gerwitz@inficad.com

Check out http://www.shfmicro.com/ , they have decent new units at
what seems to be reasonable prices.

KO4LW

--

Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
NASA Langley Research Center KO4LW@amsat.org
E-mail: J.M.Zawodny@LaRC.NASA.gov zawodny@exis.net
(757) 864-2681 (757) 864-2671 FAX http://wwwp.exis.net/~zawodny

# 1007. Re: 2m/70cm anti-duplexor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: Joseph M Zawodny <J.M.Zawodny@LaRC.NASA.gov>
Message-ID: <33C4D81B.126F@LaRC.NASA.gov>
Source record: 92567

Jason,

Do not worry about the duplexor in the rig nor the additional losses of using a second one to (re-) separate the freqencies at the antenna. Maybe you should email me for details, but you can easily place amplifiers and preamplifiers at the appropriate (and I'd add - correct) locations to overcome all of your worries. I have a 250' run from the shack to my tower and I work mainly on 2m & 70cm weak signal SSB. I use 7/8" 75 Ohm hardline and pairs of duplexors to share the hardline on several bands. For example, I get a hair over 2db loss between the rig an the antenna (actually the base of the tower) on 70cm after going through duplexor, lightning arrestor, 1/4 wave transformer, 200'+ of hardline, another set of 1/4 wave transformer, lightning arrestor, & duplexor. This line is shared with 2m. My other line is shared between 6m and HF. I do the same thing again for the run to the satellite station. At the point where my stacked yagis attach to the feedline I put a preamp to set the noise figure and overcome the feedline losses on the return trip. This works very well for me. Check out my ham page off of my home page (in a few days after I add a few things) at http://wwwp.exis.net/~zawodny for a few photos.

Talk to you soon, nephew.

JMZ

Jason T. Zawodny - PCD ~ wrote:
>
> Okay... first thanks to all that replied via email or back here.
> But my question new question is.... is there a point (this is going to get
> complicated) where it is possible to pull a low-power RF signal out of my
> FT-5100 ( I know things are really small in there, but its worth asking), use
> an external linear for each band and skip the internal duplexor???? I have
> looked at the schematics in an effort to find likely candidates, but again, Im
> not trained enough in RF or analog signals to be able to determine....
>
> jtz
--

Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
NASA Langley Research Center KO4LW@amsat.org
E-mail: J.M.Zawodny@LaRC.NASA.gov zawodny@exis.net
(757) 864-2681 (757) 864-2671 FAX http://wwwp.exis.net/~zawodny

# 1008. need schematic for Henry 2K ps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bc8d33$bbada860$379ed8cc@km3g.cts.com>
Source record: 92568

I need the schematic for the henry 2K or 2K3 power supply and the PS parts list.

# 1009. Re: Gunnplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: frussle@erols.com
Message-ID: <33c6e85d.6341706@news.erols.com>
Source record: 92569

On Wed, 09 Jul 97 19:45:08 GMT, p06288@email.mot.com (Jim Gerwitz)
wrote:

>I'm looking to buy a couple of operating 10 GHZ Gunnplexors. Anybody got 2 or
>3 laying around unused at a reasonable price?
>Jim
>N7QHK
>
>------> gerwitz@inficad.com

Do you want the REAL Gunnplexers, the ones with the varactor, or are
you just talking about the little alarm radar type things?

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

## 1010. * Small 20 amp PSU design *

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: ajbinning@scotland.ftech.co.uk
Message-ID: <33c4e848.24069672@news.ftech.net>
Source record: 92570

If you want to build a 13.8 volt 20 amp PSU for use with a 100 watt
HF or VHF transceiver, that has overvoltage protection and is very
small (155x75x175) have a look at my web pages, address below, and
click on AMATEUR RADIO.
My E-mail: ajbinning@scotland.ftech.co.uk
My Web Page: http://www.ftech.net/~scotland/
Regards: ArthurB.

## 1011. Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: egb <emilgborys@worldnet.att.net>
Message-ID: <01bc8d39$c3395ce0$8ea592cf@egb.martinauto.com>
Source record: 92571

IMMEDIATE Openings for Controls Engineers and an AUTOCAD Professional

Martin Automatic, Inc., 1661 Northrock Court, Rockford, Illinois, is a machine tool OEM with excellent benefits and competitive salary. We employ over 250 people, have been in business over 30 years, and do business internationally. We have an informal and cooperative work place atmosphere.

Machine controls design to customer specs. Vector, servo drives from various mfgs.; PLCs from various mfgs.; dedicated controllers of our own mfg.; pneumatics; etc. If you like to be exposed to a variety of challenges, this is the place for you!

My departments consist of: Electrical Engineering; Lab (R&D, assembly, electronics repair); Electrical Panel Assembly; Network&Internal Data Systems; Programming (dedicated micro-controllers and company IS systems). I am always interested to speak with bright, capable people that can contribute to Martin Automatic's future.

If you have any questions or would like to schedule an interview, please feel free to contact me, 815-654-4800 or emilgborys@worldnet.att.com. I conduct interviews myself, not through a personnel dept., and I will notify you of the results promptly and in person.
Emil Borys, AK9I

# 1012. Re: Comb Generator versus Marker Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <33C4ED0E.2D4F@aeneas.net>
Source record: 92572

There is a circuit for a comb generator in the Nov. 1989 issue of
Ham Radio magazine. Look on page 23 for the circuit. It is all
discrete components. It uses a 100MHz crystal that is gated on and
off at a slow rate using a 555 timer IC.
You should be able to get copies of the article from your local
library using interlibrary loan (provided they don't carry Ham Radio
magazine). The article title is "Wideband Frequency Analyzer" by
Adelbert Kelley. It starts on page 9 and goes thru page 23.

Hope this helps,
Mark

# 1013. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1007970830430001@news.vcnet.com>
Source record: 92573

In article <19970707213701.RAA03297@ladder01.news.aol.com>, k1bqt@aol.com (K1BQT) wrote:

> Hi John--
>
> >And in the end, that is all that really matters to me.
>
> I'm with you, John. Getting a little money back to cover expenses is
> nice, but that's not why I write. The best amateur and professional
> electronic journal writers aren't in it for the money because there's
> never been a significant amount of money in it. They do it for
> information sharing, networking, and skill development.
>
> As ham magazines go, QST pays pretty well, ...

True - unlike *73*.....Wayne Green supposedly has tons of money. Maybe he figures he can take it with him, Rick.

>.they pay on time,

- unlike *73*.

>...and they have
> excellent circulation. Of course, at a personal level, I'd rather see the
> good technical articles go to Communications Quarterly rather than QEX
> because my wife edits it.

QEX was reportedly past QST Editor Paul L. Rinaldo's (W4RI) idea, Rick. The basic plan was to get more subscription money from members by selling two magazines in place of what had been one magazine. IMO, QEX siphoned good articles from QST. The resulting vacuum in QST was filled with boring advertising.
- However, Communications Quarterly does not have an empowered Technical Editor. Around the first of the year I saw a letter in Comm. Quarterly that contained 3 technoblunders. In the publishing biz, credibility is everything. IMO, the Editor lacks the technical knowledge needed to preserve the credibility of the publication.

> But the thing I really have a hard time with
> are "writers" who whine.
>
Which writers have whined about which of your articles, Rick?

The QST authors I know have been fairly supportive in the controversy over my articles. Most of my grief has come from whining, wealthy QST advertisers whose amplifier designs appear to have easily-fixed measurable problems.. // As a result of the controversy, some of the QST authors I

know have decided to submit no more articles to QST. IMO, the denouement was when QST (9/94) allowed a self-recognized amplifier "expert" to critique an article that he had obviously not read. His statement that VHF currents do not flow in "coils" (because inductive reactance increases with freq.) pretty much sums it up. The following month, in the 10/94 issue, QST carries 30-something full page advertisements from the "expert's" employer. No rebuttal is allowed. Hmmmm. In the 2/96 issue, the QST Editor says why no rebuttal was allowed. Thanks to the Internet, interested QST readers can see that the QST Editor's 2/96 statement doesn't wash. In the publishing biz, credibility is everything.

--
--Rich-- . . . 805-386-3734, ag6k

# 1014. Re: ! FREE PREDICTIONS BY PTOVEN PSYCHICS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: burne~@xs4all.nl
Message-ID: <33d1eb98.13732003@news.xs4all.nl>
Source record: 92574

On 9 Jul 1997 17:59:21 GMT, dov@superlink.net wrote:

>You will be astounded at the
>accuracy of their predictions.

Look at the Subject line. I'm astounded by their bad spelling.. :)

Ruben

# 1015. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: burne~@xs4all.nl
Message-ID: <33d0e928.13108339@news.xs4all.nl>
Source record: 92575

On Wed, 09 Jul 1997 19:14:27 -0700, Yvon <rextel@sympatico.ca> wrote:

>but I still have too much heath loss. Can any one suggest me
>a very efficient type of insulation material.

Air.

Almost any insulator works by the general principle of air contained in a material, so that the air won't move, and conduct heat by convection.

Closed cell foam with a very low specific mass(tempex), glass-fiber wool, even cork or balsa-wood will insulate pretty good. However, don't make the mistake of packing too tight. It's the air, not the material that insulates.

Need something better? No air. A vacuum will work even better, but is difficult to implement.

Also, check where your heatloss occurs. It might be something as mundane as the wires leading out of the oven..

Ruben

# 1016. Re: If You've Got $3-5k Rig, Stay Away From Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5q34nc$83c@lace.colorado.edu>
Source record: 92576

In article <the-ya023580001007970139190001@news.primenet.com>,
<the@primenet.com> wrote:
>I had thought Sherwood Engineering had gone out of business. They used to
>make all sorts of filters for the R4-C, along with some other items.
>
>But they are still around, with a nice web page at:
>
>http://sherweng.com/table.html
>
>This particular page lists 2khz spacing IMD results for old and modern
>rigs. No wonder the ARRL deleted this list from the back of the Low Band
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
>DXing Book! Its positively embarrassing for anyone promoting the latest
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
>Japanese rigs!
^^^^^^^^^^^^^^
>
[snip]
>
>Happy operating, suckers!
>
>Rob.

Gee ... so even when there are parameters that are objectively measurable
(unlike, say, antenna gains - more about which soon) the ARRL seems to
take the position of not painting things in negative lights. I guess I
would hope for something more like Consumer Reports than BuyThisRadio(tm)
from the ARRL.

Amps - nope, can't rag on poor designs. Better snip the bad parts.

Antenna tuners - nice article, hope the fallout doesn't crush them.

Phase noise of $3k transceivers vs the old stuff - better take out that
page from a place where some people who could use it might see it.

Antenna gains - Th**CENSORED** **CENSORED** **CENSORED** **CENSORED**ad.
-> Don't EVER say those words again in this part of town, bud. <-

Yep, I guess I'll be contacting my director.

Bruce Tiemann
N6URH

# 1017. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5q34lt$cj8$1@news1.rmi.net>
Source record: 92577

Ruben van der Leij (burne~@xs4all.nl) wrote:
: On Wed, 09 Jul 1997 19:14:27 -0700, Yvon <rextel@sympatico.ca> wrote:

: >but I still have too much heath loss. Can any one suggest me
: >a very efficient type of insulation material.

<snip>

: Need something better? No air. A vacuum will work even better, but is
: difficult to implement.

No toooo hard.... Use a Thermos (c) bottle -- maybe the 'soup-sized'
version -- route the wires thru a cork replacing the stopper.
Ugly? -- probably. That's why we call it "amateur" radio.... <g>

Regards & 73
Jonesy - W3DHJ

--
SK

# 1018. Ten Tec 2m kit No. 1220 - L14 notes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: dpt@super.zippo.com
Message-ID: <33c50947.3085259@snews.zippo.com>
Source record: 92578
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

These notes are regarding Phase 2.0 of assembly and testing. These are my notes, based on my experience and a brief talk with Ten Tec. Steps referred to are in the manual I got which doesn't seem to have a revision, but the part number is 74320 and the PROM version in the kit was 2.1.

Before installing L14 (step 2-2) be sure you turn the slug all the way up and down the coil. My slug got stuck part way down and I had to remove the coil and drill it out. Resoldering the coil back into the curcuit is difficult if you cut the leads as short as they suggest.

It is my guess that my coil was wound too tight and was compressing the tube. Of course, I was only 1/4 turn or so from having it adjusted when it stuck.

In step 2-77 it refers to the voltage dropping when adjusting L14. This is not always the case. My voltage _increased_ to the proper level when adjusting L14 as described. The guy at Ten Tec must have known about this because he was able to guess my initial reading within .02 volts. He also said this is of no concern, so long as the voltage levels work as described in step 2-78.

On a more positive note... Ten Tec is sending me a new coil and slug. I was able to talk with someone who knew about this without wating on hold. The manual is excellent, while no manual can cover everything you can do wrong, this one actually stopped me from putting in the wrong part twice already. The hardware is all high quality.

-david

## 1019. VHF Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: Harold Winard <hw@rangers.lso.bellcore.com>
Message-ID: <33C5740B.7802@rangers.lso.bellcore.com>
Source record: 92579

I recall reading an article several years ago about building a crystal-radio set that could receive in the VHF range. Does anyone recall what magazine that article appeared in? If not, does anyone have information about such radios?

Thanks,

Harold
K2HW
hw@rangers.lso.bellcore.com

## 1020. http://www.love.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: randy97
Message-ID: <33c5303d.2@pgh.nauticom.net>
Source record: 92580

Looking to find people in your area that enjoy the same things
as this newsgroup?

Check out http://www.love.com

It's free, it's new, and it's awesome.

Rand

# 1021. Sierra Dummy Load with wattmeter FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: bryan@prodistributors.com
Message-ID: <5q3k1o$ikn$1@news.nts-online.net>
Source record: 92581
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a commercial wattmeter/dummy load for sale. This is a Sierra Model Z-99 that is rated at 52 ohms, 50-600 Mhz. for 200 watts with a built in wattmeter calibrated to 200 watts. This is a top quality commercial wattmeter that can easily be used for amateur or commercial use. Price is $85 plus UPS.

Bryan W5KFT

# 1022. AC Linr Freq. Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: jch.nv@rocketmail.com
Message-ID: <868572365.13791@dejanews.com>
Source record: 92582
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thanks to all that read this posting.
I am looking for information on how to construct a line frequency meter for the purpose of monitoring the output and aligmnent of generators. I would like it to be able to provide a linear voltage to indicate frequency at 110VAC. A generating set that is used at a local repeater site (10kw Kohler) has a standard needle type meter that reads out from 45 to 65 cycles. I have a vibrating reed type meter at this time, but would like to constructy a meter that can be permantly attached to the generator (I have mort that one genset). I know there can't be much to the circuit, but I don't know
where to start. (The simpler the better, less chance for trouble) Please respond via e-mail if possible.

Thanks & 73,
Josh KD6KML
jch.nv@rocketmail.com

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 1023. Re: Computer Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: dpt@super.zippo.com
Message-ID: <33c65201.21705895@snews.zippo.com>
Source record: 92583

On Mon, 30 Jun 1997 22:02:13 -0700, Paul J <kd6lor1@home.net> wrote:

>Help, can anyone suggest a way to run a computer off of 12V battery
>power. I have a remote location with unreliable 120VAC. What I want to
>do is trickle charge a car battery, and let the computer continue to run
>in the event of a power failure.
>
>What would be ideal is a computer power supply that takes 12VDC as its
>input instead of 120VAC.

You want a UPS "Uninterruptable Power Supply". Any computer store
will stock them these days. Basically this is a power inverter (sine
wave output on most), lead-acid battery, charger, and switching
ciucuit.

You be hard pressed to make this yourself for cheaper than they sell
them for.

de N9OMH

# 1024. Re: Home Digital Audio Editing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: dpt@super.zippo.com
Message-ID: <33c54eca.20883245@snews.zippo.com>
Source record: 92584

On Tue, 24 Jun 1997 04:22:58 GMT, thfawb@iglou.com (Tom) wrote:

>Hi,
>
>I am looking to purchase some audio editing software to use on my home
>PC. I am presently hosting a radio program and I want to edit liners,
>cut commercials, and other simple editing tasks from my home. I have
>a limited budget. I understand that there is software out there ready
<SNIP>

Cool Edit from Syntrillium. Does all kinds of fancy functions
including noise reduction. Needs massive computing power for some
functions (NR and filtering). S/W is about $50.

Resulting WAV files are unquestionably broadcast quality. It can
clean up HF broadcasts pretty well also (but not real time).

You'll need a good sound card for digitizing. Soundblaster and clones
are pretty noisy. I use a Tropez plus, which is probably the best for
$150 price range. Look at Turtle Beach for some high end cards.

A responsive microphone is a must. But remember you can remove noise,
so you can record in any reasonably quiet room. Good mics can be got
reasonable at most "chain" musician suppliers.

Get a CD-ROM burner and you can put your sounds on a CD that can be
played on any CD player and/or have the digital audio extracted
directly.

de N9OMH

# 1025. Re: If You've Got $3-5k Rig, Stay Away From Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580001007971557220001@news.primenet.com>
Source record: 92585

:Gee ... so even when there are parameters that are objectively measurable
:(unlike, say, antenna gains - more about which soon) the ARRL seems to
:take the position of not painting things in negative lights. I guess I
:would hope for something more like Consumer Reports than BuyThisRadio(tm)
:from the ARRL.
:
:Amps - nope, can't rag on poor designs. Better snip the bad parts.
:
:Antenna tuners - nice article, hope the fallout doesn't crush them.
:
:Phase noise of $3k transceivers vs the old stuff - better take out that
:page from a place where some people who could use it might see it.
:
:Antenna gains - Th**CENSORED** **CENSORED** **CENSORED** **CENSORED**ad.
:-> Don't EVER say those words again in this part of town, bud. <-
:
:Yep, I guess I'll be contacting my director.
:
:Bruce Tiemann
:N6URH

Sorry about the obnoxious salutation. I was actually very suprised myself to see the results. I knew modern rigs were crappy receivers connnected to high priced computers/tx- but I didn't know it was that bad.

I remembered that the early 1980's results were eye-openers, but had no idea it was so bad until someone told me that Mr. Sherwood had compiled results for the latest "high-tech???" rigs.

I guess when the whole shabang depends upon advertising dollars, just about any nutty position can be tolerated :)

Sorry to be 1/2 the messenger. Anyway there's lots of really good stuff on the Boatanchors group. And you can buy it for $200.

Rob.

# 1026. GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: dnult <dnult@concentric.net>
Message-ID: <33C56CDC.E42@concentric.net>
Source record: 92586
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

Are there any hams (or non-hams) out there that have built or seen plans for a mobile GPS antenna? I have a Garmin GPS-40 GPS reciever with an external jack. An external antenna, I've found, is a requirement for reliable mobile GPS operation.

The GPS frequency is 1575.42 Mhz. The antenna needs to have enough gain to exceed coaxial cable losses (haven't selected a cable yet) and have resonably omni-directional response. I'm not sure, but I'd guess the satalite signal is horizontally polarized. I've wondered about a 1 turn helical and even a spiral on copper clad. Problem is I don't have equipment to test antennae at this frequency.

Thanks in Advance

73s de KI5XW

# 1027. Re: Comb Generator versus Marker Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: Steve <semann@nr.infi.net>
Message-ID: <33C5663A.195F@nr.infi.net>
Source record: 92587

There is a kit comb crystal calibrator for hf markers.
Check out
http://qrp.cc.nd.edu/kanga/klist.html
The kit lists at $27 before shipping.

Steve, N4EY

## 1028. Re: GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33C57784.4E37@larc.nasa.gov>
Source record: 92588
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

There was an article in QST magazine (Oct 95) by Harold Ward, W1GE on a
patch antenna for GPS.
It can also be found under:
gpspatch.zip (11530 bytes) has a description and drawing for the
construction of a simple patch antenna for GPS reception.
at website:
http://vancouver-webpages.com/peter/index.html
By the way, the satellite signal is right hand circularly polarized.
Good luck,
John
j.m.franke@larc.nasa.gov

## 1029. Re: GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33C57754.622A@larc.nasa.gov>
Source record: 92589
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

There was an article in QST magazine (Oct 95) by Harold Ward, W1GE on a
patch antenna for GPS.
It can also be found under:
gpspatch.zip (11530 bytes) has a description and drawing for the
construction of a simple patch antenna for GPS reception.
at website:
http://vancouver-webpages.com/peter/index.html
Good luck,
John
j.m.franke@larc.nasa.gov

## 1030. Re: Easy Tube Project?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: "J. Henderson" <n6lv@pacbell.net>
Message-ID: <33C5B0D9.1CEF@pacbell.net>
Source record: 92590

Christian Void wrote:
>
> Greetings!
>
> Am looking for plans for a relatively easy tube transmitter/receiver/transceiver
> project good for someone who has never worked with tubes before... any help
> would be appreciated!
>

Try http://user.tninet.se/~acz732k/

jim n6lv

# 1031. Re: Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: "J. Henderson" <n6lv@pacbell.net>
Message-ID: <33C5B3A4.540A@pacbell.net>
Source record: 92591

Harry Lythall wrote:
>
> Hi all,
>
> My homepage is getting bigger and will continue to do so until
> Telenordia tell me I have run out of disk space on the server.
> I am currently building an HF bands general coverage receiver
> using valves. When I can get a 'round-twit' I will be posting
> this as well as the others listed below. I will present it in
> several logical stages, each of which is a complete project in
> its own right.
>
> You can find my homepage at:
>
> http://user.tninet.se/~acz732k/

Really neat page!

jim n6lv

## 1032. (S)top (P)roblematic (A)dvertising (M)ail

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33C5CE60.26F9@primenet.com>
Source record: 92592

(S)top (P)roblematic (A)dvertising (M)ail

Please help in the fight against SPAM on the internet.
Find out more at my web page: http://www.qsl.net/k7on

Links to join the "Anti-Spam Network" and to download
the "Spam Hater" software program are included.

Please set a bookmark to follow further SPAM news.

-Brian
shortckt@primenet.com

# 1033. ! FREE PSYCHIC ADVICE! (FREE CALL!) 1800-682-8057

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: julie@aaaa.net
Message-ID: <5q21am$iuu$5010@kayrad.ziplink.net>
Source record: 92593

Dial in for the live psychics you want. No credit card
charges ever! Try it now on 1- 800-677-8057; an
astounding prediction is guaranteed.
Adults over 18 only.

Dial 1-800-677-8057

# 1034. Re: Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: geotek@flex.net
Message-ID: <33c4e0b1.126109558@news.flex.net>
Source record: 92594

Harry Lythall <stop@spam.forever> wrote:

>Hi all,
>
>My homepage is getting bigger and will continue to do so until
>Telenordia tell me I have run out of disk space on the server.
>I am currently building an HF bands general coverage receiver
>using valves. When I can get a 'round-twit' I will be posting
>this as well as the others listed below. I will present it in
>several logical stages, each of which is a complete project in
>its own right.
>
>You can find my homepage at:
>
>http://user.tninet.se/~acz732k/
>

Very nice site, it is obvious that you have put a great deal of effort
into this site.

George Carlson KC5RCC
Geotek Design Services, Houston,TX
geotek@flex.net

# 1035. ! PSYCHIC PREDICTIONS! TRY-IT-FREE! 1-800-676-3733

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-10 00:00:00 UTC
From: julie@aaaa.net
Message-ID: <5q19gp$231$5010@kayrad.ziplink.net>
Source record: 92595

You've heard how psychics have predicted the future
for others and you want to see for yourself. Let
a master psychic advise you now - try it free on
1-800-676-3733. You will be astounded at the
accuracy of their predictions. Adults over 18 only.

1-800-676-3733

# 1036. Re: If You've Got $3-5k Rig, Stay Away From Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33c6a4ff.0@cheese.pcug.org.au>
Source record: 92507

the@primenet.com wrote:

>
>You can still build your own receiver with much higher performance than
>even the Drake. One of my receivers has 110db dynamic range at 2khz
>spacing, with a narrow filter.
>

It would be interesting to see equivalent figures for homebrew direct conversion receivers, particularly one made for high dynamic range (probably using a SBL-1 or similar) and an 'average' DC receiver (maybe using an NE602).

Down here there's less activity on the bands and our CW power limit is 120w on CW so there is probably less reason for dynamic range than in other countries. In this environment, my 40m direct conversion CW transceiver with an NE602 performs adequately.

73,

Peter VK1PK


--------------------------------------------------------
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
--------------------------------------------------------

# 1037. Re: FM conversions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <33c67d30.10060835@news.sprynet.com>
Source record: 92508
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.shortwave

On Sun, 06 Jul 1997 18:43:51 GMT, Peter Neal <pneal@argonet.co.uk>
wrote:

>This is a posting for a friend who would be grateful for any help:
>
>I require any information on how to convert the following to FM.
>Realistick Navaho 40ch base.
>General electric 3805.
>President AR7.
>Colt 210.
>
>If anyone has any information can they please mail me.
>
>I apologize in advance if this posting is not suitable for this newsgroup.
>No mail on any other topic is welcome in any shape of form.
>
>
>--
> ? Everything I say is true - I'm not a compulsive liar ?
> ,_, ,_,
> ,[illegible](_) Soft Option : Peter Neal pneal@argonet.co.uk (_)[illegible],
> {_____) http://www.argonet.co.uk/business/pneal/softoption (_____}
> (( (( )) ))
>
Have you reseached the possibility of adjactent channel interference.
FM is a much wide mode of transmission than is AM.
Larry ve3fxq

# 1038. Re: FM conversions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <33c67d95.10161856@news.sprynet.com>
Source record: 92509
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.shortwave

On Sun, 06 Jul 1997 18:43:51 GMT, Peter Neal <pneal@argonet.co.uk>
wrote:

>This is a posting for a friend who would be grateful for any help:
>
>I require any information on how to convert the following to FM.
>Realistick Navaho 40ch base.
>General electric 3805.
>President AR7.
>Colt 210.
>
>If anyone has any information can they please mail me.
>
>I apologize in advance if this posting is not suitable for this newsgroup.
>No mail on any other topic is welcome in any shape of form.
>
>
>--
> ? Everything I say is true - I'm not a compulsive liar ?
> ,_, ,_,
> ,[illegible](_) Soft Option : Peter Neal pneal@argonet.co.uk (_)[illegible],
> {_____) http://www.argonet.co.uk/business/pneal/softoption (_____}
> (( (( )) ))
>
Have you considered looking into the 461 mhz family channel, to get fm
quality.

# 1039. Re: CABLE TV--FREE DECODER PLANS--

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <33C6F06C.612E49DA@acsu.buffalo.edu>
Source record: 92510

> Remember this is for educational purposes only, you still have to pay for
> the channels you view. I have to say that to protect myself for any
> liablity.
>
>
> For the Plans just send $ 2 or 2 Pounds to:
>
> Ed Hacker
> 409 Adams Street # 7
> Hoboken, NJ 07030
> USA
>
> The reason I charge two dollars is for the stamp, envelop, and paper your
> plans are on. I am doing this for you not for me to make money. Lets get
> real you cant buy much for two bucks. I am not in this for the money but to
> get back at the cable companys that over charge people.
>
> CABLE HANDBOOK ( Additional $2 )
>
CABLE TV--FREE DECODER PLANS--

*** get back at the post office....post the plans here! :-))

# 1040. Calculating Air-Core Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: slug@bbs.aeminium.pt
Message-ID: <5q5iop$l2@pc2.local.aeminium.pt>
Source record: 92511
Cross-posted to: rec.radio.amateur.homebrew,pt.rec.radio.amadorismo

Hello guys. If you are reading this on a Portugues newsgroup, sorry for
any inconvinience - if you don't understand something email-me.

So, my question is. Is there a better formula than this one:
( grabbed from ARRL Amateur Handbook 1995 page 6.22 )

L ( uH ) = ( d^2 * n^2 ) / ( 18 * d + 40 * l )
where
L - inductance
d - diameter
l - length
n - number of turns

to calculate Air-Core Inductors?
Formulas for different frequency ranges would be nice too.

I'm making a xForms X based cute program to make some simple calculations
( for now ) and need good formulas.For now the program displays a
xy plot graph that shows the response of a RLC resonant circuit with
variable parameters ( R, L, C ) which can be changed trough simple
controls.Some values like ressonant frequency, circuit Q, bandwidth
are calculated and has 3 more controls that change the diameter,length and
nr of turns.
All these values & calculation results are shown in a little box with
slide controls.

The source is C and its my first interesting & usefull xForms program.
The program is working very well now, but i'll add some more things, like
a menu to choose betwen cms or inches and so forth.So when i have it
finished i will make the upload.
The system that i'm working now is Linux 2.0.30, xForms 0.86,
gcc 2.7.2, X11R6.
I don't have much time to make this program but when i finish my exams i
will try to finish it.

Thank you for your attention!

--
Nuno Sucena
CT1FOX CQG9304 CQM9228 Eng.Electrote'cnica FCTUC
To reply by e-mail use "slug" as user and "cygnus.ci.uc.pt" as domain.
My web page & PGP sig are located at the same place.

# 1041. Updated Hardware Page for Homebrewers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: melus@www.esi.us.es
Message-ID: <slrn5sdajk.2d2.melus@bart.us.es>
Source record: 92512
Cross-posted to: comp.arch.embedded,sci.electronics.misc,rec.radio.amateur.homebrew

Hello!

I've updated my hardware page with some new boards.

http://www.esi.us.es/~melus/gwlelec.html

Some of what you can find there is:

Miscellany section
1.PIC16c84 PROGRAMMER via the PC printer port
2.PIC16c71 BOARD for AN557 plus 8 bit latched output port
3.8031 BOARD with 8K EPROM, 2K SRAM and RS232 untested!!
4.WB FM Receiver with TDA7000 and MONO AUDIO AMP
5.MODEM MANCHESTER 1200-38k4 bps (clock*64)
6.MONO AUDIO AMP with TDA2002

Enjoy!, and mail me your coments.

--

73's de Luis

mail: melus@esi.us.es
Ampr: eb7gwl.ampr.org [44.133.41.18]
AX25: EB7GWL@EA7MU.EACA.ESP.EU
http://www.esi.us.es/~melus/

# 1042. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33c56364.25388406@netnews.worldnet.att.net>
Source record: 92596

On Thu, 10 Jul 1997 08:30:43 -0700, measures@mail.vcnet.com (R. L. Measures ) wrote:

> The QST authors I know have been fairly supportive in the controversy over >my articles. Most of my grief has come from whining, wealthy QST >advertisers whose amplifier designs appear to have easily-fixed measurable >problems..

You fail to remember MOSt of the people who nixed your article and Handbook material had nothing to do with Ham radio manufacturing. The people published in the QST Technical Correspondence were people picked out of a stack of letters about an inch thick pointing out errors in your articles.

Two of the people were indirectly in the industry. I was one of those people ( I serve as a consulting engineer, and do some work for Ameritron and SEVERAL other amateur radio companies), and another was Reid Brandon (of Eimac).

Not that it's any of your business, but the majority of my income is from medical and industrial electronics and patent royalties. My true employer is C.T. "Tom" Rauch, he sets my hours and determines who I work for. You should try to get at LEAST one thing right when you whine in public.

Of the rest of the PUBLISHED contributors, one guy worked for NASA and another for a semiconductor manufacturer. Another worked for a non-amateur radiao related amplifier company out west.

You appear to be distorting facts badly, as anyone bothering to read the profiles in QST would know.

You also must know these few people, including myself, had nothing to do with the rejection of your Handbook material. That material was sent out to other people, and ALL of them returned unanimous "trash it" votes. One well known ex-Rockwell engineer who is published in engineering texts scrawled "don't waste your time with this" across the top and returned your article.

Instead of admitting the truth, you get in a public forum and publicly lie about who did what.

Of course some people will be gullible enough to believe you when you claim it was a personal grudge, while others will get out a few reference books and discover your articles were most likely rebuked because they were just plain incorrect.

The ARRL was VERY careful making sure they were wrong in printing your stuff, it takes monumental evidence to get them to retract anything they commited to publishing. Contrary to what you preach, it was many people... most not even involved with amateur radio in any way.... that nixed your articles.

They were nixed because they were nonsense, nothing more...nothing less. Claiming the ARRL is dishonest is just sour grapes, probably because your moment of fame ended when they FINALLY submitted your material for review. Their ONLY mistake was waiting until after they published you to do the technical accuracy check. That, and the way they handled the rebuttal, were the only flaws in the whole thing.

73 Tom

# 1043. Re: 100's of citcuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc8dae$4f0e62a0$7260b6cd@cbx-nt>
Source record: 92597
Cross-posted to: uk.radio.amateur,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,aus.radio.amateur.misc

Thanks!!!!

Great Page!!!

--
Christopher Cox
KC8FRJ
TRA#4901

Harry Lythall <lythall@ebox.tninet.se> wrote in article
<33C1A9E4.1DD4@no.where>...
> Hi all,
>
> My homepage is getting bigger and will continue to do so until
> Telenordia tell me I have run out of disk space on the server.
> You can find my homepage at:
>
> http://user.tninet.se/~acz732k/
>
> Amongst my constructional projects are:
>
> BASIC INFO FOR BEGINNERS
> How to solder
> Component identification
> tools
>
> ANTENNAS
> Remote tuning of tuneable antennas
> Basic dipole information
> Short antennas for the HF bands
> A balcony/terrace antenna (worked JA on it)
> Packing crate antenna
> Frame antenna
>
> RECEIVERS
> Cigar box HF receiver - uses battery valves
> IC HF receiver
> HF direct conversion receiver
> Regenerative HF receiver
> HF and VHF receiver using ZN414 (ZN416)
> Modifying domestic receivers for HF SSB
> Modifying domestic receiver for 160 meters

> Synthesized receiver
>
> TRANSMITTERS
> FM (88+108MHz) 'BUG' (can be modified for 30 MHz)
> 250mW HF bands CW TX
> 4 watt PS for the above
> 5 watt CW TX - dead easy to build
> CW TX using voltage regulator
> Single valve TX
> Two valve TX
> Cigar box transmitter (valve)
> 145MHz FM TX
> QRP SSB TX
> 3 watt linear 1 - 30 MHz
> Phasing method SSB exciter
> 500 watt linear amplifier
> April 1st transmitter
>
> USEFUL
> VHF NBFM Crystal RX based on a coffee tin
> 250vDC for valves using modern components
> Stereo enhancement for HF CW
> CW filters
> Self tuning CW filter
> Q-multiplier
> CW keyer using 'relay logic'
>
> DATA/INFORMATION
> QRP frequencies
> Measuring micropowers
> Making PCBs, several methods
> G0TLAs QRP circuit database on packet
> Coil winding and 'turns' calculation.
>
> DOWNLOADING
> Signal generator program
> All my QRP@WW circuits in a ZIP file
> PCB foil for BUG TX (later version)
> 'Adult' screen saver
>
> BREWING BOOZE
> Brewing beer, wine and 'mash'
> Distilling the mash (3 methods)
> Making liquours
>
> ---------- and more ----------
>
> I will be adding more to the homepage constantly, as long as
> I have the time available to do it.

>
> Have fun with QRP (and QRO) de Harry, SM0VPO, Upplands V&#65533;sby.
>
> ---------------------------------
> visit: HARRYs HOMEBREW HOMEPAGE
> http://user.tninet.se/~acz732k/
> Real Hams use a soldering iron!
>

# 1044. Re: Need PC board software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: Johan Bodin <sm6lkm.jbeab@swipnet.se>
Message-ID: <01bc8dd0$210dd580$369cf482@win95.swipnet.se>
Source record: 92598

Mark Mumaw <nu6x@sedona.net> skrev i inl�gg
<01bc86f4$81de4120$8650b6c6@nu6x.sedona.net>...
> I have designed a mixer/converter that allows the Kenwood SM220/SM230
> monitor scope to be used with the Yaesu FT1000MP or FT1000D. I have many
> request to make up a PC board and parts kit.
>
> I am looking for some inexpensive software to do the layout/artwork for
a
> simple printed circuit board. I'm looking for either shareware, something
> preowned, or a cheap new package.
>
> Can anyone help me?????
>
> I'm also looking for a company where I can have PC boards made in small
> quanities (50 - 100).
>
>
> Thanks .... Mark NU6X nu6x@sedona.net 520-284-6848
>

Try Protel Easytrax. It's free and has NO limitations at all. It is NOT a crippled demo. It is available for download directly from Protel. I don't remember the URL but try http://www.protel.com. If that doesn't exist, search for protel and easytrax on AltaVista.

Easytrax can produce output for a variety of printers, laser printers, plotters and Gerber/drill files as well. It is a DOS program. Protel released it to the public domain when they switched their products over to Windows.

73 de Johan Bodin / sm6lkm

Change sm9xyz in the email address below to my callsign (above). I don't like spamming...

email: sm9xyz.jbeab@swipnet.se
home: http://home4.swipnet.se/~w-41522/

# 1045. Taylor Modulation?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: k0qz@primenet.com
Message-ID: <5q4td1$56r@nntp02.primenet.com>
Source record: 92599

Does anyone in this newsgroup know how and why "Taylor Modulation" does what I remember being told it did? From What I can remember from the occasional mention of this AM modulation method in the late 50's and early 60's CQ and 73 magazines was that it was capable of up to as much as 400% positive modulation while keeping the negative modulation portion of the envelope below 100%.
Old handbooks and some old magazines have not given me any other information about this modulation method so I have no additional information. I understand that this is NOT hyesing modualtion but possibly used the same type of tube as the modulator (single ended) as the final amp used and worked very well... That is all I remember.
WHY?
Well, I was thinking about building an AM transmitter out of the mass of left over parts that I have managed to accumulate and thought it might make for an interesting conversation piece on the air if nothing else, so let me know what you know about it via e-mail and if you know where I can get some tech data on the method, please give me some input......

Thanks in advance.......Mike Baker K0QZ
k0qz@primenet.com

## 1046. WTB-Regen receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: "J. mullis" <jmul@iland.net>
Message-ID: <01bc8df6$2390e1a0$6de7f2cd@jmul>
Source record: 92600

I'm looking for a working homebrew Regenerative receiver,Email if you can help.
Thanks John N0EE

# 1047. Re: NEW i am, 2 qstns

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33c6467e.7877699@news.atl.bellsouth.net>
Source record: 92601

On 8 Jul 1997 22:35:15 GMT, hamm4fun@aol.com (Hamm4fun) wrote:
>A good swr readind does't always mean your anntena system is good.(a lossy
>coax can make your swr read nearly perfect (1:1). The best indication of
>how your antenna is working is how far you can talk locally.(no Skip)

A "flat" VSWR curve almost always means that there is *something wrong*
with your antenna system. The VSWR curve should show a pronounced
U shape as you plot it with respect to frequency. If it doesn't, I'd start
looking for the reason why.

Local groundwave range is one indicator that your antenna is working, but
you have to be careful on lower HF that you aren't looking at NVIS, IE
you're pumping your power nearly straight up and getting local coverage
via the near vertical return from the ionosphere. If you want maximum HF
range, you need to look at the energy you are directing at a low angle toward
the ionosphere. That's not easy to measure unless you have a field strength
meter equipped aircraft which can "fly the pattern" for you. So the next
best thing is to depend on reports from Dx stations. That can be confounded
by propagation factors, but it will give a useful indication of your pattern
if you keep a detailed log of the locations and reported signal strengths
of stations worked over a period of weeks.

NVIS generally doesn't apply in your case (CB), but it is something amateurs
operating on lower HF need to keep in mind. To check a CB antenna's pattern,
you can "run the radials" the way broadcast stations do. In other words, get a
friend with a mobile rig to go to various points around the compass from
your station, starting at one mile radius, and extending out to a 10 mile radius,
and plot signal strength readings on your station. When you plot signal contours
on a map from these readings, you'll have a very good idea how your antenna
is performing. When you make changes to the antenna system, run the radials
again and compare the contours with those you got on the first baseline run.
That'll tell you if your changes made an improvement or not.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 1048. Re: NEW i am, 2 qstns

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33C649AE.6DA4@ix.netcom.com>
Source record: 92602

all4all wrote:
> Hello reader,
> I am new at this and i have 2 questions,
> What does HAM mean !? ( i am on 27mc)
> And how can i messeaure that my major CB and antenna are well !? (i
> have a SWR(?) meter, with doubble display, one is swr, the other power
> in watts)
> Thanx, Barend
---
Howdy Barend For the origin of "Ham" go to URL:
http://web2.airmail.net/gerryc/newham/nhp9.html

For a discussion on SWR - go to URL:
http://pw2.netcom.com/~ac6v/pageA.html#SWR

Good Luck
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 1049. For Sale Or Trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: dave1@cardina.net
Message-ID: <33cab835.2601608@news.cardina.net>
Source record: 92603

1960ish Motorola FBI Field Radiophone

Portable batery powered transciever, phone handset with transmit button, TX/RX on 163.825 national FBI calling frequency. All tubes intact, functional, in excelent condition. Minor surface corosion on battery terminals, can be cleaned no problem.

Technical Specs:

12"x4"x6"
Handie-Talkie FM Radiophone
Motorola, Inc Chicago
Model H23-1
Serial # F-9054
RX 163.825
TX 163.825
Transmiter Type NU105

Best offer or trade for SSB CB, handheld scanner, or handheld 2m radio.

Michael
dave1@cardina.net

# 1050. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1107971010170001@news.vcnet.com>
Source record: 92604

In article <33c56364.25388406@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Thu, 10 Jul 1997 08:30:43 -0700, measures@mail.vcnet.com (R. L.
> Measures ) wrote:
>
> > The QST authors I know have been fairly supportive in the controversy over
> >my articles. Most of my grief has come from whining, wealthy QST
> >advertisers whose amplifier designs appear to have easily-fixed measurable
> >problems..
>
> You fail to remember MOSt of the people who nixed your article and
> Handbook material had nothing to do with Ham radio manufacturing.
...snip...
According to QST's Joel Klineman, N1BKE, the two people/copy-editors who nixed my 1995 ARRL Handbook manuscript were Dick Erhorn (Erhorn Technological Operations) and a person that Mr. Klineman said did not want for me to find out his or her identity. Eventually I discovered that the name/callsign of this person is Charles Thomas Rauch, Junior, W8JI. - So Messrs. Erhorn and Rauch have 'nothing to do with ham radio manufacturing'?

As I recall, a few months back, Mr. Rauch was firmly in charge of MFJ quality control and firmly in charge of MFJ engineering. :-). However, an even better laugh was the behind-the-scenes deal you tried to cut with me during the VHF parasitics debate to allow you to semi-gracefully exit. It was all over on 28 November, 1996, Tom---and you know it. Add a few ohms of ESR to Ls and VHF-Rp plummets. Wes' scientific measurements prove it. The series to parallel-equivalent calculations confirm it. ..... Your steed appears to be slightly deceased, Tom.
Rich---

--
--Rich-- . . . 805-386-3734, ag6k

# 1051. Re: VHF Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <jk2F0HA+9nxzEwrA@ddwyer.demon.co.uk>
Source record: 92605

In article <33C5740B.7802@rangers.lso.bellcore.com>, Harold Winard
<hw@rangers.lso.bellcore.com> writes
>I recall reading an article several years
>ago about building a crystal-radio set
>that could receive in the VHF range. Does
>anyone recall what magazine that article
>appeared in? If not, does anyone have
>information about such radios?
>
>Thanks,
>
>Harold
>K2HW
>hw@rangers.lso.bellcore.com
I have built a wide bandwidth "TRF" equivilent that demodulates AM
carriers over 100 to 600Mhz the deliberate low sensitivity and notches
to attenuate continuous powerful signals gives interesting listening.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 1052. CABLE TV--FREE DECODER PLANS--

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-11 00:00:00 UTC
From: Edward Witt <superted@worldnet.att.net>
Message-ID: <01bc8e48$8501abc0$537074cf@default>
Source record: 92606

Now you can get new plans to build a Cable Descrambler System, US and UK plans.

This is not the origonal Radio Shack plan (now obsolete), but a choice of six new up to date plans designed to work on any cable box in any area. Just send me details of which cable box you have and in what area you reside as the plan needed will vary area to area, and you will be able to view all premium and pay per view channels.

It works on all Cable Tv Systems. The parts to make the box cost appoximately $15 (depending on the plan) and you can find them at any local electronic part supplier( US Residents will be supplied with radio shack part numbers). British Sky Cable descrablers cost approx 20 Pounds. Remember this is for educational purposes only, you still have to pay for the channels you view. I have to say that to protect myself for any liablity.

For the Plans just send $ 2 or 2 Pounds to:

Ed Hacker
409 Adams Street # 7
Hoboken, NJ 07030
USA

The reason I charge two dollars is for the stamp, envelop, and paper your plans are on. I am doing this for you not for me to make money. Lets get real you cant buy much for two bucks. I am not in this for the money but to get back at the cable companys that over charge people.

CABLE HANDBOOK ( Additional $2 )

Everything you ever wanted to know about cable boxes. Includes a cross reference list for upgrading your box using upgrade converts, cubes, plug-in activators and service code-generators. Also explains general cable operation, this handbook is very COMPLETE, a must have!

TURN ME ON!

Turn on all your premium channels with nothing to buy.

The Notch Filter

A notch filter allows you to selectively descramble channels. For instance, if HBO is on channel 7 and Cinemax is on channel 14 or pay-per-view is on 22, you may build a notch filter to descramble each of those channels. This method is fairly simple to build; However, it requires several more parts than the Fifteen Dollar Box. This system will work on your cable system, no matter what frequency your cable system operates on. A cable box is NOT

REQUIRED, and parts cost in the range of $25-30 depending on how many channels pay channels you wish to descramble. NOTE: I used channel 7,14 and 22 as an example. Your premium services may be on other channels and the notch filter can be built for whatever channel your premium services are on. (between the range of 2-22) Parts can be purchased from a electronics wholesaler/retailer in your phone.

The Gated Sync is the Grand Daddy of descramblers (in band and out band). It can be configured to operate on your cable systems frequency. This system is for the serious home electronics buff. It is a bit more complex to build; However, it sells for a lot of money. And, it will descramble EVERY channel.

SSAVI was created by Zenith, and used by many Zenith converters. The system is very difficult to build, but it will descramble EVERY channel, and also sells for a lot of money. Novices should not attempt to build the SSAVI system.

FREQUENTLY ASKED QUESTIONS

What is a Descrambler?

A descrambler is a device that restores the picture and sound of a scrambled channel. In most cases, ALL channels which are scrambled will be restored.

Are Descramblers legal?

YES! It is legal to build, sell, ship, use, and own a descrambler; However, when you use a descrambler, it is your responsibility to notify the cable company that you are accessing their signal.

Do I need a converter from my cable company?

In most cases NO. A cable ready VCR or TV will work.

Is it difficult to build a descrambler?

Turn me on, the Fifteen Dollar Box, the Oak converter and the Foil method are very simple methods! The instructions provide step by step instructions. No special skill or knowledge are needed. The Notch filter is still fairly simple. The Gated Sync is not for the beginner, it requires electronics knowledge.

Can I build more than one?

YES! You may build as many descramblers as you want! They are legal to sell and demand fairly high prices!

Just send me details of which cable box you have and in what area you reside as the plan needed will vary area to area
For the Plans just send $ 2 or 2 Pounds to:

Ed Hacker
409 Adams Street # 7

Hoboken, NJ 07030
USA

CABLE TV--FREE DECODER PLANS--

# 1053. ! PROVEN PSYCHICS! TRY-IT-FREE! 1-800-677-8063

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: susan13@cybernex.net
Message-ID: <5q6ivs$5hk$5007@news.cybernex.net>
Source record: 92513

The Live Psychic Calling Center invites you to enjoy
a complete fifteen minute, live psychic reading with
no credit card charges. Try it Free on
1-800-677-8063. Adults over 18 only.

Dial now 1-800-677-8063

# 1054. Re: GPS antennae - Anyone know how to make one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: geoff <gefhor@bigpond.com>
Message-ID: <33c6ea19.0@139.134.5.33>
Source record: 92514
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.space

"John M. Franke" <j.m.franke@larc.nasa.gov> writes: > There was an article in QST magazine (Oct 95) by Harold Ward, W1GE on a
> patch antenna for GPS.
> It can also be found under:
> gpspatch.zip (11530 bytes) has a description and drawing for the
> construction of a simple patch antenna for GPS reception.
> at website:
> http://vancouver-webpages.com/peter/index.html
> Good luck,
> John
> j.m.franke@larc.nasa.gov
john
just for info i attempted to make one on following the details of
one i broke up... but it be a very fussy antenna to make ..
i now currently use another one off another unit.. but this one has
an low noise amp in side of it...
best of luck
geoff vk6npn
gefhor@bigpond.com

# 1055. TP 2180, TP 2320 datasheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: Eric Post <post@iaehv.nl>
Message-ID: <33C7D058.1FE4@iaehv.nl>
Source record: 92515

I'm looking for the datasheets of the following transistors :

TP 2180
TP 2320

Is there someone who can tell me where I can find these on the web ?
The transistors are used in a poweramplifier from an old Pye transceiver
operating around six meters.

Please reply via email to pe1mix@amsat.org

Thanks al lot,

Eric Post
PE1MIX

post@iaehv.nl
pe1mix@amsat.org

# 1056. Re: VHF Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: Chuck Wixson <cwixson@grfn.org>
Message-ID: <Pine.GSO.3.95.970712055024.5736H-100000@freenet.grfn.org>
Source record: 92516

On Thu, 10 Jul 1997, Harold Winard wrote:

> I recall reading an article several years
> ago about building a crystal-radio set
> that could receive in the VHF range. Does
> anyone recall what magazine that article
> appeared in? If not, does anyone have
> information about such radios?
>
> Thanks,
>
> Harold

Harold....

If a "few years ago" means about 20 - 25 years ago, there was an article in Popular Electronics about just such a device. They were listing it as a way to listen to LOCAL avaition freqs and as a non interferance way to listen while riding on comercial aircraft. Tiz all I remember.....

-Chuck, WD8DTH

## 1057. Norcal 38 Special

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: travis@vgernet.net
Message-ID: <33C7837E.7319@vgernet.net>
Source record: 92517

I've had a lot of fun with this rig but am looking for some modifications. The stuff on the Norcal Page is old-- no new mods. In particular, I would like to increase the selectivity a bit. Perhaps use it as a foundation for a multiband / VFO unit etc. Anyone know of any active discussions?? Thanks, Travis WA2JJF

# 1058. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33c77f28.304800@netnews.worldnet.att.net>
Source record: 92518

On Fri, 11 Jul 1997 10:10:17 -0700, measures@mail.vcnet.com (R. L. Measures ) wrote:

I wrote:
>> You fail to remember MOSt of the people who nixed your article and
>> Handbook material had nothing to do with Ham radio manufacturing.

You replied:
>...snip...
>According to QST's Joel Klineman, N1BKE, the two people/copy-editors who
>nixed my 1995 ARRL Handbook manuscript were Dick Erhorn (Erhorn
>Technological Operations) and a person that Mr. Klineman said did not want
>for me to find out his or her identity. Eventually I discovered that the
>name/callsign of this person is Charles Thomas Rauch, Junior, W8JI. - So
>Messrs. Erhorn and Rauch have 'nothing to do with ham radio manufacturing'?

No, I never reviewed your Handbook material. I did receive a copy of it to read from two independent sources, but the actual reviewers were several other people OUTSIDE the amateur radio industry. An example of how you "twist things" can be found by reading the actual byline of the QST Technical Correspondence.

As I said, most of the people who nixed your article and Handbook material had nothing to do with manufacturing. QST tried real hard to find independent sources, and the author and moderator of the Technical Correspondence column had nothing to do with amateur radio and wasn't known to any of the dozens and dozens of people who wrote to complain about the misinformation in the article.

The only reason why I made the Technical Correspondence pages was because I found more mistakes than most people. Many people found errors in the area they specifically delt with (i.e. semiconductors or tubes), but since I deal with many types of HFPAs on a daily basis I was in a better position to find the most mistakes.

It was kind of like finding the most Easter Eggs hidden in the bushes, hi.

I'm sure it would behove your home business of selling mods to blame it on the manufacturers or the ARRL, but that's just your pecuniary interests talking. The truth is in print, for all to see.

The ARRL's only mistake was not reviewing your material before granting you magizine space for theories that rival those about Elvis and the aliens following Hale-Bop.

Nice try though.

73 Tom

# 1059. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1207970854550001@news.vcnet.com>
Source record: 92519

In article <33c77f28.304800@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Fri, 11 Jul 1997 10:10:17 -0700, measures@mail.vcnet.com (R. L.
> Measures ) wrote:
>
> I wrote:
> >> You fail to remember MOSt of the people who nixed your article and
> >> Handbook material had nothing to do with Ham radio manufacturing.
>
> You replied:
> >...snip...
> >According to QST's Joel Klineman, N1BKE, the two people/copy-editors who
> >nixed my 1995 ARRL Handbook manuscript were Dick Erhorn (Erhorn
> >Technological Operations) and a person that Mr. Klineman said did not want
> >for me to find out his or her identity. Eventually I discovered that the
> >name/callsign of this person is Charles Thomas Rauch, Junior, W8JI. - So
> >Messrs. Erhorn and Rauch have 'nothing to do with ham radio manufacturing'?
>
> No,.. ...snip...

As I recall, you also denied what took place when you telephoned me after "Parasitics Revisited" was published in QST. As I recall, you also denied that the information I obtained from the Eimac personnel dept. on the alleged "R+D Engineering Manager" was real. You promised to publish a letter from Eimac setting the record straight. So far, zip. Next came the alleged Eimac Technical Bulletins on parasitics, which also never materialized.

Some folks tell the truth and some do not. Self-recognized "experts" (9/94 QST, p.72) seem to fit in the latter catagory.

--
--Rich-- . . . 805-386-3734, ag6k

# 1060. WTD. Mods for Kenwood R-1000 receiver??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: fritter@NOSPAMgeko.net.au
Message-ID: <5q8a4a$n5c@news.geko.net.au>
Source record: 92520

Hi All...
I'm looking for ANY mods for the Kenwood R-1000 receiver.
Anything would be great no matter how simple (or complex :)).

Thanks and 73's de Graeme.....
--
***Please remove NOSPAM from my Reply-To address when replying***
Graeme Frith VK2GDF
E-MAIL:fritter@geko.net.au snookie@geocities.com
HTTP://www.qsl.net/vk2gdf
HTTP://www.geocities.com/CapeCanaveral/Lab/2004/index.html
PACKET:VK2GDF@VK2XY.NSW.AUS.OC
PHONE:02 94565786 MOBILE:014616584
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

## 1061. Wanted Atlas 210 for parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <33C7C515.1BD5CF3F@acsu.buffalo.edu>
Source record: 92521

I need the cabinet for a project.
I also need the goofey DC connector on the back.
Will consider all conditions and degrees of completeness for the Atlas
210.

What do you have?

Jim(N2GO)

# 1062. Bird Model 43 Wattmeter and Slugs FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5q8psp$h76@news.teleplex.net>
Source record: 92522

Very Good condition Bird 43 with N type connectors
and the following elements:

100A 100watt 25-60Mhz
250C 250Watt 100-250Mhz
2500H 2500watt 2-30Mhz
1000A 1000watt 25-60 Mhz

The A type slugs work close at 7-28 mhz

$325 for all or will seperate the elements

Pat Bunn, N4LTA

# 1063. Re: 100's of citcuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: Daniel Treyer <treyer@uiuc.edu>
Message-ID: <33C7F559.5237@uiuc.edu>
Source record: 92523
Cross-posted to: uk.radio.amateur,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,aus.radio.amateur.misc

```
Harry Lythall wrote:
>
> Hi all,
>
> My homepage is getting bigger and will continue to do so until
> Telenordia tell me I have run out of disk space on the server.
> You can find my homepage at:
>
> http://user.tninet.se/~acz732k/
> visit: HARRYs HOMEBREW HOMEPAGE
> Real Hams use a soldering iron!

!!! Great Site !!!

73 de HB9XCC
```

# 1064. Re: VHF Crystal Sets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <33C852A0.4562@worldnet.att.net>
Source record: 92524

I recall that article, although I've long since lost my copy of it. As I recall, it was just a tuned circuit, followed by a simple amplifier. No local oscillator, hence no source for rfi that might cause problems with receivers in an airplane. The tuned circuit used a varactor as the capacitative element, and a pot controlled the voltage fed to it, allowing tuning over the range of 108-136mHz, or thereabouts.

Although it didn't have an oscillator, and shouldn't pose a problem for aircraft electronics, how would you ever convince the pilot?

# 1065. Nuts & Volts - Request Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-12 00:00:00 UTC
From: astone@erols.com
Message-ID: <33C7DDFF.510D@erols.com>
Source record: 92525

Perhaps someone who has access to back issues can help me out. I'm looking for a few specific articles going back to Dec. 96. The Feb. 97 issue has an article on buying used test equipment and the Dec. 96 issue has an article "How Much Scope is Enough" by Mazur. There's a follow-up article in Jan. 97 as well on Scopes. Will of course pay costs. Thanks for your help. Please email direct to astone@erols.com

73,

Ron (KA3J)

# 1066. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: rick@area.com
Message-ID: <5q9gjm$5nq$1@nixon.area.com>
Source record: 92526

In article <33C44583.5B22@sympatico.ca>, Yvon <rextel@sympatico.ca> wrote:
>I am trying to build a high temperature oven for a mechanical filter
>measuring 1.25''X 3/4''X 3/8''. The filter is placed in a metal box
>with plenty of room for insulation. I have tried many types of insulation
>material but I still have too much heath loss. Can any one suggest me
>a very efficient type of insulation material. My metal box is 2 X 2 X
>1.5 inches. Thanks. VE2 AUC <rextel@sympatico.ca>

The best you can do, without pulling a vacuum, is to simply use still
air as insulation. This is accomplished by making a "knife edge" support
structure out of PC board matl (w/o copper) or other plastic, such that
the conductive heat loss is negligible. Most plastics have 10 times the
thermal conductivity of still air, so that gives you an idea of what
you need to do. The thermal conductivity of still air is about 0.04
in MKS units, which have dimensions of watt-meter/degree C. You can
get low density polyurethane foams that are almost as good as still air.
For that matter, plain ordinary styrofoam is not all that bad. Perhaps
your expectations are unrealistic.

There are exotic insulations such as aerogels, glass spheres, and a
product called "min-K" that allow you to get below .04, but only if
you pull a vacuum, which I assume is not an option. You may want
to read my paper "The Theory of Zero Gradient Crystal Ovens"* for some
general ideas on ovens.

*(1997 IEEE International Frequency Control Symposium)

Rick Karlquist, N6RK
rick@area.com

# 1067. QST month? 1964 Wanted!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <33C88BA9.7DC0@pacbell.net>
Source record: 92527
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors

I'm looking for a 1964 issue of QST that featured a 60 watt 80 & 40 meter 60 watt transmitter using a 6146B final and a 6AGK7? oscillator... If you have this issue of QST, I would be very interested in obtaining it. I can be reached by sending me a reply by email or mail to my callbook address.
--
William A. Wetzel
http://www.dxnet.com/~n6rky
http://www.qsl.net/n6rky
http://home.pacbell.net/n6rky

# 1068. FS Heath SB101 & HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: sbrady@pce.net
Message-ID: <33c81fee.3202323@news.pce.net>
Source record: 92528

Heathkit Radios for sale!

I have four (4) radios for sale. Two are close to
working, 2 I havn't been able to get anything to happen.

SB-101 All tubes. Cosmetically good. 400 kc CW filter.

SB-101 All tubes. Very clean. 400 kc CW filter
Some audio & Receive. No Xmit.
I think this one just needs a good tune-up.

HW-101 All tubes. Very clean. 400 kc CW filter.
Receives but need tuning.
Transmits but needs tuning.
This may be the best one of the bunch.

HW-101 Most tubes. Seen better days. No filter
Havn't even tried to get this one going.

One HP-23 and Two HP23A power supplies, all working..

Box of spare LMO's, feet, dial parts, tubes, etc.

I'm selling all of above as package for $100.00 plus
shipping. The CW filters I know alone have been going
for $40-$50 each on the used market.

If intrested, please contact Shane, WB2WPM at:

(716) 675-5797
or sbrady@pce.net
or wb2wpm @ke2vw.#wny.ny.usa.na

I'm located outside of Buffalo, New York.

If your a fixer-upper and good with tubes radio's I
know you'll be able to get 2 of these up and running
in no time. The other 2 maybe too.

Thanks for reading, and hope to hear from you.

73, Shane WB2WPM

## 1069. 3-500Z Filament transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: g-riccio <gfriccio@capecod.net>
Message-ID: <01bc8f9e$d3550360$310ee6cd@default>
Source record: 92529

Looking to buy fil. xfrmer-------115ac pri./5Volt@30amp sec. Im
building linear amp,using pr of 3-500z tubes.Looking for other parts also;
chokes,hv caps, etc.Tell me wat u hve. TNX,73. Glenn ,KE1EJ
email; gfriccio@capecod.net

# 1070. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33c8e1d8.3600820@netnews.worldnet.att.net>
Source record: 92530

On Sat, 12 Jul 1997 08:54:55 -0700, measures@mail.vcnet.com (R. L.
Measures ) wrote:

>
>As I recall, you also denied what took place when you telephoned me after
>"Parasitics Revisited" was published in QST. As I recall, you also denied
>that the information I obtained from the Eimac personnel dept. on the
>alleged "R+D Engineering Manager" was real. You promised to publish a
>letter from Eimac setting the record straight. So far, zip. Next came
>the alleged Eimac Technical Bulletins on parasitics, which also never
>materialized.

Rich,

You claim you called Eimac and you were told Miklos (who disagrees
with you, and who you wanted to discredit) was never R and D
Engineering manager. Yet Eimac's policy, as is the policy of most
major and small corporations, is not to release ANY employee
information to total strangers over the phone.

I do have a letter here, signed by Eimac's personal director, that
Miklos was indeed R+D manager. To get that letter it was necessary to
have Buzz send Eimac a written statement authorizing release of his
employment history, because that is the firm policy of most employers
and the absolute policy of Eimac-Varian.

IMHO, if someone makes a mistake about one simple telephone
conversation he likely makes mistakes about many other things... as
you did with Marv Borne's "alleged" Al-1500 and other things like a
TL-922 that YOU KNEW was a antenna lightning arrestor failure you
blamed on a parasitic, and the owner "happened" to pop up and rebuke
your claims. You also made a mistake about Eimac telling you
parasitics caused grid problems in low power tubes, mixing a single
problem suspected in a UHF high power televison transmitting tube into
an 8877.

I believe you honestly think you hear what you claim to hear. That
does not mean, however, it really happened.

## 1071. *Small 20 amp PSU design.*

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: ajbinning@scotland.ftech.co.uk
Message-ID: <33cdf947.31360032@news.ftech.net>
Source record: 92531

My 20 amp PSU design web pages, accessed from my AMATEUR RADIO link,
are now updated with construction notes and circuit diagrams.

GM3XIJ
My E-mail: ajbinning@scotland.ftech.co.uk
My Web Page: http://www.ftech.net/~scotland/
Regards: ArthurB.

## 1072. Ranger Bible

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: Tomcat121356@webtv.net
Message-ID: <5qar17$o5g$1@newsd-111.bryant.webtv.net>
Source record: 92532

I have gone to the ranger bible
section and tried to get into the information
but cannot. It keeps bring up the poster
(name and password) I dont know what they are. Can anyone help me get
in.
Thanks

# 1073. FS: B&W coil stock <

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970713163700.MAA21332@ladder02.news.aol.com>
Source record: 92533

Have some coil stock for sale, I believe it is new and made by B&W. It is about 2" diameter and bout 7" long, about 16 or 18 wire, close spaced so there is lots of inductance. Have only a few. Would send one for $10 priority mail to your home.

Thanks.

Evan
K9SQG@AOL.com

# 1074. Circuit- 10 (15) watt HF linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: Harry Lythall <lythall@ebox.tninet.se>
Message-ID: <33C990CD.57A1@ebox.tninet.se>
Source record: 92534
Cross-posted to: uk.radio.amateur,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,aus.radio.amateur.misc

Hi all,

I have now added a QRP linear amplifier to the collection. It was designed as the final stage for my Phasing-type SSB exciter, but with over 30dB of gain it will make a lovely CW / SSB transmitter when used with a simple oscillator / driver. I have used it at 10 watts with my Grid Dip Oscillator (GDO) as a driver.

The hand-drawn PCB foil pattern is also included as a GIF file (drawn before I ever had a PC computer).

I am adding more circuits to my homepage constantly, as long as I have time available to do it. Have fun with QRP (and QRO).
Harry, SM0VPO (G4VVJ), Upplands V&#65533;sby, Sweden.

---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

# 1075. Re: 2m/70cm anti-duplexor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: dbill@uic.edu
Message-ID: <5q9pao$as6$1@piglet.cc.uic.edu>
Source record: 92535

Jason T. Zawodny - PCD ~ (jzawodny@pcocd2.intel.com) wrote:

: Here's the question, is there a filter arrangement or some other
: means to do the following... I have a Yeasu FT5100 with the duplexor built in,
: but to use it for psuedo base station use, I would like to be able to
: use beam antennas. They all appear (as I would expect) to be single band
: models. Even the Cushcraft "dual band" appears to have two feedpoints. So,
: is there an arrangement that will filter the output signal of the radio
: to the appropriate antenna and also allow both bands to be received????

: Thanks in advance..

: jtz

: --

: Jason T. Zawodny Summer Intern, PCD SLS Department
: Phone (916)356-9220 Loc:FM5-2-H2, MS FM5-45

# 1076. Xtal sockets for CR1A/AR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: hmiller@fix.net
Message-ID: <33c92956.1808477@news.fix.net>
Source record: 92536

Hello, this is Harry Miller KB6CGG in sunny California.
I am looking for xtal sockets CR-1A/AR xtals. They are
2-pin, .125" (1/8") pins. If you have any or know where I
can get some, please email me hk@fix.net
Tnx es 73 Harry KB6CGG

## 1077. Asian Ladies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: jacob <jacob@friesl.net>
Message-ID: <5qbbg4$rtk@halley.pi.net>
Source record: 92537

I've found the pefect site with nude Asian ladies.
Much more than you can find in any newsgroup.

http://home.pi.net/~sappie/playboy.htm

# 1078. Re: UCLA Amateur Radio Club, W6YRA, 50 Year Anniversary

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: joel <unit77@concentric.net>
Message-ID: <33C94F12.DFA06FDF@concentric.net>
Source record: 92538
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.policy

David Ditlow, KC6LDO wrote:

> x-no-archive: yes
>
> UCLA Amateur Radio Club Alumni, Past Members, and Current Members:
>
> The UCLA Amateur Radio Club, W6YRA, is celebrating it's 50 year
> Anniversary this year.
> I am trying to locate any/all past members in order to schedule a
> Reunion at the UCLA Radio Room, sometime later this summer.
>
> If you were ever a member of the UCLA Amateur Radio Club, please send
> me
> your e-mail address, or other contact info so you can be invited!!
>
> David Ditlow, KC6LDO
> President, UCLA Amateur Radio Club
> My address in the Callbook is current since 1992.
> email: ditlow@pacbell.net
>
> 73,
>
> Dave

CONGRATULATIONS!!!!

# 1079. Re: QST Call for Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1307971556350001@news.vcnet.com>
Source record: 92539

In article <33c8e1d8.3600820@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Sat, 12 Jul 1997 08:54:55 -0700, measures@mail.vcnet.com (R. L.
> Measures ) wrote:
>
> >
> >As I recall, you also denied what took place when you telephoned me after
> >"Parasitics Revisited" was published in QST. As I recall, you also denied
> >that the information I obtained from the Eimac personnel dept. on the
> >alleged "R+D Engineering Manager" was real. You promised to publish a
> >letter from Eimac setting the record straight. So far, zip. Next came
> >the alleged Eimac Technical Bulletins on parasitics, which also never
> >materialized.
>
> Rich,
>
> You claim you called Eimac and you were told Miklos (who disagrees
> with you, ...snip...

I have no information from Joseph P. Miklos. The only information is what
you alleged he said.

...
> I do have a letter here, signed by Eimac's personal director, ...snip...

--- signed by a "personal director", instead of a "personnel director".
Yeah, right

--
--Rich-- . . . 805-386-3734, ag6k

## 1080. varecs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: Dick <ke4ztp@n-jcenter.com>
Message-ID: <33C94E63.24F0@n-jcenter.com>
Source record: 92540

The Volusia County ARES/RACES Page is back up and operational!

The New Address is:
http://www.netpass.com/varecs

This page was down for awhile at an older address. The old address is not operational. If you currently have a link to VARECS at the former address (dbeach.com) please change it to the above (netpass.com). If you have taken down the link please put the new one up at your earliest convience.

Some new features include:
+ Frames
+ Image Maps
+ Music
+ Updated Links
+ The Amateur Radio Ring
+ And Many More Great Improvements

I invite everyone to check out our new page. Please spread this message to any newsgroups, mailing lists, packet BBS or any other meathod you see fit. If you have a or know of any ham radio pages, newsgroups, or any other information, that isn't on our link list please send them to kf4bia@n-jcenter.com. Personal pages are welcome along with skywarn, ares, races, civil defence, and any other ham radio related pages.

Thanks,

73

Richard Paczkowski Jr.
KF4BIA
Assistant EC
Volusia County

# 1081. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970713192048.13421B-100000@oso.slonet.org>
Source record: 92541

What aree you trying accomplish? Might be nice to know that first! Cliff
K7RR

On 13 Jul 1997, Richard Karlquist wrote:

> In article <33C44583.5B22@sympatico.ca>, Yvon <rextel@sympatico.ca> wrote:
> >I am trying to build a high temperature oven for a mechanical filter
> >measuring 1.25''X 3/4''X 3/8''. The filter is placed in a metal box
> >with plenty of room for insulation. I have tried many types of insulation
> >material but I still have too much heath loss. Can any one suggest me
> >a very efficient type of insulation material. My metal box is 2 X 2 X
> >1.5 inches. Thanks. VE2 AUC <rextel@sympatico.ca>
>
> The best you can do, without pulling a vacuum, is to simply use still
> air as insulation. This is accomplished by making a "knife edge" support
> structure out of PC board matl (w/o copper) or other plastic, such that
> the conductive heat loss is negligible. Most plastics have 10 times the
> thermal conductivity of still air, so that gives you an idea of what
> you need to do. The thermal conductivity of still air is about 0.04
> in MKS units, which have dimensions of watt-meter/degree C. You can
> get low density polyurethane foams that are almost as good as still air.
> For that matter, plain ordinary styrofoam is not all that bad. Perhaps
> your expectations are unrealistic.
>
> There are exotic insulations such as aerogels, glass spheres, and a
> product called "min-K" that allow you to get below .04, but only if
> you pull a vacuum, which I assume is not an option. You may want
> to read my paper "The Theory of Zero Gradient Crystal Ovens"* for some
> general ideas on ovens.
>
> *(1997 IEEE International Frequency Control Symposium)
>
> Rick Karlquist, N6RK
> rick@area.com
>
>

# 1082. PROGRAMMING RIB FOR MOTOROLA GP300 FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: Jerry Sturge <jerrys@jerrys.rogerswave.ca>
Message-ID: <5qbjpf$p5h@news.bc>
Source record: 92542

For Sale:

Programming Rib for MOTOROLA GP300.

Asking $100

## 1083. 6mtr ccts wanted homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-13 00:00:00 UTC
From: "H.J PAYNE" <howard@netcentral.co.uk>
Message-ID: <01bc8f90$da9b3a80$ecc23ec3@howard>
Source record: 92543

hi all
tnx for reading this

what iam looking for is homebrew 50mhz tx/rx synth
poss with ssb\fm and with pcb's

any help with tnx

e-mail me : howard@netcentral.co.uk
or leave here

tnx again
howard

# 1084. Re: Need help making chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: ibthebigma@aol.com
Message-ID: <19970714205600.QAA18930@ladder01.news.aol.com>
Source record: 92457

... I have a coil calculator that was found while searching the QRP - homebrew pages - (I don't remember where). Try:

(Insulated14 ga wire diameter estimate 0.072")
On 1 inch form, average winding depth 1.375", length 3.8 "
520 turns total gives L = 2 mH.

R should be about one half ohm.

Disclaimer: I have not *actually* built a coil from this calculator or know it's
accuracy.

# 1085. Re: Comb Generator versus Marker Generator

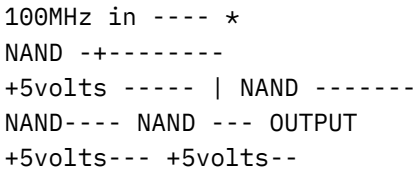
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5qecil$phg@hpcvsnz.cv.hp.com>
Source record: 92458

John Kolb (jlkolb@sd.cts.com) wrote:

(On generating a "comb" of marker frequencies:)

: Take the sq wave, and connect it to one input of a 74AS00 gate and
: also to an input of an inverter, a 74AS04, or another section of
: the 74AS00 with the inputs tied together. Tie the output of of the
: inverter to the other input of the 74AS00. Most of the time, input
: A will be high and B low or vice versa, and output Y will be high.
: Only when the oscillator switches from low to high, A will be high,
: and B will still be high because of the delay of the inverter will
: the output go low. Thus a narrow spike is created. It may be necessary
: to put 3 inverters in series to get the proper delay for this to work.

An infinitely narrow impulse repeated periodically will have a
spectrum of equal amplitude harmonics of the repetition frequency.
They extend out "forever" in frequency. If the pulse has width, the
comb will be multiplied by a sin(x)/x factor (assuming rectangular
pulses) which "zeros" the harmonics out far away from the fundamental.
The wider the pulse, the closer in the nulls come in the frequency
domain. So...to make harmonics out to as high a frequency as possible,
make the pulses as short as you can. Use a logic family with very fast
rise and fall times (ACT type stuff?? I'm not up on the fastest logic),
and use a single quad two input package like John suggests for all
the gates, so you don't have to worry so much about ground bounce.
Minimize the loading on each gate, to get the fastest possible rise and
fall times: keep leads very short, and minimize the number of inputs
each output drives, like so:




Note that there's an input buffer which gives fast edges to
next stage; "inverter" has one input tied high instead of
two driven inputs; output buffer may not be any advantage.
My experiments say a single NAND delay is plenty...more like
too much. You can put a small resistance in place of the wire
labeled with * to further shorten the pulse width by making the
inverted and direct paths more nearly equal. The resistance
causes a delay by virtue of the input capacitance of the third
NAND, which should be in the vicinity of 3pF, so resistance in
the low hundreds of ohms would be appropriate. "Dead bug" wiring
over a ground plane should work well for this.

--
Cheers,
Tom
tomb@lsid.hp.com

# 1086. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: Adrian Bayling <bayling@zetnet.co.uk>
Message-ID: <19970714232233776888@zetnet.co.uk>
Source record: 92459

In message <5q9gjm$5nq$1@nixon.area.com>
rick@area.com (Richard Karlquist) writes:

> In article <33C44583.5B22@sympatico.ca>, Yvon <rextel@sympatico.ca> wrote:
> >I am trying to build a high temperature oven for a mechanical filter
> >measuring 1.25''X 3/4''X 3/8''. The filter is placed in a metal box
> >with plenty of room for insulation. I have tried many types of insulation
> >material but I still have too much heath loss. Can any one suggest me
> >a very efficient type of insulation material. My metal box is 2 X 2 X
> >1.5 inches. Thanks. VE2 AUC <rextel@sympatico.ca>

> The best you can do, without pulling a vacuum, is to simply use still
> air as insulation. This is accomplished by making a "knife edge" support
> structure out of PC board matl (w/o copper) or other plastic, such that
> the conductive heat loss is negligible. Most plastics have 10 times the
> thermal conductivity of still air, so that gives you an idea of what
> you need to do. The thermal conductivity of still air is about 0.04
> in MKS units, which have dimensions of watt-meter/degree C. You can
> get low density polyurethane foams that are almost as good as still air.
> For that matter, plain ordinary styrofoam is not all that bad. Perhaps
> your expectations are unrealistic.

> There are exotic insulations such as aerogels, glass spheres, and a
> product called "min-K" that allow you to get below .04, but only if
> you pull a vacuum, which I assume is not an option. You may want
> to read my paper "The Theory of Zero Gradient Crystal Ovens"* for some
> general ideas on ovens.

> *(1997 IEEE International Frequency Control Symposium)

> Rick Karlquist, N6RK
> rick@area.com

I agree with the comments on still air, with the emphasis on still.
Some light material can help reduce loss through convection currents
and you can do much worse than dry paper matrix in this respect. Try
putting some news print through the liquidiser, but don't cut it up
too small,or pack it in too tight.
Adrian, G4AZS.

# 1087. Message not deliverable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: IMCEACCMAIL-Administrator+20at+20HQS3@ncr.disa.MIL
Message-ID: <199707140900.CAA23750@mailbox1.ucsd.edu>
Source record: 92460

```
This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------ =_NextPart_000_01BC9012.B0AFBED0
Content-Type: text/plain

------ =_NextPart_000_01BC9012.B0AFBED0
Content-Type: application/ms-tnef
Content-Transfer-Encoding: base64

<encoded_portion_removed>
/NARiL8AoCSYyinqIQ==

------ =_NextPart_000_01BC9012.B0AFBED0--
```

## 1088. Beaware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: fgb@stp.org
Message-ID: <5qdvr9$86p$15@charlotte.aracnet.net>
Source record: 92461

Angered Research Expert, Legal Asst. Tells "The rest of
The Story" - Declares WAR ON THE NET!!! -- Demands to
know why WIRED failed to tell *The Full Story* About the
"Flying Saucier"... Freaks vs. Enlow?

THERE WAS SO MUCH MORE TO TELL...

http://163.125.3.231/spamwar.html

## 1089. Help Marine antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: Alan Hackney <aln@any.net>
Message-ID: <33CA3B02.4008@any.net>
Source record: 92462

I live on the Kentucky river , Trying to come up with a 2mtr antenna
design that can hold up to the elements (trashed my whip on a tree
branch yesterday ) !
question >would a screen door spring (non painted) work as a ground
section of a center fed whip , or eaven as a driven element ?
Seems like as long as the coils are shorted together the electrical
length would be as if it were solid ?

Any Ideas E-mail me .
aln@any.ney KE4OOI
Thanks

# 1090. $$$$$$$ LOAN BUSINESS, EASY MONTHLY INCOME, NO BRAINER $$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: a9@a.a
Message-ID: <33c97bd8.0@news.unibe.ch>
Source record: 92544

I have participated in the standard "Please put me on your mailing list" letter and found it to be worth
my time (I get 1 or 2 handfulls or letters every day) but I also found that it's results were nowhere
near what I expected due mainly to people not sending in the money but rather spreading the letter
without paying for it. I participated in that mainly as an experiment and found that there are a
tremendous amount of people willing to do it. I thought about how to, first, eliminate the "non-pay"
problem and, second, to create a monthly income. I came upon the solution and decided to start a new
program. I decided that there were 3 things that this new program needed in order to work for everyone
and they were: 1.) It needed to be very simple and easy for anyone to do, and, 2.) It needed to be
inexpensive enough for even the poorest of people, and, 3.) It needs to be DUPLICATABLE. I think you
will find this program to meet those requirements. I have put lots of thought into it and I ask that you
PLEASE do NOT modify it. This WILL WORK if you follow it. This system is based on the unconditional
"loaning" of money to people. Simply say, "I am loaning you this $2 as an act of goodwill to help you in
your financial need, you may pay me back if and when you can." You should find 5 or more people who will
send $2 to the 5 needy people on this list AND MAINTAIN 5 or more people who will do the same. You
should put your name on postition number 5 and move each of the other names up one position. The name
originally on position number 1 gets removed. You should be able to contact each of your 5 or more
people to see if they are going to be active this month. If not then you need to find one or more people
to be active in order to maintain at least 5. I am not speaking about the 5 people on the list but
rather the 5 new people you have found. I would highly suggest having more than 5 in any given month.
Now I know that this would be extremely easy to do since I can think of at least 20 people myself who
will do this consistently. The key is to maintain at LEAST 5 active people. If you don't then you can't
expect for the rest of the people to do it either and you can't expect for this system to work. This

system is a no-brainer, and if someone can't afford the $10 + stamps for this then they truly ARE in
need! It is OK to use the internet to find people but I think it would be easier to find them through
people that you know. This way it will be easier for you to contact them every month to ask about their
being active, unless someone is willing to give you their e-mail address. Here are some numbers:

---

Monthly income model per level and total for maintaining 4 active members @ $2 each:

Level 1: $2 x 4 people = $8, Total now $8
Level 2: $2 x 16 people = $32, Total now $8 + $32 = $40
Level 3: $2 x 64 people = $128, Total now $8 + $32 + $128 = $168
Level 4: $2 x 256 people = $512, Total now $8 + $32 + $128 + $512 = $680
Level 5: $2 x 1024 people = $2048, Total now $8 + $32 + $128 + $512 + $2048 = *** $2728 ***

Yearly income: $2728 x 12 months = $32,736

---

Monthly income model per level and total for maintaining 5 active members @ $2 each:

Level 1: $2 x 5 people = $10, Total now $10
Level 2: $2 x 25 people = $50, Total now $10 + $50 = $60
Level 3: $2 x 125 people = $250, Total now $10 + $50 + $250 = $310
Level 4: $2 x 500 people = $1000, Total now $10 + $50 + $250 + $1000 = $1310
Level 5: $2 x 2500 people = $5000, Total now $10 + $50 + $250 + $1000 + $5000 = *** $6310 ***

Yearly income: $6310 x 12 months = $75,720

---

Monthly income model per level and total for maintaining 6 active members @ $2 each:

Level 1: $2 x 6 people = $12, Total now $12
Level 2: $2 x 36 people = $72, Total now $12 + $72 = $84
Level 3: $2 x 216 people = $432, Total now $12 + $72 + $432 = $516
Level 4: $2 x 1296 people = $2592, Total now $12 + $72 + $432 + $2592 = $3108
Level 5: $2 x 7776 people = $15552, Total now $12 + $72 + $432 + $2592 + $15552 = *** $18660 ***

Yearly income: $18660 x 12 months = $223,920

---

Monthly income model per level and total for maintaining 7 active members @ $2 each:

Level 1: $2 x 7 people = $14, Total now $14
Level 2: $2 x 49 people = $98, Total now $14 + $98 = $112
Level 3: $2 x 343 people = $686, Total now $14 + $98 + $686 = $798
Level 4: $2 x 2401 people = $4802, Total now $14 + $98 + $686 + $4802 = $5600
Level 5: $2 x 16807 people = $33614, Total now $14 + $98 + $686 + $4802 + $33614 = ***

$39214 ***

Yearly income: $39214 x 12 months = $470,568

---

Keep in mind that it does not matter what day of the month that someone chooses to be active. It DOES
matter that they are active on that day EVERY month. The key to this is DUPLICATION! You must treat this
as a business. If you treat it like a hobby that is how it will treat you. You could even organize small
meetings with your people and their prospects and work with your leaders.
Think of how easy this would be for you, how reasonable this is, and of how good the chances are of it
working for you. You may need to hire someone to open all the envelopes.

NOTE: I decided on $2 instead of $1 because it is more feasible and it won't matter much for someone to
send $2 as opposed to $1. Also I was against $5 as that becomes too expensive to duplicate.

Mail $2 every month with a piece of paper saying "I am loaning you this $2 as an act of goodwill to help
you in your financial need, you may pay me back if and when you can" to the following needy people:

#1 Robert Jezil
114 Jefferson Ave.
Slidell, LA 70460

#2 Phil Walther Jr.
9495 Annapolis Lane North
Maple Grove, MN 55369

#3 C. E. Burkman
170 University Ave. W
Suite 12-129
Waterloo, Ontario
N2L 3E9

#4 A. Bailey
1207 Reeves Road
Plainfield, IN 46168

#5 J. Martin
P.O. Box 2292
Reston, Va. 20195

# 1091. $$$ NEW SYSTEM, BETTER THAN "ADD ME TO YOUR MAILING LIST" $

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: a6@a.a
Message-ID: <33c9aa43.0@news.unibe.ch>
Source record: 92545

I have participated in the standard "Please put me on your mailing list" letter and found it to be worth
my time (I get 1 or 2 handfulls or letters every day) but I also found that it's results were nowhere
near what I expected due mainly to people not sending in the money but rather spreading the letter
without paying for it. I participated in that mainly as an experiment and found that there are a
tremendous amount of people willing to do it. I thought about how to, first, eliminate the "non-pay"
problem and, second, to create a monthly income. I came upon the solution and decided to start a new
program. I decided that there were 3 things that this new program needed in order to work for everyone
and they were: 1.) It needed to be very simple and easy for anyone to do, and, 2.) It needed to be
inexpensive enough for even the poorest of people, and, 3.) It needs to be DUPLICATABLE. I think you
will find this program to meet those requirements. I have put lots of thought into it and I ask that you
PLEASE do NOT modify it. This WILL WORK if you follow it. This system is based on the unconditional
"loaning" of money to people. Simply say, "I am loaning you this $2 as an act of goodwill to help you in
your financial need, you may pay me back if and when you can." You should find 5 or more people who will
send $2 to the 5 needy people on this list AND MAINTAIN 5 or more people who will do the same. You
should put your name on postition number 5 and move each of the other names up one position. The name
originally on position number 1 gets removed. You should be able to contact each of your 5 or more
people to see if they are going to be active this month. If not then you need to find one or more people
to be active in order to maintain at least 5. I am not speaking about the 5 people on the list but
rather the 5 new people you have found. I would highly suggest having more than 5 in any given month.
Now I know that this would be extremely easy to do since I can think of at least 20 people myself who
will do this consistently. The key is to maintain at LEAST 5 active people. If you don't then you can't
expect for the rest of the people to do it either and you can't expect for this system to work. This

system is a no-brainer, and if someone can't afford the $10 + stamps for this then they truly ARE in
need! It is OK to use the internet to find people but I think it would be easier to find them through
people that you know. This way it will be easier for you to contact them every month to ask about their
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Yearly income: $6310 x 12 months = $75,720

---

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Level 4: $2 x 1296 people = $2592, Total now $12 + $72 + $432 + $2592 = $3108
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Level 4: $2 x 2401 people = $4802, Total now $14 + $98 + $686 + $4802 = $5600
Level 5: $2 x 16807 people = $33614, Total now $14 + $98 + $686 + $4802 + $33614 = ***

$39214 ***

Yearly income: $39214 x 12 months = $470,568

---

Keep in mind that it does not matter what day of the month that someone chooses to be active. It DOES
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meetings with your people and their prospects and work with your leaders.
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working for you. You may need to hire someone to open all the envelopes.

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send $2 as opposed to $1. Also I was against $5 as that becomes too expensive to duplicate.

Mail $2 every month with a piece of paper saying "I am loaning you this $2 as an act of goodwill to help
you in your financial need, you may pay me back if and when you can" to the following needy people:

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#3 C. E. Burkman
170 University Ave. W
Suite 12-129
Waterloo, Ontario
N2L 3E9

#4 A. Bailey
1207 Reeves Road
Plainfield, IN 46168

#5 J. Martin
P.O. Box 2292
Reston, Va. 20195

## 1092. For sale or trade, FM transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: dave1@cardina.net
Message-ID: <33c9a781.12291906@news.cardina.net>
Source record: 92546

I have an old tube type portable batery powered Motorola FM field phone, removed from service by the FBI. Originaly designed to RX and TX on 163.825 Mhz, It is still fully functional. Has sub-miniature tubes, all parts intact.

For you scroungers, its FM transmiter is type NU105.

Best Offer

Michael
dave1@cardina.net

# 1093. ++++NEED HELP WITH RC CIRCUITS++++

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970714142101.KAA23283@ladder02.news.aol.com>
Source record: 92547

Hi,

I know that an RC circuit is a resistor and capacitor, and I believe that it can be used to delay a voltage from reaching a certain point after the RC circuit, or that it can be used to lengthen the time that a voltage remains in a circuit after the RC circuit. I have a power supply feeding current to a transmitter. This current is for control purposes only. The transmitter is fed by a seperate dedicated supply, but the control currents (there are 2), when there, key the transmitter, and when not there, the tranmitter is unkeyed. I would like a circuit that I can use to lengthen the time that the control voltages are present on the 2 control wires, one feeding 9.5 volts, and the other 12.5 volts. The delay should be between 2 and 3 seconds. If you can help me with this type of circuit, and/or provide me with the equation to figure out the delay as a function of resistance and capacitance, please let me know by E-Mail.

Thanx
Mike

# 1094. Nuts & Volts - Request Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9707140304047164@atdbbs.com>
Source record: 92548

>>...articles going back to Dec. 96 / Feb. 97...

Nuts & Volts is produced ten miles from me in Corona, CA.
If no one else has what you need, please let me know!

---
Clint Bradford, KE6LCS/KAF3359 909.681.6210 Voice sysop@atdbbs.com
ATTENTION to Details 909.681.6221 BBS ftp@atdbbs.com
---

# 1095. RE: Nuts & Volts - Request Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9707140304047165@atdbbs.com>
Source record: 92549

>>...Dec. 96 and Feb. 97...

Nuts & Volts is literally down the road from me...Corona, CA.
If no one else comes up with what you need, lemme know - I can
run down and grab the back issues for you.

---
Clint Bradford, KE6LCS/KAF3359 909.681.6210 Voice sysop@atdbbs.com
ATTENTION to Details 909.681.6221 BBS ftp@atdbbs.com
---

# 1096. Barebones Superhat @ N2CQR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33c9fa0f.831948@news.erols.com>
Source record: 92550

Homebrewers: I got my version of the Barebones Superhet (June 82 QST) finished this weekend. It really sounds great. Compares very favorably to my Drake 2-B and the receiver in my HW-101. VERY stable. I'm using one 3.579 mhz crystal as the IF filter. A bit broad for CW, but it makes the SSB signals sound wonderful. I can now swing the VXO rocks about 20 Kc and I have crystals to tune 14.031-14.051 and 14.195-14.217. EA3OT from Barcelona fills the room with FB SSB audio. Building and using my first HB transmitter was a real thrill, but I think that the satisfaction that comes from listening to this little reciever is even better. I should be making QSOs by next weekend.

I have a few little problems. Maybe someon i nthe group could suggest solutions.

Sluggish VXO: It runs fine once it gets oscillating, but every now and then when I turn on the receiver, the VXO doesn't start oscillating until I touch the crystal. Seems like it needs a little pus to get it going. Any ideas?

WIAW in the IF. I'm wondering if the selection of the 3.579 IF wasn't part of some ARRL plot! (Just kidding!) While tuning 20 meters, I can hear (faintly) WIAW's 80 meter bulletins and code practice coming through. I suppose a simple bandpass filter would help...

Thanks, 73 Bill N2CQR

# 1097. Xtal sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: hmiller@fix.net
Message-ID: <33ca4ef2.920772@news.fix.net>
Source record: 92551

I have found sockets for the CR-1A/AR xtals. Tnx es
73 Harry Miller KB6CGG

## 1098. VHF Oscillator schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: thall@mmm.com
Message-ID: <NEWTNews.868892259.19425.Postmaster@monarch>
Source record: 92552

Does anyone out there know of any schematics for radio tracking collar type VHF oscillators?

Opinions expressed herein are my own and may not represent those of my employer.

# 1099. Pioneer HiFi - need to modify to use a mic'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: N.M.Marsh1@student.derby.ac.uk
Message-ID: <5qc63c$ili@unix3.derby.ac.uk>
Source record: 92553

I have a Pioneer Hi Fi (circa 1989) system and would like to make microphone recordings on the twin Cassette Deck (CT-Z 360 WR), however there' no facility to do so. The only connection on the deck is a 28 pin ribbon cable that goes to the amplifier (A-Z 360).

Can someone advise me the how to modify the unit ?.

Given the details I'm competent enough to make up a circuit and install it myself.

If it helps the Laser Disc & VCR left/right input phono sockets on the rear of the amp are not used.

A recommendation for microphones of reasonable quality and price will be useful too.

Thanks in anticipation of your response.

Neil Marsh

## 1100. CR-1A/AR xtal sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: hmiller@fix.net
Message-ID: <33ca57b6.3164759@news.fix.net>
Source record: 92554

Hello, this is Harry Miller KB6CGG in California. The sockets
I am looking for have a 1/2" pin spacing and the pins are
1/8" or .125" diameter. I have found 3, but, need more. If
you have any or know where I can get some, please let
me know via email hk@fix.net tnx es 73 Harry

## 1101. Need help making chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: voicebox@dnai.com
Message-ID: <voicebox-1407971141510001@dnai-207-33-180-161.dialup.dnai.com>
Source record: 92555
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I need help making a couple of 2mH air-core chokes. This is for an experiment with audio frequencies and currents, so I need to make them out of stout wire (probably 14ga solid copper, insulated). They need to be somewhat adjustable by hand (spreading out the coils).

Can someone give me some dimension guidelines for these? It will be easy to know when they are tuned (waveform on the o'scope will peak, so say the instructions), so great accuracy isn't required.

I am a non-radio electronics amateur who knows the consequences of breaking ohms law :-)

Any help will be greatly appreciated. Direct e-mail replies, doubly so.

Thanks.

Enjoy,
Dave
--
Dave Carpenter
Sound Logic

## 1102. Subject: Amateur Radio Mailing Lists (partial summary, long)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-14 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33CA505F.3EC@primenet.com>
Source record: 92556

```
Subject: Amateur Radio Mailing Lists (partial summary, long)

Below is a list of mailing lists at QSL.Net and Contesting.Com

TO: majordomo@qsl.net >or< majordomo@contesting.com
SUBJECT:
BODY: subscribe listname

Mailing Lists (Reflectors) At QSL.Net

50mhz 6 Meters only
50mhz-digest
alinco Alinco
alinco-digest
aprs APRS
aprs-digest
ares-races ARES-RACES
ares-races-digest
bcvhfa Butler County VHF Assn.
bcvhfa-digest
bitbucket The BitBucket
bitbucket-digest
bpsk BPSK/DSP Weak-Signal Detection
bpsk-digest
cw CW Amateur Radio List-Server
cw-digest
emwin Emergency Manager's Weather Information Net
emwin-digest
flares Florida ARES
flares-digest
forsale-swap ForSale/Swap/Wanted
forsale-swap-digest
fox_tango Fox-Tango
fox_tango-digest
georgia-skywarn Georgia Skywarn
georgia-skywarn-digest
greenland-97 **1997 NASA mission to Iceland/Greenland**
PRIVATE
greenland-97-digest
ham-books HAM-BOOKS Amateur Radio List-Server
ham-books-digest
ham-software HAM-SOFTWARE Amateur Radio List-Server
ham-software-digest
handi-hams Handicapped Hams
handi-hams-digest
```

homebrew Homebrew Amateur Radio List-Server
homebrew-digest
icom Icom User's Amateur Radio List-Server
icom-digest
kenwood Kenwood Amateur Radio List-Server
kenwood-digest
laser Free Space Laser Communications List-Server
laser-digest
list-owner-info
marcnet Marin Amateur Radio Club
marcnet-digest
marrn MARRN Amateur Radio
marrn-digest
meteor-scatter Meteor Scatter Amateur Radio
meteor-scatter-digest
mnqrp MNQRP Amateur Radio
mnqrp-digest
mobile-portable MOBILE-PORTABLE Amateur Radio
mobile-portable-digest
newsvhf North East Weak-Signal VHF
newsvhf-digest
nlrs Northern Lights Radio Society
nlrs-digest
packet-pbbs Packet and PBBS Amateur Radio
packet-pbbs-digest
park PARK Amateur Radio List-Server
park-digest
ppares Pikes Peak ARES Amateur Radio
ppares-digest
ppraanet Pikes Peak Radio Amateur Assn.
ppraanet-digest
programit PROgramit Amateur Radio
programit-digest
qsl-net Private Amateur Radio
qsl-net-digest
serc Sarasota Emergency Radio Club
serc-digest
skywarn SkyWarn Amateur Radio
skywarn-digest
smirk SMIRK Amateur Radio
smirk-digest
srqares SRQARES Amateur Radio
srqares-digest
sstv-atv SSTV and ATV Amateur Radio
sstv-atv-digest
vaafmars Virginia AFMARS Amateur Radio
vaafmars-digest
vintage-radio Vintage Radio and AM
vintage-radio-digest
wsvhf International Weak-Signal VHF

wsvhf-digest
wswss Western States Weak-Signal Society
wswss-digest

Mailing Lists (Reflectors) At Contesting.Com

3830 3830 Score Reporting Reflector
3830-digest
amps RF Amplifier Discussion List
amps-digest
cq-contest CQ Contest Mailing List
cq-contest-digest
kids Kid's Day Operating Event Reflector
kids-digest
stewperry Stu Perry TopBand Distance Contest Reflector
stewperry-digest
svhfs SE VHF Society Mailing List
svhfs-digest
tentec TenTec Amateur Radio Mailing List
tentec-digest
topband Top Band Reflector
topband-digest
towertalk Tower Talk Reflector
towertalk-digest
trlog TRLog Mail Reflector
trlog-digest
yaesu Yaesu Amateur Radio Mailing List
yaesu-digest
yccc Yankee Clipper Contest Club Reflector
yccc-digest

## 1103. Icom F-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5qeel4$6km@hplms2.hpl.hp.com>
Source record: 92463
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.ham-radio

Looking for information on how to field program
the new Icom F-3 commercial radio.

--
Joseph Kral
Hewlett-Packard Laboratories
kral@hpl.hp.com

# 1104. Re: Taylor Modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33caba82.3766701@news1.mnsinc.com>
Source record: 92464

On 11 Jul 1997 02:12:01 -0700, k0qz@primenet.com (Mike Baker) wrote:

>Does anyone in this newsgroup know how and why "Taylor Modulation"
>does what I remember being told it did? From What I can remember from
>the occasional mention of this AM modulation method in the late 50's
>and early 60's CQ and 73 magazines was that it was capable of up to
>as much as 400% positive modulation while keeping the negative
>modulation portion of the envelope below 100%.
>Old handbooks and some old magazines have not given me any other
>information about this modulation method so I have no additional
>information. I understand that this is NOT hyesing modualtion but
>possibly used the same type of tube as the modulator (single ended) as
>the final amp used and worked very well... That is all I remember.
>WHY?
>Well, I was thinking about building an AM transmitter out of the mass
>of left over parts that I have managed to accumulate and thought it
>might make for an interesting conversation piece on the air if nothing
>else, so let me know what you know about it via e-mail and if you know
>where I can get some tech data on the method, please give me some
>input......
>
>Mike Baker K0QZ

Don Hoisington, (W4CJL or W4CJY?) in Florence, AL wrote an article on
a practical transmitter like this in CQ magazine in I believe 1953.
Reprint of the article are still floating around, and "Hoisy" is still
with us and opertaing such rigs!

## 1105. Pye Westminster Transceivers for sale.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: sdhe@aol.com
Message-ID: <19970715134700.JAA07507@ladder01.news.aol.com>
Source record: 92465

I have a few ex-council PYE WESTMINTERS for sale.
Convertible to other frequencies?

Comes complete with speaker, mic, control box, 'rubber duck' antenna. All
you need to get going!

See web page for ordering details.

http://members.aol.com/sdhe

Goto the 'Surplus Goods' section.

# 1106. Re: Icom F-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <33cb72f0.1826622@news.cmc.net>
Source record: 92466
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.ham-radio

On 15 Jul 1997 00:01:40 GMT, kral@hpl.hp.com (Joseph Kral) wrote:

>
>
>Looking for information on how to field program
>the new Icom F-3 commercial radio.
>
>
>--
>Joseph Kral
>Hewlett-Packard Laboratories
>kral@hpl.hp.com
You need the EX1961 software and OPC-478 cloning cable

Gary
THIS REPLY DOES NOT REPRESENT ANY OFFICIAL POSITION of
MY EMPLOYER. It represents only MY PERSONAL opinion.

# 1107. Scavanged OLD radio, SSB Filter(?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: maroof@triton.kaifnet.com
Message-ID: <33caaa07.3226359@news.kaifnet.com>
Source record: 92467
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components

Found this in an old SSB radio. I think it's some kind of an SSB filter set. It has two parts:

1. VERNITRON
TL-720-2
7605
...This is a three terminal component, looks like a double ended electrolytic capacitor with the body acting as third terminal.

2. Vernitron
TF 720-2
... This is a 2 terminal component, looks like a ceramic resonator.

In the original circuit board, part(2) was connected terminating one end of part(1).
Can anyone give any idea what kind of filter this is, How to use it, any specs?

## 1108. IF amp specs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: maroof@triton.kaifnet.com
Message-ID: <33caa9c6.3161791@news.kaifnet.com>
Source record: 92468
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components

Hi,

I'm looing for specs or data sheets of PLessey SL612C & SL610 IF amplifiers.
Looking for something close of enough to replace them.

Maroof

# 1109. Looking for DTMF keypad

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: voicebox@dnai.com
Message-ID: <voicebox-1507970751210001@dnai-207-33-180-161.dialup.dnai.com>
Source record: 92469
Cross-posted to:
sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.misc,comp.dcom.telecom.tech

I need a DTMF (i.e. telephone) keypad. The 12-key keypad needs to be self-contained (all electronics within the borders of the keys, not spread out on a circuit board larger than the keypad itself). It must be able to be powered from the telco line power; no room for batteries.

Any suggestions? Do you know of any keypads from some telephone/ radio equipment you've seen that might fit my needs? I'm upgrading an old dial-type telecom test set to a tone-type, and the keypad needs to fit within the space that the dial takes up.

Thanks for any help you can offer. Direct e-mail replies are doubly appreciated.

Enjoy,
Dave
--
Dave Carpenter
Sound Logic

## 1110. TOKO filter specs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: maroof@triton.kaifnet.com
Message-ID: <33caaa7d.3344809@news.kaifnet.com>
Source record: 92470
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components

Can anyone give me the specs of the following filters/transformers?
Probably all of them are made by TOKO.

1. 18601
92347

2. 14702
93427

3. 14702
92327

4. 19401
93147

5. 14201
92167

6. 14201
92307

# 1111. Looking for DTMF telephone keypad

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: voicebox@dnai.com
Message-ID: <voicebox-1507970816510001@dnai-207-33-180-161.dialup.dnai.com>
Source record: 92471
Cross-posted to:
sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.misc,comp.dcom.telecom.tech

I need a DTMF (i.e. telephone) keypad. The 12-key keypad needs to be self-contained (all electronics within the borders of the keys, not spread out on a circuit board larger than the keypad itself). It must be able to be powered from the telco line power; no room for batteries.

Any suggestions? Do you know of any keypads from some telephone/ radio equipment you've seen that might fit my needs? I'm upgrading an old dial-type telecom test set to a tone-type, and the keypad needs to fit within the space that the dial takes up.

Thanks for any help you can offer. Direct e-mail replies are doubly appreciated.

Enjoy,
Dave
--
Dave Carpenter
Sound Logic

## 1112. Message not deliverable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: IMCEACCMAIL-Administrator+20at+20HQS3@ncr.disa.MIL
Message-ID: <199707150304.UAA07803@mailbox2.ucsd.edu>
Source record: 92472

```
This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------ =_NextPart_000_01BC90AA.1B2DFCD0
Content-Type: text/plain

------ =_NextPart_000_01BC90AA.1B2DFCD0
Content-Type: application/ms-tnef
Content-Transfer-Encoding: base64

<encoded_portion_removed>
AAAiXJxAvvzQEYi/AKAkmMopRyI=

------ =_NextPart_000_01BC90AA.1B2DFCD0--
```

## 1113. Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: Eldon <eldon@adan.kingston.net>
Message-ID: <01bc912c$02e0b280$5d34d2cd@eldon>
Source record: 92473

I am looking for a maintnance service manual for a ft 101zd.
Does anyone have one they would sell?

Eldon

eldon@adan.kingston.net

# 1114. I'M NEW AT THIS. HELP!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: bc6000@aol.com
Message-ID: <19970715150801.LAA11392@ladder01.news.aol.com>
Source record: 92474

Hi my name is cory
I have wanted to have a shortwave radio station for a long time. So I figured now's a good time if any. SO. Here I am. BUT I HAVE NO IDEA HOW TO GET STARTED. Actually my brother and his friend use to have a radio station but it was ostly his friends equipment

Any way.
I just want to know how to get started. Buy some cheep equipment stuff like that.
THANKS

CORY

# 1115. Re: REQ: pwr mod for a crapy cb /TRC-501/

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33CB4177.5FBE@taxes.net>
Source record: 92475
Cross-posted to: rec.radio.amateur.homebrew,alt.radio.scanner,alt.radio.pirate,rec.radio.cb

If you're going to use this radio on 11 meters, it's not legal
for you to modify it. However, if you want to add a little
kick, check out Harry SM0VPO's home page -- he has a nice
10-watt linear amp that should fit inside that chassis.

Harry posts the URL for his page pretty frequently.

# 1116. Re: I'M NEW AT THIS. HELP!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33CBBD9D.7701@ix.netcom.com>
Source record: 92476

BC6000 wrote:
>
> Hi my name is cory
> I have wanted to have a shortwave radio station for a long time. So I
> figured now's a good time if any. SO. Here I am. BUT I HAVE NO IDEA HOW TO
> GET STARTED. Actually my brother and his friend use to have a radio
> station but it was ostly his friends equipment
>
> Any way.
> I just want to know how to get started. Buy some cheep equipment stuff
> like that.
> THANKS
>
> CORY
---
Hi Cory -- if you mean "How to get started in Ham Radio" see URL:
http://pw2.netcom.com/~ac6v/pageA.html#H
license required

If you mean CB see URL:
http://pw2.netcom.com/~ac6v/pagej.html
no license required

Except for very very low power operation,
other "shortwave stations" require a license -- see FCC Pages.

Regards
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 1117. Kenwood tr751e mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: Dave@omen.softnet.co.uk
Message-ID: <N.071597.192503.62@swhjz003>
Source record: 92477
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.college,alt.radio.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Hi Thanks for reading,
I am looking for mods for my kenwood/trio TR751e,
what i would like to do is to get it to rx below 144.00
i have got the display to read 140 to 150 but it only rx,s from 144 to 150
dont know why?? the display shows a small minus sign when trying
to tune below 144 mhz !!
any help would be of great use ....73s DE dave Gw7pny

# 1118. Classes D,E,F,G,H Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: Matt Ettus <mne@cmu.edu>
Message-ID: <33CBBDB1.7DECA023@cmu.edu>
Source record: 92478

Hi. After reading the recent QST article on the Class E amplifier,
I decided to do some research on other classes.

I understand A,B,C, and E.

There seems to be disagreement on Class D, however.
One reference says it is just a push-pull with two class C halves, fed
by a square wave.

The other reference I have says it is PWM, and can reproduce linear
signals. This one was an audio application.

Also, does anyone know what classes F,G,H, etc. are?
How about any references to learn more about them?

Thanks
73
Matt
N2MJI
mne@cmu.edu

# 1119. 10w HF lin + Easy PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: Harry Lythall <lythall@ebox.tninet.se>
Message-ID: <33CC6D41.51E7@ebox.tninet.se>
Source record: 92479

Hi all,

I have now added a QRP linear amplifier to the collection. It was designed as the final stage for my Phasing-type SSB exciter, but with over 30dB of gain it will make a lovely CW / SSB transmitter when used with a simple oscillator/driver. I have used it for 10w with my Grid Dip Oscillator (GDO) as a driver. The hand-drawn PCB foil pattern is also included as a GIF file (drawn before I had a PC computer).

I have also added a dead easy 15v PSU. No IC's or any complicated stuff. Can be extended to form a regulated 0-15v PSU with current limiting (only two active devices).

I am adding more circuits to my homepage constantly, as long as I have time available to do it. Have fun with QRP (and QRO). Harry, SM0VPO (G4VVJ), Upplands V&#65533;sby, Sweden.

---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

## 1120. http://www.potg.com/ A free comedy radio show on the web

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970715231900.TAA07762@ladder02.news.aol.com>
Source record: 92480

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.

Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."

Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.
The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 1121. Re: Comb Generator versus Marker Generator BE CAREFUL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <33CC137A.6A74@hevanet.com>
Source record: 92481

Yes, you can generate a mighty flat comb spectrum using a high
amplitude narrow pulse. Remember that it's still a high amplitude
pulse. It can fry the mixer diodes in your spectrum analyzer even
though each harmonic is within specified dynamic range. It also takes
very little DC offset to fry diodes.
BE CAREFUL

Tom Bruhns wrote:
>
> John Kolb (jlkolb@sd.cts.com) wrote:
>
> (On generating a "comb" of marker frequencies:)
>
> : Take the sq wave, and connect it to one input of a 74AS00 gate and
> : also to an input of an inverter, a 74AS04, or another section of
> : the 74AS00 with the inputs tied together. Tie the output of of the
> : inverter to the other input of the 74AS00. Most of the time, input
> : A will be high and B low or vice versa, and output Y will be high.
> : Only when the oscillator switches from low to high, A will be high,
> : and B will still be high because of the delay of the inverter will
> : the output go low. Thus a narrow spike is created. It may be necessary
> : to put 3 inverters in series to get the proper delay for this to work.
>
> An infinitely narrow impulse repeated periodically will have a
> spectrum of equal amplitude harmonics of the repetition frequency.
> They extend out "forever" in frequency. If the pulse has width, the
> comb will be multiplied by a sin(x)/x factor (assuming rectangular
> pulses) which "zeros" the harmonics out far away from the fundamental.
> The wider the pulse, the closer in the nulls come in the frequency
> domain. So...to make harmonics out to as high a frequency as possible,
> make the pulses as short as you can. Use a logic family with very fast
> rise and fall times (ACT type stuff?? I'm not up on the fastest logic),
> and use a single quad two input package like John suggests for all
> the gates, so you don't have to worry so much about ground bounce.
> Minimize the loading on each gate, to get the fastest possible rise and
> fall times: keep leads very short, and minimize the number of inputs
> each output drives, like so:
>
> 100MHz in ---- *
> NAND -+--------
> +5volts ----- | NAND -------
> NAND---- NAND --- OUTPUT
> +5volts--- +5volts--
>

> Note that there's an input buffer which gives fast edges to
> next stage; "inverter" has one input tied high instead of
> two driven inputs; output buffer may not be any advantage.
> My experiments say a single NAND delay is plenty...more like
> too much. You can put a small resistance in place of the wire
> labeled with * to further shorten the pulse width by making the
> inverted and direct paths more nearly equal. The resistance
> causes a delay by virtue of the input capacitance of the third
> NAND, which should be in the vicinity of 3pF, so resistance in
> the low hundreds of ohms would be appropriate. "Dead bug" wiring
> over a ground plane should work well for this.
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com

--
Please remove NOSPAM from return address before replying.

# 1122. Re: TS-830 Freq Jump

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: robjohn@chesco.com
Message-ID: <5qgcc1$ba0$1@news.chesco.com>
Source record: 92482
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Alan,
Access http://www.kenwood.net, select the Amateur group, then click on FTP site. You then select Amateur Service Bulletins. The bulletin you want is ASB-0840. Click on it and it will appear on your screen. The info therein should get you playing.

Greg K3EWZ

## 1123. Web Page Updates

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33CC29BE.59EB@primenet.com>
Source record: 92483

Web Page Updates

Many, many amateur radio topics...

http://www.qsl.net/k7on

# 1124. Online Mailing List FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: "k7on@qsl.net" <ShortCkt@primenet.com>
Message-ID: <33CC56B1.5716@primenet.com>
Source record: 92484

Online Mailing List FAQ
Covering Mailing Lists Hosted at QSL.Net (by K3TKJ)

http://www.qsl.net/k7on/qslfaq.htm

** NEW **

# 1125. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970715150101.LAA07288@ladder02.news.aol.com>
Source record: 92485

The problem with your oven may not be insulation but rather a lack of thermal mass. The idea behind using a oven is to stablize temp by raising it above the ambient. Assume for the moment that your insulation is nearly perfect, now you would not only have to have a heater to raise the temp of the oven but also have to deal with cooling the device to maintain a stable environment.energy
I recently disassembled a small crystal oven used as a frequency standrad.(Heating element went out). this device had very little insulation but the temp sensor and the heating element were encapsulated in a small "concrete appearing" cylinder that surronded the crystal. I had used it for several years as a frequency standrad at 10Mhz occasionally having to adjust the osc to allow for aging of the crystal. Short term{24 hr) stability of the osc was at least 1 part in 10 million.(I cant measure more accurrately than this).
An oven with enough thermal mass may not require insulation at all. The only real advantage of the insulation would be to conserve energy applied to the heater.(Are we talking about more than 5 Watts?)The unit I disassembled had only a thin layer of cork wraped around the outside of the heater.
If your requirements are really tight I suggest you use some type of proportional control for your heater. The on-off type of control of a thermostat would not be acceptable in critical conditions.

## 1126. Transformer specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-15 00:00:00 UTC
From: cas@marconi.ih.lucent.com
Message-ID: <5qgf6k$foa@ssbunews.ih.lucent.com>
Source record: 92486

Hi all.
Im building a 1.2G amp from the 1991 handbood. It needs a 1200 volt
supply at about 400mA peak. I have an OLD transformer that is about the
right voltage (950VCT AC) but I dont know the current rating. This xformer
is 3.5x4x6 and also has one 5V and two 6 volt windings. It is completely
sealed in a square metal can with ceramic insulators. It was originally
used with a 5R4 rectifier tube and a pi type filter (cap,choke,cap).
I would need to use it in a bridge circuit to get the required voltage.

How can I determine its current rating?? Can I get a good idea by measuring
the AC voltage drop under load? Or do I have to connect some rectifers
and filter caps and measure the DC performance?

Thanks

chuck sherwood

## 1127. Ham/Police Web

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: terryh@iamerica.net
Message-ID: <5qh0fq$f81@news1.iamerica.net>
Source record: 92487

http://cust.iamerica.net/terryh/

# 1128. Re: Looking for DTMF telephone keypad

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: quartlow@netcom.com
Message-ID: <quartlowEDECpq.Bv2@netcom.com>
Source record: 92488
Cross-posted to:
sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.misc,comp.dcom.telecom.tech

DaveC (voicebox@dnai.com) wrote:
: I need a DTMF (i.e. telephone) keypad. The 12-key keypad needs to be
: self-contained (all electronics within the borders of the keys, not spread
: out on a circuit board larger than the keypad itself). It must be able to
: be powered from the telco line power; no room for batteries.

: Any suggestions? Do you know of any keypads from some telephone/ radio
: equipment you've seen that might fit my needs? I'm upgrading an old
: dial-type telecom test set to a tone-type, and the keypad needs to fit
: within the space that the dial takes up.

: Thanks for any help you can offer. Direct e-mail replies are doubly appreciated.

: Enjoy,
: Dave
: --
: Dave Carpenter
: Sound Logic

Ma Bell made an upgrade to the old '500' series
desk telephone that contains just the component
you need. Pick one up at a flea market anywhere.
Remove cover. Keypad is attached to base via two
screws. Beware that the keypad does not include
the hybrid network for phone coupling. It is
located just under the keypad on the base.

=> Best regards --Len
--
quartlow@netcom.com

## 1129. Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: David Peach <dpeach@earthlink.net>
Message-ID: <01bc91aa$2f6be800$f8c00c26@david-peach>
Source record: 92489

I need help locating a good antena tuner project. My Elmer says that it is not difficult to build one, but I need to know where to start. I am very new to homebrewing and would appreciate all the help I can get.

David
KE4ROB

## 1130. Re: Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: gelleric@goethe.informatik.uni-stuttgart.de
Message-ID: <5qi47m$6c9@zdi.informatik.uni-stuttgart.de>
Source record: 92490

There is a lot of information on homebrew antenna tuners in the ARRL radio amateur hand book and in the ARRL antenna book.

73, Wolfgang DJ3TZ

# 1131. Re: Taylor Modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <33CC96D9.3993@hevanet.com>
Source record: 92491

Bry wrote:
>
> On 11 Jul 1997 02:12:01 -0700, k0qz@primenet.com (Mike Baker) wrote:
>
> >Does anyone in this newsgroup know how and why "Taylor Modulation"
> >does what I remember being told it did? From What I can remember from
> >the occasional mention of this AM modulation method in the late 50's
> >and early 60's CQ and 73 magazines was that it was capable of up to
> >as much as 400% positive modulation while keeping the negative
> >modulation portion of the envelope below 100%.
> >Old handbooks and some old magazines have not given me any other
> >information about this modulation method so I have no additional
> >information. I understand that this is NOT hyesing modualtion but
> >possibly used the same type of tube as the modulator (single ended) as
> >the final amp used and worked very well... That is all I remember.
> >WHY?
> >Well, I was thinking about building an AM transmitter out of the mass
> >of left over parts that I have managed to accumulate and thought it
> >might make for an interesting conversation piece on the air if nothing
> >else, so let me know what you know about it via e-mail and if you know
> >where I can get some tech data on the method, please give me some
> >input......
> >
> >Mike Baker K0QZ
>
> Don Hoisington, (W4CJL or W4CJY?) in Florence, AL wrote an article on
> a practical transmitter like this in CQ magazine in I believe 1953.
> Reprint of the article are still floating around, and "Hoisy" is still
> with us and opertaing such rigs!

Back in '65, I built a dual 6146 plate modulator and stuck it on
a Viking challenger. Big resistor in series with a string of diodes
across the plate modulation transformer. Negative peaks get dissipated
in the resistor, positive modulates big-time. Used a lot of clipping
too to keep those peaks humming. Worked like a champ. Don't remember
all the details, but think the challenger ran 60W input and the
modulator
ran 240W input.
--
Please remove NOSPAM from return address before replying.

## 1132. Tube data CV1525

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: Dave Bullock <daveb@ihr.mrc.ac.uk>
Message-ID: <33CC9471.7EE@ihr.mrc.ac.uk>
Source record: 92492

Please help, by looking in your cherished tube data books to see if
there is a CRT type CV1525 E4205/C/7 in there.
If there is I would greatly appreciate knowing pinout/working voltages
etc.
All help greatfully received...Thanks Dave Bullock G6UWO
daveb@ihr.mrc.ac.uk

# 1133. ** FLEA at MIT ** Sunday July 20th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <5qh58d$7r3@senator-bedfellow.MIT.EDU>
Source record: 92493
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

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Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754

**********

# 1134. No bogus, no smallprint, Start earning today !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: ICTC <ITCT@nhi.no>
Message-ID: <5qiicl$160$603@due.unit.no>
Source record: 92494

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http://www.romegeorgia.com/cgi-bin/mfgdir/index.cgi?CH0667

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http://www.romegeorgia.com/cgi-bin/mfgdir/index.cgi?CH0667

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As an added bonus, just for reading this advertisement, reply to
ICTC@nhi.no with "Newsletters" in the subject field and I
will send you 2 POWERFUL Newsletters just for replying to this
message!

# 1135. Rate Ten-Tec Transceiver Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: "J. Dirk Bremer" <dirkb@myself.com>
Message-ID: <33CCFB45.652F4F0C@myself.com>
Source record: 92495
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

What does everyone think about Ten-Tec's 6-meter/2-meter/220 mhz transceiver kits? How do they compare to commercial rigs? Are they a good value? Are they difficult to assemble?
--
Best Regards,


+-----------------------------------+------------------+
+ Dirk Bremer St. Charles MO | Member of AR8000,+
+ Senior Analyst/ (25 miles west | SABRENT, SCAN-L, +
+ Software Engineer of St. Louis) | and TRUNKCOM +
+ for CADP, | mailing lists, +
+ St. Peters MO. | SABRE and SCARC +
+ Business email: dirkb@myself.com | radio clubs. +
+ Confidential email:jdbremer@msn.com | Equipment: +
+ Voice:314-922-9158 extension 652 | AR8000 +
+ Fax: 314-922-9175 | BC230XLT +
+-----------------------------------+------------------+


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## 1136. Re: Looking for DTMF telephone keypad

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: dmcnutt@macnauchtan.com
Message-ID: <dmcnutt.1219447017D@news-2.sni.net>
Source record: 92496
Cross-posted to:
sci.electronics.repair,sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.misc,comp.dcom.telecom.tech

In Article <voicebox-1507970816510001@dnai-207-33-180-161.dialup.dnai.com>,
voicebox@dnai.com (DaveC) wrote:
>I need a DTMF (i.e. telephone) keypad. The 12-key keypad needs to be
>self-contained (all electronics within the borders of the keys, not spread
>out on a circuit board larger than the keypad itself). It must be able to
>be powered from the telco line power; no room for batteries.

Find the nearest yard sale. I saw telephones for $5.00 a couple of weeks
ago. Each one had such a thing in it. The "500" set conversions actually
could accept either dials or touch tone keypads.

-> From the USA. The only socialist country that refuses to admit it. <-

# 1137. Re: Transformer specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33CCAC8C.40D@taxes.net>
Source record: 92497

Some things you might look at --

o Will the winding resistance pass the required current? Check
both the primary and the HV secondary.
o Does it REALLY look like a 500-watt transformer? The handbook
used to have a lamination size estimator that plotted
core cross-section against output wattage (saturation).
I'm not sure whether they still include stuff on
rewinding transformers any more.

You could connect the secondary to 110V, load down the
primary with car headlights, and measure current&volts to
see what you get in watts. A headlight is approx. 100 watts.

Or you could build the supply and test it on the air (hihi),
but I suspect your max output power may be disappointing. But
assuming the components you used were all capable of handling
400 mA at 1200V _except_ the transformer, you'd only need
to locate a transformer later. And this is a fairly common
swapfest transformer voltage.

I have seen some seriously cobbled-together junk used as
plate supplies on HF amps, and it worked fine when it
wasn't pushed too hard. If you can live with a working,
lower power amp -- as opposed to a non-working high-power amp
-- you may be able to use a too-small transformer.

If your final is a 2C39, they're not real efficient and you
will need a solid 500 watts in to see anything like 100 watts out.
But you COULD get 25 to 40 watts out, and the dB difference
between 25 and 100 isn't that much.

N6OTQ

# 1138. Re: Transformer specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5qjo9u$ns6@mtinsc03.worldnet.att.net>
Source record: 92498

An article on 'brewing transformers answers all of your questions (more
or less). See if you can find the article: "New Transformers for Old",
CQ Mag, Feb. 1972. It is about 5 pages. If you cannot locate and want,
send an SASE for 5 photo copy pages. Email me for address....
73, Woody

Chuck Sherwood wrote:
>
> Hi all.
> Im building a 1.2G amp from the 1991 handbood. It needs a 1200 volt
> supply at about 400mA peak. I have an OLD transformer that is about the
> right voltage (950VCT AC) but I dont know the current rating. This xformer
> is 3.5x4x6 and also has one 5V and two 6 volt windings. It is completely
> sealed in a square metal can with ceramic insulators. It was originally
> used with a 5R4 rectifier tube and a pi type filter (cap,choke,cap).
> I would need to use it in a bridge circuit to get the required voltage.
>
> How can I determine its current rating?? Can I get a good idea by measuring
> the AC voltage drop under load? Or do I have to connect some rectifers
> and filter caps and measure the DC performance?
>
> Thanks
>
> chuck sherwood

--
de Woody, WB4QXE, woody/white@worldnet/att/net (Non-spamers, change /
to . )
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

# 1139. Re: Comb Generator versus Marker Generator BE CAREFUL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5qivb7$n21@hpcvsnz.cv.hp.com>
Source record: 92499

miker (mreiney@hevanet.com) wrote:
: Yes, you can generate a mighty flat comb spectrum using a high
: amplitude narrow pulse. Remember that it's still a high amplitude
: pulse. It can fry the mixer diodes in your spectrum analyzer even
: though each harmonic is within specified dynamic range. It also takes
: very little DC offset to fry diodes.
: BE CAREFUL

Mike's advice is well worth heeding... Don't throw out the baby with the bathwater, though: a capacitor will remove the DC, and an attenuator and/or bandpass filter will knock the peak amplitude down nicely. From 5-volt logic, the max pulse amplitude should be 5 volts, and for an extremely narrow pulse will be less than that. (There are ways to generate 100 volt sub-nanosecond pulses that would be really dangerous to mixers!) I'm assuming the markers don't have to be very big to be useful, and a 20dB attenuator is probably appropriate at the comb gen output.

--
Cheers,
Tom
tomb@lsid.hp.com

## 1140. Re: Transformer specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970716213000.RAA17767@ladder01.news.aol.com>
Source record: 92500

I think the info you need is in the arrl handbook. You can estimate the power rating of a xfmr if you know the size of the core. Barring this method, Load the output of the xfmr until the ouput voltage drops by 10% of the noload voltage and measure the current. Practice saftey when doing this voltages may be lethal.

# 1141. Re: Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: David Peach <dpeach@earthlink.net>
Message-ID: <01bc9218$ae28a160$efc10c26@david-peach>
Source record: 92501

Thank you Wolfgang, I have a current copy of ARRL handbook. I am just unsure where to start. I am looking for something that is easy enough for me to build (this will be my first project besides simple antenas), and that will last for a few years.

David

Wolfgang Gellerich <gelleric@goethe.informatik.uni-stuttgart.de> wrote in article <5qi47m$6c9@zdi.informatik.uni-stuttgart.de>...
> There is a lot of information on homebrew antenna tuners in the ARRL radio
> amateur hand book and in the ARRL antenna book.
>
> 73, Wolfgang DJ3TZ
>

# 1142. Re: Taylor Modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: "J. Henderson" <n6lv@pacbell.net>
Message-ID: <33CDB022.17FF@pacbell.net>
Source record: 92502

miker wrote:
>
> Bry wrote:
> >
> > On 11 Jul 1997 02:12:01 -0700, k0qz@primenet.com (Mike Baker) wrote:
> >
> > >Does anyone in this newsgroup know how and why "Taylor Modulation"
> > >does what I remember being told it did? From What I can remember from
> > >the occasional mention of this AM modulation method in the late 50's
> > >and early 60's CQ and 73 magazines was that it was capable of up to
> > >as much as 400% positive modulation while keeping the negative
> > >modulation portion of the envelope below 100%.

------- snippity poo ---------

> > >Mike Baker K0QZ
> >
> > Don Hoisington, (W4CJL or W4CJY?) in Florence, AL wrote an article on
> > a practical transmitter like this in CQ magazine in I believe 1953.
> > Reprint of the article are still floating around, and "Hoisy" is still
> > with us and opertaing such rigs!
>
> Back in '65, I built a dual 6146 plate modulator and stuck it on
> a Viking challenger. Big resistor in series with a string of diodes
> across the plate modulation transformer. Negative peaks get dissipated
> in the resistor, positive modulates big-time. Used a lot of clipping
> too to keep those peaks humming. Worked like a champ. Don't remember
> all the details, but think the challenger ran 60W input and the
> modulator
> ran 240W input.

Taylor modulation is one of the many forms of efficiency modulation cooked up in the thirties and forties to reduce audio power requirements of medium and high power broadcast applications. The Taylor circuit (as I remember it) consisted of two RF amplifiers, one operating in some mode of efficiency modulation, probably grid or screen, and the other operating at far cutoff and only turned on during the positive audio peaks. The outputs are combined and the resulting carrier appears to be modulated -100%/+400%. Since the first amplifier is efficiency modulated, the carrier output is one fourth what it normally would be in class C. On positive peaks the first amplifier is delivering full output which is added the the full output of the normally cutoff amplifier.

Taylor modulation is strongly "upward" resulting in significant
"pumping"
of receiver AGC unless the time constant is long. KFI (640KHz) tried
Taylor modulation for some years, and I believe their old standby rig
may still be modulated that way... Saves tons of iron!

jim n6lv

# 1143. Re: Barebones Superhat @ N2CQR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: griffin@jgfl1.allcon.com
Message-ID: <EDFAqt.3qt@jgfl1.allcon.com>
Source record: 92503

Bill Meara (wmeara@erols.com) wrote:
[...]
> I have a few little problems. Maybe someon i nthe group could suggest
> solutions.

> Sluggish VXO: It runs fine once it gets oscillating, but every now
> and then when I turn on the receiver, the VXO doesn't start
> oscillating until I touch the crystal. Seems like it needs a little
> pus to get it going. Any ideas?

Try a 1-2 MOhm resistor in parallel to the crystal. This way the
oscillator doesn't depend on the crystal to start.

Hope that helps,
72/3, Jens, DB9LL
--
Disclaimer: Not only do I speak for myself; I am myself.

## 1144. ten tec kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-16 00:00:00 UTC
From: psyodell@mail.provide.net
Message-ID: <33cd5f7d.957123@news.provide.net>
Source record: 92504

I have just built the Ten Tec 40 meter QRP rig. I just can't get any gain out of the receiver, unless I jump the crystal filter, and then it isn't anything to write home about.

I have spent about 300 hours checking the construction, and, heaven knows, I may have some solder bridges that my ohmmeter hasn't picked up.

I almost never post anything, but this one has really stumped me. All the xtals are ok, all the components check out, there are no shorts that I know of. Ten Tec is helpful, and I've replaced all of the semiconductors in the RF chain.

Oh, I get gangbusters performance from the 11 mhz IF.

I just hate to give up. 73 Jerry W8GND

# 1145. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: rick@area.com
Message-ID: <5qk6o7$a3i$1@nixon.area.com>
Source record: 92407

In article <19970714232233776880@zetnet.co.uk>,
Adrian Bayling <bayling@zetnet.co.uk> wrote:
>In message <5q9gjm$5nq$1@nixon.area.com>
> rick@area.com (Richard Karlquist) writes:
>
>> The best you can do, without pulling a vacuum, is to simply use still
>> air as insulation. This is accomplished by making a "knife edge" support
>
>I agree with the comments on still air, with the emphasis on still.
>Some light material can help reduce loss through convection currents
>and you can do much worse than dry paper matrix in this respect. Try
>putting some news print through the liquidiser, but don't cut it up
>too small,or pack it in too tight.
>Adrian, G4AZS.

We did some studies of air insulated ovens and found that convection currents
were negligible in terms of oven power consumption. We also found that
radiation loss was also negligible, reaching maybe 5% of conduction loss
if you paint everything black.

Rick N6R

# 1146. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: rick@area.com
Message-ID: <5qk74l$as2$1@nixon.area.com>
Source record: 92408

In article <19970715150101.LAA07288@ladder02.news.aol.com>,
Hamm4fun <hamm4fun@aol.com> wrote:
>The problem with your oven may not be insulation but rather a lack of
>thermal mass. The idea behind using a oven is to stablize temp by raising

It is not clear from the original posting whether the complaint is
excessive heater power consumption or poor "thermal gain" (which is
defined as the ratio of a change in ambient temperature to the resulting
change in oven temperature.) If the problem is thermal gain, then you
are right, that insulation is not the main issue and that one brute
force fix is to make thermal mass bigger.

> I recently disassembled a small crystal oven used as a frequency
>standrad.(Heating element went out). this device had very little
>insulation but the temp sensor and the heating element were encapsulated
>in a small "concrete appearing" cylinder that surronded the crystal. I had
> An oven with enough thermal mass may not require insulation at all. The
>only real advantage of the insulation would be to conserve energy applied
>to the heater.(Are we talking about more than 5 Watts?)The unit I
>disassembled had only a thin layer of cork wraped around the outside of
>the heater.
>If your requirements are really tight I suggest you use some type of
>proportional control for your heater. The on-off type of control of a
>thermostat would not be acceptable in critical conditions.

Yes, this is good advice.

Rick N6RK

# 1147. WTB: Drake L4PS and L7 PS non-working <

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970717043701.AAA16414@ladder01.news.aol.com>
Source record: 92409

Looking for non-working Drake L4PS or L7PS for the L4B and L7 linears.
Must have good transformer. Please state condition and price.

Thanks,

Evan
K9SQG@AOL.com

## 1148. hairpin filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: Andy Sayers VK1AT <asayers@cyberone.com.au>
Message-ID: <01bc928d$c4e95000$0d1308d2@default>
Source record: 92410

Does anyone have information about microstrip hairpin filters?
Design formulas would very helpful.
Please email me at asayers@cyberone.com.au

Andy Sayers VK1AT

## 1149. Re: Transformer specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5qknvg$47q$1@news.belwue.de>
Source record: 92411

In article <5qgf6k$foa@ssbunews.ih.lucent.com>,
Chuck Sherwood <casherwood@lucent.com> wrote:
>How can I determine its current rating?? Can I get a good idea by measuring
>the AC voltage drop under load? Or do I have to connect some rectifers
>and filter caps and measure the DC performance?

The curreent handling is limited by the temperature rise. You can connect
the anticipated load for the anticipated amount of time. If the transformer
becomes only warm, you are OK, if it becomes hot (and smelly) it wont do
it. The voltage drop at full load depends very much on the core design.

73, Moritz

# 1150. FREE SEX SITE..password is...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: 098723489763278@compuserve.com
Message-ID: <5qktqm$ln6@news1-alterdial.uu.net>
Source record: 92412

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
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over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL above.

# 1151. GET FREE 2100 $ex-Web $Sites FREE! @?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: gary099g@erols.com
Message-ID: <5qku1r$kod@news1-alterdial.uu.net>
Source record: 92413

```
This is a multi-part message in MIME format.

--_-=599
Content-type: text/html; name="Sex~1.htm"
Content-transfer-encoding: base64

<encoded_portion_removed>
b25nPjwvZm9udD48L2ZvbnQ+PC9hPjwvcD4NCjwvYm9keT4NCg0KPC9odG1sPg0K

--_-=599
```

# 1152. Booklet on homebrew antennas (Portable & Emergency)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: Bill Merwin <billm@datacomm.com>
Message-ID: <33CE07F1.381B5FC@datacomm.com>
Source record: 92414
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

*** QST *** QST *** QST ***

Please excuse my interruption. I will try to make this brief.

As you can see from my signature, I am currently the Emergency Net Manager for ARES Oregon District 1. I am also very interested in "home brew" antennas that can be built for emergency as well as portable installations.

As we all know there has been a great influx of new hams in the last several years. Most of them have little or no experience in building equipment. Too bad it seems, the days of actively involved "ELMERS" have become history.

My goal is to publish (with your help of course), a booklet for the new (and not so new) hams on how to build inexpensive antennas without having to be EE's. The plans should be easily understood and would be most beneficial if they were as "Bomb Proof" as possible.

If you have such plans available, please drop me a note at any of the addresses listed below and I would be more than happy to send you a SASE for them.

Thanks for taking the time to read this. I will post follow up messages letting you all know how it is going and publicly thank any contributors.

73 - Bill - K7BKS

--
==========
Bill Merwin - K7BKS, Net Manager
ARES Oregon District 1
e-mail billm@datacomm.com
k7bks@juno.com
Packet k7bks@k7iqi.or.usa.noam
10-10 member - 62540
==========

# 1153. Re: hairpin filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5qm0e1$l0g@nntp02.primenet.com>
Source record: 92415

Andy Sayers VK1AT <asayers@cyberone.com.au> wrote:
: Does anyone have information about microstrip hairpin filters?
: Design formulas would very helpful.
: Please email me at asayers@cyberone.com.au

: Andy Sayers VK1AT

Andy,
I have found in my files the followinf references for
Hairpin (Stepped Impedance Resonator) Filters:

1. Cristal, Edward G. and Sidney Frnakel, "Hairpin-
Line and Hybrid Hairpin-Line/Half-Wave Parallel-Coupled-
Line Filter," IEEE MTT, Vol. MTT-20, No. 11, Nov 1972,
pp. 719-728.

2. Gysel, Ulrich H., "New Theory and Design for
Hairpin-Line Filters," IEEE MTT, Vol. MTT-22, No. 5, May
1974, pp. 523-531.

3. Makimoto, Mitsuo and Sadahiko Yamashita, "Bandpass
Filters Using Parallel Coupled Stripline Stepped Impedance
Resonators," IEEE MTT, Vol. MTT-28, No. 12, Dec 1980,
pp. 1413-1417.

4. Makimoto, Mitsuo and Sadahiko Yamashita, "Compact
Bandpass Filters Using Stepped Impedance Resonators,"
Proc. IEEE, Vol. 67, No. 1, Jan 1979, pp. 16-19.

Regards,

Chris

,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/ Chris Trask / N7ZWY
oo\ Principal Engineer
(__)\ _ ATG Design Services
\ \ .' `. P.O. Box 25240
\ \ / \ Tempe, Arizona 85285-5240
\ '" \
. ( ) \ Technical Editor,
'-| )__| :. \ QRP Quarterly
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

## 1154. Bypass Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: Al Lorona <al_lorona@removethispart.hp.com>
Message-ID: <33CE3446.4CF@removethispart.hp.com>
Source record: 92416

Hi Everybody,

I came across some very small 0.1 uF @ 50V monolithic capacitors with axial leads for a pretty good price. As bypass capacitors, are they worse than, as good as, or better than ceramic disc caps? I would be using them in an 11 MHz IF/AGC board project.

Thanks very much. You may reply directly to me if you wish.

R,

Al W6LX

## 1155. IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: "Dr. Jackle" <drjackle@webspan.net>
Message-ID: <33CEC5A5.D8655BA8@webspan.net>
Source record: 92417
Cross-posted to: rec.radio.amateur.homebrew,alt.radio.pirate,alt.radio.scanner,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner

I just got an IBM PC '86 and I was wondering if
any of it can be salvaged for radio.
if you know of any parts that can be used e-mail
me at drjackle@webspan.net
if you want any of it do the same, will work out
something.

I got the power suplys from the '86 and from a
tandy 1000.
I got the '86's motherboard, video card, and all
the interface cards.

-------
drjackle@webspan.net

# 1156. State-of-the-Art In-House Active Filter Capability

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: "Kathryn J. Goerg" <kgoerg@webblabs.com>
Message-ID: <33CE770C.385F@webblabs.com>
Source record: 92418
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radioamateur..misc,rec.radio.amateur.space,alt.ham-radio,alt.ham-radio.am,alt.ham-radio.amtor,alt.ham-radio.atv,alt.ham-radio.digital-voice,alt.ham-radio.eme,alt.ham-radio.exotic-modes,alt.ham-radio.fax,alt.ham-radio.fm,alt.ham-radio.hf

YOUR COMPETITORS HAVE IN-HOUSE ACTIVE FILTER CAPABILITY. DO YOU?

Active filters are more important than ever before, particularly in high speed signal processing applications! Can you design to an arbitrary frequency response in any circuit realization of your choosing? The experts can! They rely on AFDPLUS...

http://www.webblabs.com/afd.htm

# 1157. Re: Barebones Superhat @ N2CQR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33ce82ce.0@cheese.pcug.org.au>
Source record: 92419

wmeara@erols.com (Bill Meara ) wrote:

>I have a few little problems. Maybe someon i nthe group could suggest
>solutions.
>
>Sluggish VXO: It runs fine once it gets oscillating, but every now
>and then when I turn on the receiver, the VXO doesn't start
>oscillating until I touch the crystal. Seems like it needs a little
>pus to get it going. Any ideas?
>

Try increasing the value of some of the capacitors (eg between base and emitter, between emitter and base) slightly. If you have a coil in series with the crystal, you could make that a little smaller (though this will reduce the pulling range). I find coils for VXOs are critical. I use one of those two hole ferrite balun cores for TV use. With one of those I get about 18 kHz shift on 7 MHz with a VXO I built. Use of a ferrite toroid was less successful. You might be able to increase pulling range a little if you're willing to eexperiment.

>WIAW in the IF. I'm wondering if the selection of the 3.579 IF
>wasn't part of some ARRL plot! (Just kidding!) While tuning 20
>meters, I can hear (faintly) WIAW's 80 meter bulletins and code
>practice coming through. I suppose a simple bandpass filter would
>help...
>

A bandpass filter would help, but a simple series tuned circuit resonant on 3.58 MHz across the antenna should be OK. You could try a 10uH RF choke and capacitance around 200pF.

73,
--


Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

# 1158. FS:New BIRD 4522 Wattmeter/SWR in 19" rack panel

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: bryan@prodistributors.com
Message-ID: <5qm0u1$duu$1@news.nts-online.net>
Source record: 92420
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.swap

I have a brand new unused Bird 4522 Wattmeter/SWR indicator. The model 4522 is a rack mount model that has places for two Bird elements and a front panel switch so that you can switch between forward and reflected power measurements. The 4522 sells for over $400 list price from Bird or Bird dealers. I will sell for $275 plus UPS.

I also have a used Bird 4522 rack mount in very good condition that I will sell for $200 plus UPS.

Bryan W5KFT

# 1159. Yaesu FT 757 Spectrum Analyzer Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: dthimm@newnorth.net
Message-ID: <33cea521.2997777@news.newnorth.net>
Source record: 92421

Hello Everyone !

The FT 757 GX and FT 757 GX II Spectrum Analyzer
software is now available for high speed downloading
from ZDNET !

You can access the download directly by following either
of the links below.

http://www.newnorth.net/~dthimm

or

http://www6.zdnet.com/cgi-bin/texis/swlib/hotfiles/info.html?fcode=000GG1

Thank You,

Dan T.
N9IPV
73

# 1160. Re: Transformer specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5qlm9v$f7h@hpcvsnz.cv.hp.com>
Source record: 92422

moritz@ipers1.e-technik.uni-stuttgart.de wrote:
: In article <5qgf6k$foa@ssbunews.ih.lucent.com>,
: Chuck Sherwood <casherwood@lucent.com> wrote:
: >How can I determine its current rating?? Can I get a good idea by measuring
: >the AC voltage drop under load? Or do I have to connect some rectifers
: >and filter caps and measure the DC performance?

: The curreent handling is limited by the temperature rise. You can connect
: the anticipated load for the anticipated amount of time. If the transformer
: becomes only warm, you are OK, if it becomes hot (and smelly) it wont do
: it. The voltage drop at full load depends very much on the core design.

I agree with Mortiz here... and offer the following as a way to be more quantitative: Measure the winding DC resistances accurately at room temperature. Connect a load (start with a moderate one, one you are pretty sure will be safe!) and let it run for long enough to reach thermal equilibrium. Disconnect the AC and load. Quickly remeasure the winding DC resistances (before it has a chance to cool significantly). The change will tell you to a close approximation the temperature rise, since the thermal coefficient of resistance of copper is about 0.39%/C. So if the resistance of any one winding increases by 15.6%, it indicates a 40C temp rise in the transformer...which should be OK, but I'd not want to see more than a 60C rise unless I knew for very sure that the insulation in my transformer was rated for it. (You can get a modest increase in safe transformer output volt-amps by blowing cool air over it or putting cooling fins on it.)

Also, be very aware that a resistive load is not nearly as severe as the load of a capacitor input filter; best check it operating into the rectifier/filter you plan to use, with your load a DC one on the filter output. The RMS current into a rectifier/capacitor input filter is typically much higher than the average current out of the DC supply, by a factor of 2 or 3. (Depends a lot on the capacitor and the "stiffness" of the transformer voltage.)

Cheers,
Tom
tomb@lsid.hp.com

## 1161. Japanese transistors - where to get them?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: Frank Bures <fbures@address.in.the.sig>
Message-ID: <hsyaueewanknu.pminews@frank.chem.utoronto.ca>
Source record: 92423

I would appreciate an advice on where to get Japanese discrete semiconductors
in North America. I am talking about 2SCnnnn, 2SBnnnn and 2SKnnnn types.
Any dealers, representatives, shops?

Namely I am looking for 2SB832, 1kV PNP.

Thanks a bunch!

73

Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
fbures@alchemy.chem.utoronto.ca (use this address for replies)

# 1162. Receiver Splitter Information Required.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: sparc@ihug.co.nz
Message-ID: <5qmbvk$17h$2@newsource.ihug.co.nz>
Source record: 92424

G'Day All,

I have been doing some reading regarding Receiver Splitting from one Receive antenna, but have so far been unable to find any information on how to construct one. I can purchase one, but I would like to try and build on first.

The reason for the Splitter is so it can be used at our repeater site, which has muiltipule repeaters.

If anyone can help could you please E-mail me or reply via the news group.

E-mail

sparc@ihug.co.nz
Mitchell.Kevin.KF@bhp.com.au

Best Regards

Kevin, ZL1UDD.

E-mail: sparc@ihug.co.nz
Packet: ZL1UDD@ZL1AB.#11.NZL.OC
:Amateur Radio helped Pioneer
the way the World Communicates
Today.:

## 1163. Off-Topic sorry: 2m repeater info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: allent@mnsinc.com
Message-ID: <33cd7288.16073677@netnews.worldnet.att.net>
Source record: 92505

Strictly HF, I regrettably know virtually nothing about 2 meters and the repeater network. I would apprecitate a quick reference to any comprehensive internet/web-based info.

Many Tx & 73

Dave Allen
WA2BSL
Falls Church, VA
allent@mnsinc.com

## 1164. Web Page with Links

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-17 00:00:00 UTC
From: ke4ish@qsl.net
Message-ID: <33cd74f6.8774298@nntp.infoave.net>
Source record: 92506

Interested in links to radio equipment manufactures, suppliers and
much more? Check out the web page of the "Liberty County Emergency
Communications Amateur Radio Club" at http://www.qsl.net/lcecarc

## 1165. Re: MR-510 rectifier specs <

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: delords@ibm.net
Message-ID: <33ceb69b.0@news1.ibm.net>
Source record: 92425

It is a Motorola part number "Standard Recovery Power Rectifier" 3A, 1000V,
Vf about a volt. It is in the diode data book - there are a lot more specs - let
me know if you need more info. There may be info on the Motorola web site.

In <19970717225501.SAA05756@ladder01.news.aol.com>, k9sqg@aol.com (K9SQG) writes:
>Does anybody know the specifications for the MR-510 silicon rectifier? I
>believe it was/is made by Motorola but I can't find it in the Newark or
>Allied or other catalogs.
>
>Thanks,
>
>Evan
>K9SQG@AOL.com

# 1166. Parabolic Antenna For AMSAT Work

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: rutledgec@geocities.com
Message-ID: <5qmt9c$92p$1@excalibur.flash.net>
Source record: 92426
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Has anyone ever used or heard of anyone using a parabolic antenna (Satellite Dish Antenna) for working any of the AMSAT birds? Seems like the gain would be nice but are there any problems with polarization and how about the mesh width? - i.e. would a plain old 10' C-Band TVRO dish work for xmit? or would the signals pass right through it?

Thanks In Advance -

Chris Rutledge
KC5FHV

# 1167. CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Free Cable <lartermen@mindspring.com>
Message-ID: <5qmmcs$i29@newsfep2.sprintmail.com>
Source record: 92427

CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Just a few inexpensive parts from Radio Shack and a little time and you can descramble every cable channel. See all your favorite movie channels,pay per view etc

To recieve detail instructions and diagrams on how to construct your own Cable Box Descrambler
Mail $5.00 CASH MONEY ORDER CHECK and SASE to:

S&G Enterprise
12145 Augusta Woods Cir
Suite 2
Orlando FL. 32824

Please be sure to include your full name & address
Allow 10 days to recieve

Thank You
Seth Garner

# 1168. Re: Icom F-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5qme96$srn@hplms2.hpl.hp.com>
Source record: 92428
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.ham-radio

In article <33cb72f0.1826622@news.cmc.net>,
Gary Fiber <gfiber@seattle.cmc.net> wrote:
>On 15 Jul 1997 00:01:40 GMT, kral@hpl.hp.com (Joseph Kral) wrote:
>
>>
>>
>>Looking for information on how to field program
>>the new Icom F-3 commercial radio.
>>
>>
>>--
>>Joseph Kral
>>Hewlett-Packard Laboratories
>>kral@hpl.hp.com

>You need the EX1961 software and OPC-478 cloning cable
>
>Gary
>THIS REPLY DOES NOT REPRESENT ANY OFFICIAL POSITION of
>MY EMPLOYER. It represents only MY PERSONAL opinion.

Thanks Gary, but I'm looking for how to field program the radio. i.e.,
through the keypad, not a computer. I know for a fact that it can be done,
I just don't yet know the magic code.

Thanks anyway.

--
Joseph Kral
Hewlett-Packard Laboratories
kral@hpl.hp.com

# 1169. Re: Bypass Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5qndt3$bom$2@nadine.teleport.com>
Source record: 92429

In article <33CE3446.4CF@removethispart.hp.com>,
Al Lorona <al_lorona@removethispart.hp.com> wrote:
>Hi Everybody,
>
>
>I came across some very small 0.1 uF @ 50V monolithic
>capacitors with axial leads for a pretty good price. As
>bypass capacitors, are they worse than, as good as,
>or better than ceramic disc caps? I would be using
>them in an 11 MHz IF/AGC board project.
>
>Thanks very much. You may reply directly to me if
>you wish.
>
>
>R,
>
>Al W6LX

They're better for bypassing than ceramic disks. That size and value will
make excellent bypass capacitors for the HF range and well beyond.

Roy Lewallen, W7EL

## 1170. lectrokit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: danandamym@aol.com
Message-ID: <19970718050000.BAA28759@ladder01.news.aol.com>
Source record: 92430

Is the lectrokit company still in business? I read an old article about a kit they offered.

# 1171. Re: Parabolic Antenna For AMSAT Work

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Bruce Nolte <brucenol@abs.net>
Message-ID: <33CF71C8.6AFA@abs.net>
Source record: 92431
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Christopher M. Rutledge wrote:
>
> Has anyone ever used or heard of anyone using a parabolic antenna (Satellite
> Dish Antenna) for working any of the AMSAT birds? Seems like the gain would
> be nice but are there any problems with polarization and how about the mesh
> width? - i.e. would a plain old 10' C-Band TVRO dish work for xmit? or would
> the signals pass right through it?
>
> Thanks In Advance -
>
> Chris Rutledge
> KC5FHV

Depending on the frequency, a TVRO dish could work well for you, the mesh is designed to work at frequencies of up to 4 Ghz. As for gain, at 432 mhz, a perfect 12 foot dish has a gain of about 22 dB over an isotropic radiator, according to charts in the ARRL Antenna Book. A 10 foot dish has a potential gain at 432 Mhz of about 20 dB, i figure by interpeting the charts. At higher freqencies, the potential gain is even higher.
At 1296 Mhz, that same 10 foot dish has a potential dBi of about 26 dB, and in fact people have used 10 foot dishes for EME work at these frequencies.
At lower frequencies than 432 Mhz, a dish becomes impractical. A 10 foot dish at 144 Mhz has a dBi of only 8 or 10 dB, a figure I can equal with a homemade 4 element Quad.

The ARRL antenna book also has ideas for building feedhorns for dishes, and other ideas. Good luck and 73
Bruce N3LSY -k-

# 1172. Conversion of PYE PF2 to 2m band - help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: p.r.green@umist.ac.uk
Message-ID: <5qnn8k$j1n@yama.mcc.ac.uk>
Source record: 92432

I am trying to help my father convert Pye PF2FMB (band A2) sets to 2m band operation. We have followed the procedure outlined in Chris Lorek's book on PMR conversions and the TX side is fine, but the RX is deaf. I have heard of others who have experienced the same problem with A2 band PF2FMBs, but as yet I have not found anyone with a solution.

Can anyone offer suggestions or point me at a further source of information.

Many thanks,

Peter Green

p.r.green@umist.ac.uk

## 1173. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Jim in Texas <jstrohm@taxes.net>
Message-ID: <33CF737E.16EF@taxes.net>
Source record: 92433
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

I've thinned down the newsgroup list a little -- hope you see this.

Basically, junker computers are nearly as good as junker
vacuum-tube TV sets for ham radio parts sources. You have to
be willing to dig.

I've heard of people successfully pulling ICs off of soldered
boards, but personally haven't had great luck. The capacitors
come off easily enough with a soldering iron and are well
worth taking. Any of the TTL or CMOS discrete logic chips
are worth taking if they'll come along easily -- I haven't found
the magic technique yet.

I've tried these methods --
o Heat the solder side of the PC board with a blow torch
(Chip packages seem to melt before the solder)
o Solder wick
o Desoldering gun/"snot-bottle"
I haven't tried making a desoldering tip the size of a DIP IC
for my 100-watt iron yet -- maybe that'll work. I've also seen
people in the electronics salvage industry use a bed of heated
sand, drop the board on the sand, and pick chips off with a
chip puller. Might work....

The memory probably isn't worth messing with, same with the
8086 and controller chips. If there's an 8087, it's worth
taking -- people will still pay a couple bucks for one of these.

Inside the power supply -- there is at least one hi-voltage,
hi-capacitance filter cap VERY suitable for use in an HV
power supply. You'll need four of these (at least) to series
a filter cap bank, but the voltage range is typically 250 to
400 volts and it's drilling apart a power supply. There's also
a nice fan -- and it always amazes me to see people spend
$3 for a fan but pass up a 25-cent XT power supply. The power
supply has the best stuff -- hi-watt resistors, some toroids,
the capacitors, and some potentially useful switching transistors
that should work on 80 meters.

Happy hacking.

N6OTQ

# 1174. Re: Parabolic Antenna For AMSAT Work

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <tTmb4JAYo5zzEw5T@pacsat.demon.co.uk>
Source record: 92434
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <5qmt9c$92p$1@excalibur.flash.net>, "Christopher M. Rutledge" <rutledgec@geocities.com> writes
>Has anyone ever used or heard of anyone using a parabolic antenna (Satellite >Dish Antenna) for working any of the AMSAT birds? Seems like the gain would >be nice but are there any problems with polarization and how about the mesh >width? - i.e. would a plain old 10' C-Band TVRO dish work for xmit? or would >the signals pass right through it?

Hi Chris

Follow some of the links from my web site you will find plenty of info on parabolics.

The problem with a big dish will be:

1> surface accuracy at required freq. No lumps can be bigger than 1/3 wavelength or you get squints

2> solid or mesh? If mesh the holes cant be bigger than 1/10 wavelength wide or you get losses

3> pointing accuracy required. A big dish might need a pointing accuracy of 3 degrees. Pretty hard!

I would go for a smaller dish, say 1M - perfect gain for higher bands, reasonable pointing accuracy and easy to control.

Polarisation, depends on what satellite, but normally circular - simple helix feed at the dish focus for 2.3/3.4 and a horn with phasing adapter for 5.7 and 10 ghz.

I think you must be gearing up for 3D.

Let me know more, I maybe able to help.

73 Simon

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

## 1175. A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Jonathan <ke6yzz@hotmail.com>
Message-ID: <33CF5DD8.94FFD6FB@hotmail.com>
Source record: 92435
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

How many of you would pay $30 (postage included) for the plans to build
a PROFESSIONALLY designed 12 Element 2 Meter log-spaced quad, a little
under 20 feet long and build on a sturdy aluminum boom, with 17-21 dB of
average forward gain, giving you an effective radiated power of about
200 forward Watts RMS for every 10 Watts RMS of input to the antenna?

If yes, please go only once to this URL:

http://www.caprica.com/~jd/yes4quad.html

If no, please go only once to this URL.

http://www.caprica.com/~jd/no4quad.html

To see pictures of this antenna, finished and installed, click here:

http://www.caprica.com/~jd/ant-pics.html

Thank you.

Sincerely,

Jonathan DeFabritis
Radio Operator's License: KE6YZZ
Southern California hams can reach me on: 144.45 MHz FM/Simplex
Send Mailto:ke6yzz@hotmail.com
---
-=A Few Great WWW Links!=-

My General Homepage URL is: http://www.caprica.com/~jd/
The "World of Radio" Webpage: http://www.caprica.com/~jd/rf-world.html
Taral Hicks Fan Club WebPage: http://www.caprica.com/~jd/taralfan.html
---
Alan Keyes for US President in 2000! The "Teddy Roosevelt" of our era!
Please browse: http://www.declaration.net for more info on Alan Keyes!
---

## 1176. Yet more circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Harry Lythall <lythall@ebox.tninet.se>
Message-ID: <33D0266E.70B9@spam.forever>
Source record: 92436
Cross-posted to: uk.radio.amateur,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,aus.radio.amateur.misc

Hi all,

My homepage is getting bigger and will continue to do so until Telenordia tell me I have run out of disk space on the server. Since the last list I have almost finished my General Coverage receiver, and it works a treat. I have added a 10 (15) watt HF linear amplifier, complete with the PCB foil (uses the cheap CB type PA transistors).

I have even included a couple of pages about 'estimating' size of heatsinks. Visut my page at:

http://user.tninet.se/~acz732k/

Amongst my constructional projects are:

BASIC INFO FOR BEGINNERS
How to solder
Component identification
tools
How to calculate heatsinks

ANTENNAS
Remote tuning of tuneable antennas
Basic dipole information
Short antennas for the HF bands
A balcony/terrace antenna (worked JA on it)
Packing crate antenna
Frame antenna

RECEIVERS
General coverage HF receiver
Cigar box HF receiver - uses battery valves
IC HF receiver
HF direct conversion receiver
Regenerative HF receiver
HF and VHF receiver using ZN414 (ZN416)
Modifying domestic receivers for HF SSB
Modifying domestic receiver for 160 meters
Synthesized receiver

TRANSMITTERS
FM (88+108MHz) 'BUG' (can be modified for 30 MHz)
250mW HF bands CW TX
4 watt PS for the above

5 watt CW TX - dead easy to build
CW TX using voltage regulator
Single valve TX
Two valve TX
Cigar box transmitter (valve)
145MHz FM TX
QRP SSB TX
3 watt linear 1 - 30 MHz
Phasing method SSB exciter
500 watt linear amplifier
April 1st transmitter
10 watt linear amplifier (30dB gain)

USEFUL
VHF NBFM Crystal RX based on a coffee tin
250vDC for valves using modern components
Stereo enhancement for HF CW
CW filters
Self tuning CW filter
Q-multiplier
CW keyer using 'relay logic'

DATA/INFORMATION
QRP frequencies
Measuring micropowers
Making PCBs, several methods
G0TLAs QRP circuit database on packet
Coil winding and 'turns' calculation.

DOWNLOADING
Signal generator program
All my QRP@WW circuits in a ZIP file
PCB foil for BUG TX (later version)
'Adult' screen saver

BREWING BOOZE
Brewing beer, wine and 'mash'
Distilling the mash (3 methods)
Making liquours

---------- and more ----------

I will be adding more to the homepage constantly, as long as
I have the time available to do it.

Have fun with QRP (and QRO) de Harry, SM0VPO, Upplands V&#65533;sby.

---
visit: HARRYs HOMEBREW HOMEPAGE
http://user.tninet.se/~acz732k/
Real Hams use a soldering iron!

# 1177. WANTED: Triad M-15 Mod transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Chuck O'Neal <CONEAL@microtouch.com>
Message-ID: <01bc93a2$3b8099c0$f7512ec0@coneal>
Source record: 92437

Anyone have one of these? Need one to finish a project
Thanks!
73,
Chuck...

## 1178. Re: Japanese transistors - where to get them?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <33CF884E.28EE@popd.ix.netcom.com>
Source record: 92438

MCM electronics have a pretty wide selection

## 1179. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: "Dr. Jackle" <drjackle@webspan.net>
Message-ID: <33CFC8D0.6884E869@webspan.net>
Source record: 92439
Cross-posted to: rec.radio.amateur.homebrew,alt.radio.pirate,alt.radio.scanner,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner

in a few days I'll post a list of all ic's and
transistors I got and if you want one contact me.

--------
drjackle@webspan.net

## 1180. swap 2m amp for 6m amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33CF7EAE.41C6@pactitle.com>
Source record: 92440
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hello,

I have a Marage 10 in 150 out 2m amp. "g150"?
Has fm/ssb switch.

Want to trade for a 6m sb200 or another 6m amp...
I'll take a sb-200 that needs to be modified.

Let me know what you got.
Thanks.

--
Dave Booth kc6wfs dm04rk
http://www.geocities.com/Hollywood/5860/

Note the **spamsaver when replying.

# 1181. Re: A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5qnumg$b8f$1@news.belwue.de>
Source record: 92441
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>How many of you would pay $30 (postage included) for the plans to build
>a PROFESSIONALLY designed 12 Element 2 Meter log-spaced quad, a little
>under 20 feet long and build on a sturdy aluminum boom, with 17-21 dB of
>average forward gain, giving you an effective radiated power of about
>200 forward Watts RMS for every 10 Watts RMS of input to the antenna?

Well, if the antenna were professionally designed, you would certainly care
to specify the gain a little closer. If it were anywhere near the quoted
figure, many EME-ers would immedially throw away their arrays.

In fact, there is no reason to believe that the gain exceeds that of a
typical 20 ft yagi, at about 13 dBd, the plans for which are *free*.

73, Moritz DL5UH

## 1182. Re: A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc93a5$0cb051a0$6d60b6cd@cbx-nt>
Source record: 92442
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I was wondering when someone would put up a log quad!
Our club built a 5 element that is great!

I wonder why the 'weak signal' guys dont use them more often?

--
Christopher Cox
KC8FRJ
TRA#4901

# 1183. Re: Bypass Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <lzgZQEACj5zzEwaY@pacsat.demon.co.uk>
Source record: 92443

In article <33CE3446.4CF@removethispart.hp.com>, Al Lorona <al_lorona@re
movethispart.hp.com> writes
>I came across some very small 0.1 uF @ 50V monolithic
>capacitors with axial leads for a pretty good price. As
>bypass capacitors, are they worse than, as good as,
>or better than ceramic disc caps? I would be using
>them in an 11 MHz IF/AGC board project.

Hi Al

Wouldn't have thought they would have made much difference at that freq!
As long as the leads as kept short and they fit your planned PCb holes I
don't see a problem

It is almost DC anyway :)))

73 Simon GM4PLM
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

## 1184. CA3160E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Bob Liesenfeld <wb0poq@visi.com>
Message-ID: <33CFEDB6.1B207789@visi.com>
Source record: 92444

Hi,
Anybody have any specs on the CA3160E IC?
Thanks!
--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

## 1185. voice synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: Dana Yeomans <dana@randomc.Com>
Message-ID: <Pine.GSO.3.96.970718214645.7361A-100000@randomc.com>
Source record: 92445

hi all, i am blind, and was wondering if someone could take a freq counter
and make the digits come out in speach, might be somthing to look into,
if you'all could come up with somthing like that, i could sell all you
could
build, well just a thaught. i sure would like one of those. i am located
in griffin, georgia close to atlanta. take care and thanks for reading
from
n4pge in griffin, georgia.

## 1186. Rebuilding Yaesu Nicad Battery Packs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-18 00:00:00 UTC
From: mphagan@erinet.com
Message-ID: <mphagan.2.0F73BEAD@erinet.com>
Source record: 92446

Does anyone know of a good method to open Yaesu battery packs? They appear to be sealed and locked, or glued tight.

## 1187. ceramic resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Dave <davepmer@fullnet.com>
Message-ID: <01bc945b$cb2eada0$efad96ce@dave>
Source record: 92359

Help, I need a 10.7 MHZ Ceramic resonator or any ideas on what else to
use.
Dave
davepmer@fullnet.com

## 1188. good and bad news

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: "Dr. Jackle" <drjackle@webspan.net>
Message-ID: <33D0E70E.BC3AD095@webspan.net>
Source record: 92360
Cross-posted to: rec.radio.amateur.homebrew,alt.radio.pirate,alt.radio.scanner,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner

The good news is, I traded in the crapy RadioShack
TRC-501 for a less crapy Cobra 19ultra.
The bad news is, I need mods for it.

# 1189. Help Needed Finding Prescaler IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <33D0FA8D.54D3@hiwaay.net>
Source record: 92361

I am attempting to repair a 23cm FM ATV transmitter made by
TD Systems. I have narrowed the problem down to the
1.2 Ghz prescaler IC. From the circuit analysis I believe this to be a
divide by 128 IC. The part number on the IC is 506 and the schematic
indicates M8506. Attempts to find this IC in Mouser and Digi-key
have been unsuccessful. Can any help me locate a dealer that
handles this IC, or recommend a replacement?

Thanks in advance,

Gene Marcus W3PM GM4YRE
Huntsville, AL
mmarcus@hiwaay.net

## 1190. Re: good and bad news

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Professor <bgriffey@ameritech.net>
Message-ID: <01bc947d$803e9860$9cd38dce@bgriffey>
Source record: 92362
Cross-posted to: rec.radio.amateur.homebrew,alt.radio.pirate,alt.radio.scanner,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner

It's Dr. Jeckle !
--
Signed
Mr. Hyde

Dr. Jackle <drjackle@webspan.net> wrote in article
<33D0E70E.BC3AD095@webspan.net>...
> The good news is, I traded in the crapy RadioShack
> TRC-501 for a less crapy Cobra 19ultra.
> The bad news is, I need mods for it.
>
>

## 1191. Needed Desprately

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: ace@home.com
Message-ID: <33d301c6.658065@news.cardina.net>
Source record: 92363

I just purchased a LW-51 50 watt 6/2 meter transmitter. I need the matching power supply or a pinout of the power connector.

LW-51 Double Deluxe 2 & 6 meter Transmitter

# 1192. Re: good and bad news

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: "Dr. Jackle" <drjackle@webspan.net>
Message-ID: <33D15337.1A7864D4@webspan.net>
Source record: 92364
Cross-posted to: rec.radio.amateur.homebrew,alt.radio.pirate,alt.radio.scanner,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner

no it's Dr. Jackle
Professor wrote:

> It's Dr. Jeckle !
> --
> Signed
> Mr. Hyde
>
> Dr. Jackle <drjackle@webspan.net> wrote in
> article
> <33D0E70E.BC3AD095@webspan.net>...
> > The good news is, I traded in the crapy
> RadioShack
> > TRC-501 for a less crapy Cobra 19ultra.
> > The bad news is, I need mods for it.
> >
> >

# 1193. Ameritron AL80 electronic ALC diagram PSE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <33d19cdb.1053209@news.interbusiness.it>
Source record: 92365
Cross-posted to: rec.radio.amateur.homebrew,radio.amateur.equipment

Hi, Friends! I'm looking for contact somebody having an Ameritron AL80
that uses a so-called electronics ALC that i'm interested to reproduce
in my SB-220.
Thanks for any kind answer.
73 de Vanni I8JJB
e-mail: grainone@caserta.peoples.it
--
Vanni R.
Caserta,Italy

# 1194. Ameritron AL80 electronic ALC diagram PSE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <33d29e84.1478408@news.interbusiness.it>
Source record: 92366
Cross-posted to: rec.radio.amateur.homebrew,radio.amateur.equipment

Hi, Friends! I'm looking for contact somebody having an Ameritron AL80
that uses a so-called electronics ALC that i'm interested to reproduce
in my SB-220.
Thanks for any kind answer.
73 de Vanni I8JJB
e-mail: grainone@caserta.peoples.it
--
Vanni R.
Caserta,Italy

## 1195. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33D0E844.422E@calweb.com>
Source record: 92367
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

Jim in Texas wrote:
>
> I've thinned down the newsgroup list a little -- hope you see this.
>
> Basically, junker computers are nearly as good as junker
> vacuum-tube TV sets for ham radio parts sources. You have to
> be willing to dig.
>
> I've heard of people successfully pulling ICs off of soldered
> boards, but personally haven't had great luck. The capacitors
> come off easily enough with a soldering iron and are well
> worth taking. Any of the TTL or CMOS discrete logic chips
> are worth taking if they'll come along easily -- I haven't found
> the magic technique yet.
>
>
> Happy hacking.
>
> N6OTQ

Hi mate,

Re removing ICs. Some years back myself and a bunch of other folks in a ham club were given a pile of Burroughs PC boards loaded with a now defucnt CTL logic family (an early current mode logic). In an effort to recover the stuff (1970) we tried many trick and finally the late K6OIK, Len, came up with a scheme which I modified slightly. The trick is to find an old American Beauty soldering iron that takes a copper slug type tip (approximately 3/8 inch diameter) and then fashion new tips from 3/8 inch od copper tubing. Then you can hammer out a nice sharp flat end the width of the chip you want to remove. No attempt was made to save the multi-layer pcb, but by applying the heat with a sharp edged and tinned heating tip that hit all pins on one side, we were able to pop the chips off one side at a time with a little prying action. We rarely lost a chip, but did pull a lot of thru-holes with the chips (no big deal).
The process was not pretty nor delicate, but when TTL was selling for a couple bucks a piece for JK flops, it sure got a lot of projects off the ground. The tip required continuous trimming and filing and hammering, but it was a cheap tool and easy to make new ones. The key was keeping the tip/blade sharp and square cut.

# 1196. FS: Antique, NOS, Used Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Kevin Harlan <harlan@home.net>
Message-ID: <01bc9417$9a15a640$528a0118@cx75859-a.msnv1.occa.home.com>
Source record: 92447

(2) CENTRON 572B/T160L new jobber boxed @ $94 each,
free shipping in USA

(2) Chinese 572B @ $65 each, free shipping in USA

(1) PENTA 3-500Z @ $105 each, free shipping in USA

(1) EIMAC 3-500Z @ $160 each, free shipping in USA

(1) Chinese 3-500C ( same as 3-500Z but has graphite plate)
$120 each, free shipping in USA
---
ANTIQUE GLOBE SHAPE TUBES, untested bu us, used,
pulled from old radios, priced accordingly, FREE
SHIPPING IN THE USA:

(1) Cunningham C35 $2.50
(4) Cunningham C327 $5.00
(3) Eveready Raytheon ER224 $2.50
(1) Eveready Raytheon ER227 $5.00
(1) Eveready Raytheon ER239 $2.50
(2) Philco 37 $2.50
(1) Philco 80 $7.50
(4) RCA UY227 $5.00
(1) Sylvania 85 $2.50
(1) Tungsol 24 $2.50

Shipping in USA: 1 - 6 tubes $4.00, 7 or more shipping free.
---
Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $1.00
6AH6 $0.50
6AL5 $0.50
6AN8A $1.00
6AU6A $0.50
6CL6 $1.00
6X4 $1.00
12AT7 $2.00
12AU7A $3.00
12AX7A $3.00
5651A $0.75
5963/12AU7A $3.00
6080 $3.00
6201/12AT7 $2.00

8068 $14.00
8136 $0.75
8532W $1.00

Shipping in the USA: 1 - 6 tubes $4.00, 7 or more tubes shipping free! For shipping outside the USA Email your list and your shipping address for shipping cost information.

---

(5) TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned and calibrated,120 day warranty,shipping free in the USA $465.00 each!

---

(4) Hewlett Packard 8640B/323 signal generators (military AN/USM 323), .5 MHz to 512 Mhz, $475ea, working but may need minor repairs and/or calibration.
Units reconditioned and calibrated $675 ea with 120 day warranty. Any unit free shipping in USA.

---

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin miniature made by Philips in the USA 1986, NOS, individual boxes, 3000 available, shipping in the USA: 1 - 199 $4.00, 200 or more shipping free!
$0.12 each

---

TEST EQUIPMENT, RECONDITIONED, CALIBRATED, 120 DAY WARRANTY, FREE SHIPPING IN USA.

Tektronix 455 , 50 MHz Dual trace oscilloscope, $395
Tektronix 465, 100 MHz dual trace oscilloscope, $550
Tektronix 475A, 250 MHz dual trace oscilloscope, $750
HP8405A, Vector Voltmeter, $325
Power Design 6050, 0-60 Volts,1 Amp,Regulated Pwr Supply,$225
Power Design 6050A,0-60 Volts,1 Amp,Regulated Pwr Supply,$200

---

For a complete list of ELECTRON TUBES (both new and/or used), various ANTIQUE RADIO COMPONENTS or ELECTRONIC TEST EQUIPMENT, please E-mail: sales@emodus.com

Thank you!

# 1197. Re: Help, filter oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: acj@ultranet.com
Message-ID: <acj-1807972130070001@d14.dial-1.wor.ma.ultra.net>
Source record: 92448

A while back Bob Pease dicussed (in his Pease Porridge column in EDN) tricks used for making temperature-stable chambers. He claimed that surounding the chamber to be stabilized with a second chamber of some sort was very effective. In his lab, he's used cardboard boxes nested inside larger cardboard boxes to make thermally stable test chambers, and says he keeps old boxes around just for this purpose. If you have room for an outer chamber, seems like a cheap and simple thing to try.

Cheers,

Jon

# 1198. Re: A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Robert Lay <w9dmk@crosslink.net>
Message-ID: <33D090F1.704A@crosslink.net>
Source record: 92449

Dear Jonathan,

I suggest that when an antenna has a forward gain of X db, the Effective Radiated Power (ERP) should be X db higher than a reference antenna. You are suggesting a 20:1 factor (13 db) for Effective Radiated Power, but the Forward Gain you mention (17 -20 db) is not consistent with that ERP. Have I misunderstood something?
73
Bob

## 1199. IC's for trade or sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: "Dr. Jackle" <drjackle@webspan.net>
Message-ID: <33D09DAE.4681C125@webspan.net>
Source record: 92450
Cross-posted to: rec.radio.amateur.homebrew,alt.radio.pirate,alt.radio.scanner,rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner

a pritty large list of ic's is at
http://www.webspan.net/~drjackle/ic.htm
if you see something you need e-mail me at
drjackle@webspan.net.
if you don't see what you need e-mail me anyway I
might have it.

Dr. Jackle
drjackle@webspan.net

# 1200. Re: CA3160E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Roland Burgan <nobody@up.net>
Message-ID: <33D0C996.1C20@up.net>
Source record: 92451

Bob Liesenfeld wrote:
>
> Hi,
> Anybody have any specs on the CA3160E IC?
> Thanks!
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com

The only ones I see listed in the Harris Linear book is the
CA3160 , and, CA3160A.
Try: www.harris.com
--
**********
To respond by E-Mail, replace the 'nobody' in the
reply-to address with: rburgan
**********

# 1201. Re: Rebuilding Yaesu Nicad Battery Packs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <7tA+XMAc$H0zEwBv@pacsat.demon.co.uk>
Source record: 92452

In article <mphagan.2.0F73BEAD@erinet.com>, "Mansel P. Hagan"
<mphagan@erinet.com> writes
>Does anyone know of a good method to open Yaesu battery packs? They appear to
>be sealed and locked, or glued tight.

Hi!

Done a few. You CAN prise them open, you just need to take your time!
Use a sharp knife along the seams, then gently prise them apart. Be
careful, all the insides will fall out!

Once you have replaced the cells you can gently pack it all back in and
then glue the case shut. I have used a number of glues, but epoxy resin,
marketed in this country under the name 'Araldite'. Use a thin layer on
all the seams and use tape to hold it all together whilst the glue
cures. I have heard of people using instant 'superglues' but I don't
know how effective these are on the plastic used?

Good luck!

73 Simon

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

## 1202. F.S. - Tubes, radios, books, misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970719145101.KAA08657@ladder01.news.aol.com>
Source record: 92453

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco plus radio related publications. Schematics for many older radios and TV's - just $3 delivered. Tube Manuals, Tube Substitution books, Service Manuals, radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #711-T.

# 1203. Re: CA3160E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Roland Burgan <nobody@up.net>
Message-ID: <33D0CB90.3663@up.net>
Source record: 92454

Roland Burgan wrote:
>
> Bob Liesenfeld wrote:
> >
> > Hi,
> > Anybody have any specs on the CA3160E IC?
> > Thanks!
> > --
> > Genuine E-mail From the Land of the Everlasting Icicle...
> > Bob Liesenfeld
> > wb0poq@visi.com
>
> The only ones I see listed in the Harris Linear book is the
> CA3160 , and, CA3160A.
> Try: www.harris.com
> --
> **********
> To respond by E-Mail, replace the 'nobody' in the
> reply-to address with: rburgan
> **********Sorry, I goofed the above address.
Try this instead:

http://www.semi.harris.com/

--
**********
To respond by E-Mail, replace the 'nobody' in the
reply-to address with: rburgan
**********

## 1204. Ideas for a 6M RC system

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: Andy <andy@microcosm.net>
Message-ID: <5qqmqp$otg@paperboy.world-net.net>
Source record: 92455

Anyone have any ideas for a 6M remote control xmtr and rcvr (located seperately)? I designed the simple electronics, I just need to link the modules. It's only a (psuedo) 2 channel system. I didn't want to do pulse modulation, so the transmitter sends 4 tones and the receiver decodes them. Basically either forward or reverse for each servo.

Should I use FM or AM? I know that AM would be much easier to build, but FM would be clearer. Any suggestions for design and or mode?

# 1205. WTB: 4-1000 socket SK-510

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-19 00:00:00 UTC
From: km3g@aol.com
Message-ID: <19970719154400.LAA25135@ladder02.news.aol.com>
Source record: 92456

Need two fo these.

lane KM3G
san diego
619 470 6528

## 1206. Re: ceramic resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970720000801.UAA09328@ladder01.news.aol.com>
Source record: 92368

>
>Help, I need a 10.7 MHZ Ceramic resonator or any ideas on what else to
>use.
> Dave
>

Buy them at Digi-Key.

W4ZCB

## 1207. Re: ceramic resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc94a2$1441ca40$8c90f5ce@wa6vse.fast.net>
Source record: 92369

Dave <davepmer@fullnet.com> wrote in article
<01bc945b$cb2eada0$efad96ce@dave>...
> Help, I need a 10.7 MHZ Ceramic resonator or any ideas on what else to
> use.
> Dave
> davepmer@fullnet.com
>

If you could say something about what you need it for (what you're
trying to do) it would help ...

Carl - wa6vse
wa6vse@fast.net

# 1208. WANTED, INFO on heahkit AR-15

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: cogline@emi.net
Message-ID: <33d17266.2303902@news.emi.net>
Source record: 92370

Hi All... I'm looking for info on an old heathkit stereo am/fm reciever, the AR-15. I Need to know where i may be able to fin a parts list, of schematic. My ar-15 works fine except that the mode (am/fm/tape/aux/phono) switch is damaged, and I need to get the part number to order a replacement.

Thanks

Cogline@emi.net

## 1209. help on amateur radio conrol

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: scottn3xcc@aol.com
Message-ID: <19970720043301.AAA25282@ladder01.news.aol.com>
Source record: 92371

I would like to obtain schematics, etc. on how to utilize the special section of amateur bandwidth allocated for remote control applications (for a remote control car/airplane) anything you can provide would be helpful.

thanks in advance

ScottN3XCC

## 1210. Trade Collins for Kenwood

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: km3g@aol.com
Message-ID: <19970720141001.KAA26160@ladder02.news.aol.com>
Source record: 92372

Trade my 75S3 with Collins cw filter, 32S1, 516F2, matching speaker for
TS-850SAT.

Will not sell outright.
Will not split.
Trade only.

Lane KM3G
San Diego

## 1211. Anyone brewed a interface for JIL SX-400 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Nick Norton <nick@swint.demon.co.uk>
Message-ID: <bUSzNAArli0zEw26@swint.demon.co.uk>
Source record: 92373

I think the interface for this scanner is known as RC-4000
but as it is impossible to obtain one, my only hope is to make
one. Do you possibly have any light for this subject please.
--
Nick

Museum of 70's 80's Sports & Leisurewear = http://www.swint.demon.co.uk/

## 1212. Info about S-AV17?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Marco Baaij <mbaay@casema.net>
Message-ID: <33D2433D.109E@casema.net>
Source record: 92374

Hello OM/YL !!

From a Ham-friend, i got a powermodule.
It is a powermodule from TOSHIBA, the S-AV17.
I know he's working around the 2 Meter band.
Can anyone help me with some info or a datasheet of this module??
I want to find out, which pin is for what.
Please send me a email, when you have some info.

Many thanks, 73's Marco de PE1PNA, Holland

Email: mbaay@casema.net

## 1213. Re: A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Jonathan <ke6yzz@hotmail.com>
Message-ID: <33D24F21.673FF41B@hotmail.com>
Source record: 92375
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Jonathan wrote:
>
> How many of you would pay $30 (postage included) for the plans to build
> a PROFESSIONALLY designed 12 Element 2 Meter log-spaced quad, a little
> under 20 feet long and build on a sturdy aluminum boom, with 17-21 dB of
> average forward gain, giving you an effective radiated power of about
> 200 forward Watts RMS for every 10 Watts RMS of input to the antenna?
>
> If yes, please go only once to this URL:
>
> http://www.caprica.com/~jd/yes4quad.html
>
> If no, please go only once to this URL.
>
> http://www.caprica.com/~jd/no4quad.html
>
> To see pictures of this antenna, finished and installed, click here:
>
> http://www.caprica.com/~jd/ant-pics.html

Bob replied:
>
>Dear Jonathan,
>
>I suggest that when an antenna has a forward gain of X db, the Effective
>Radiated Power (ERP) should be X db higher than a reference antenna.
>You are suggesting a 20:1 factor (13 db) for Effective Radiated Power,
>but the Forward Gain you mention (17 -20 db) is not consistent with that
>ERP. Have I misunderstood something?
>73
>Bob

No, I just mistyped it. Also, my figures for forward gain in dB is an
aproximate extrapolation from the specs for a 2 element quad, which has
about the same gain as a 3 element yagi.

You have to realize that raw data on quad antennas is relaticely
non-existant for quads over 4 elements. Nobody else to my knowledge has
ever recorded any such data for a common quad over 4 elements, much less
for one that is log-spaced and has an aluminum boom. I believe mine is
unique in it's particular design and combination of materials.

What I can tell you for sure is that with 6 watts output from the rig, I
was able to register a solid reading of 10 dB over S9 in San Diego from

Inglewood, CA which is about 120 Miles from me. My quad is about 40' above the ground. My Ringo Ranger is 50' above the ground and is not at all heard by the same station in San Diego with his squelch open, nor does it even move his S-meter. Perhaps that will give people a more tangible idea of the gain. Of course, results do depend upon terrain too. There are some hindering conditions I must overcome for that contact including a range of palisades and a small mountain range. That's why they call this the Los Angels basin, because we're surrounded by crests on all sides, except for a fraction of our shoreline, but even half of our shoreline also has very high ridges seperating the city from the beach.

Yes 13 dB would be right for a yagi the same size, but this is a quad and quads generally have about 1/3 ro 1/2 more gain than a yagi when the quad's elements are the traditional even-spacing. using log-spacing opimizes the gain. I guestimate my forward gain is likey 18 dB, but I thought I'd better give a margin for error which is why I stated the above range in my first post.

I don't know which newsgroup you read this in but after this I won't be posting to *.misc after this because it generated an annoying automatic message which I did not want or solicit. I hope it doesn't put me on any mailing list or I'll be having a fit with a certain someone's ISP admin. But if it didn't then I'll just ignore it and drop the newsgroup.

Sincerely,

Jonathan DeFabritis
Radio Operator's License: KE6YZZ
Southern California hams can reach me on: 144.45 MHz FM/Simplex
Send Mailto:jd@caprica.com or Mailto:ke6yzz@caprica.com (same account)
IF YOU ARE AN AOL USER, then ONLY send mailto:ke6yzz@hotmail.com
---
To reply to me you MUST change the "To" header to say jd@caprica.com or I WON'T get your reply. I've altered the headers to defeat the annoying junk-mail robots which capture email addresses in newsgroups & on some websites! It's a good defense against most annoying "junk-email" bots!
---
-=A Few Great WWW Links!=-

My General Homepage URL is: http://www.caprica.com/~jd/
The "World of Radio" Webpage: http://www.caprica.com/~jd/rf-world.html
Taral Hicks Fan Club WebPage: http://www.caprica.com/~jd/taralfan.html
---
Alan Keyes for US President in 2000! The "Teddy Roosevelt" of our era!
Please browse: http://www.declaration.net for more info on Alan Keyes!
---

--
Sincerely,

Jonathan DeFabritis
Radio Operator's License: KE6YZZ
Southern California hams can reach me on: 144.45 MHz FM/Simplex
Send Mailto:jd@caprica.com or Mailto:ke6yzz@caprica.com (same account)
IF YOU ARE AN AOL USER, THEN ONLY send mailto:ke6yzz@hotmail.com
---
To reply to me you MUST change the "To" header to say jd@caprica.com or
I WON'T get your reply. I've altered the headers to defeat the annoying
junk-mail robots which capture email addresses in newsgroups & on some
websites! It's a good defense against most annoying "junk-email" bots!
---
-=A Few Great WWW Links!=-

My General Homepage URL is: http://www.caprica.com/~jd/
The "World of Radio" Webpage: http://www.caprica.com/~jd/rf-world.html
Taral Hicks Fan Club WebPage: http://www.caprica.com/~jd/taralfan.html
---
Alan Keyes for US President in 2000! The "Teddy Roosevelt" of our era!
Please browse: http://www.declaration.net for more info on Alan Keyes!
---

# 1214. New Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: ?ISA-2922-JP?B?GyRCQmcySBsoSg==?= <shortckt@primenet.com>
Message-ID: <33D26138.571@primenet.com>
Source record: 92376

New Web Site
http://www.primenet.com/~shortckt

# 1215. RE: Ham-Homebrew Digest V97 #420

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: THOMPSMD@NYSOMR.EMI.COM
Message-ID: <D390ZWYCMMUNK*THOMPSMD@A1.OMRDD>
Source record: 92377

Caller Id boxes:

Hello all,
I would like to know if anyone has found any uses for caller Id
boxes in Ham Radio.
Thank you,
Mike/N2poc
thompsmd@nysomr.emi.com

# 1216. Re: Xtal sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33d26b96.9417056@news1.mnsinc.com>
Source record: 92378

On Mon, 14 Jul 1997 16:09:31 GMT, hmiller@fix.net (Harry Miller)
wrote:

>I have found sockets for the CR-1A/AR xtals. Tnx es
>73 Harry Miller KB6CGG

How about telling us WHERE you found them? (grin!)

# 1217. Re: Transformer specifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33d26c3a.9581281@news1.mnsinc.com>
Source record: 92379

On 17 Jul 1997 09:17:36 GMT, moritz@ipers1.e-technik.uni-stuttgart.de
() wrote:

>In article <5qgf6k$foa@ssbunews.ih.lucent.com>,
>Chuck Sherwood <casherwood@lucent.com> wrote:
>>How can I determine its current rating?? Can I get a good idea by measuring
>>the AC voltage drop under load? Or do I have to connect some rectifers
>>and filter caps and measure the DC performance?
>
>The curreent handling is limited by the temperature rise. You can connect
>the anticipated load for the anticipated amount of time. If the transformer
>becomes only warm, you are OK, if it becomes hot (and smelly) it wont do
>it. The voltage drop at full load depends very much on the core design.
>
>73, Moritz

THIS is what *I* like:

Empirical Engineering - GRIN!

# 1218. Free Internet Access World Wide

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Abdul Safar <ASE1000@1stfamily.com>
Message-ID: <7147cd$f2f7.165@NEWS>
Source record: 92380

Greetings from 1stfamily,

As we all know unlimited Internet access is $19.95 / month
with every major Internet access company. From Netcom to
AT&T that price never changed. So what makes us any
different when we are also charging $19.95 / month ???

Our Marketing Plan.

Our method is this. Unlimited Internet access for $19.95 per
month. If you find our service to be extremely satisfactory,
in which we are sure you will, you can refer our service
to 10 of your friends and family. If you do , you will get
free Unlimited Internet access with your e-mail address
for life !

What we offer is this:

* The fastest, clearest Internet access in the world.

* World Wide Internet access in over 110 countries.

* An e-mail account that is also life time free if you refer
10 of your friends and family to using our service.

* America On-line for only $10 / month !

* Much much more that will amaze you !

Our plan is by the year 2005 we will be the world's ONLY
Internet service providers. With our technique of offering you
life time free Internet access we will be.

Please visit our web site http://www.freeisp.com/ any where
from the world to know more about our opportunity and to even
get on the wagon before every one else beats you there.

http://www.freeisp.com/

Please forward this message to all of your online friends. Wouldn't you
want all of them to get free internet access ?

---
Abdul ( SPONSOR ID # SAF5197 )
Stop paying for Internet access !
http://www.freeisp.com/
mailto:webmaster@freeisp.com
---

## 1219. Re: A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Jonathan <ke6yzz@hotmail.com>
Message-ID: <33D26B5E.33EACE32@hotmail.com>
Source record: 92381
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

philj@ecc-uky.campus.mci.net wrote:
>
> Why would anyone pay that kind of price for info that can be gotten
> free from the internet (including online-realtime design or from
> various individuals's sites or newsgroups) or from a book about the
> same price that contains a wealth of other info as well?

Because "that kind of information" can not be obtained from any of the above about THIS antenna design. Pay better attention before passing judgement.

There is no published info on QUAD antennas over 4 elements. I know because I searched both the net, ham retailers AND a bunch of well stocked ham sections at libraries.

This is is not some yagi found in any VHF antenna book. This is MY OWN ORIGINAL design.

> Jonathon, that was a nice try, but the internet was originated as
> a medium of exchanging information, not as another commercial
> medium. Maybe another product (porn seems to well on the 'net) or
> another medium? Some adds in the ham magazines carry ads for
> products at outrageous prices and they reappear month after month
> so they must be making some money.

You were already sounding like some snobbish ninny with his head stuck up his rectum when you made the false judgement about me in the forer paragraph. But your latter paragraph is what really enforced it.

I'd bet you also belong to an all-white country club,(that intends to remain all-white), and/or are a member of a Satanic... oops... I mean Masonic Lodge,(Satanic/Masonic...same difference), and were in some snobbish, exclusive fraternity in some ivy-league university, which one could only join if you raised to believe that your so good your dung doesn't stink. You sound like JUST that type! One of the rich white democrat "Omega House" elite types like the "Greg" character in the movie "Animal House".

GIVE ME A BREAK! I've got news for you, I might not be rich, white, high-class, drive a status symbol or look down my nose at anyone who isn't stamped from the same cookie-cutter, but that doesn't make me dishonest pal and it doesn't make you any better than me. Why don't you get off your high horse, go find a good baptist church and let them teach you something about HUMANITY and about being a member of it!

Don't bother sending me any more email again until you come down to
Earth, Mr. Demigod. Because if there's one thing I can't stand, it's a
prejudgemental liberal snob!

In other words... go blow it out your ear!

Sincerely,

Jonathan DeFabritis
Radio Operator's License: KE6YZZ
Southern California hams can reach me on: 144.45 MHz FM/Simplex
Send Mailto:ke6yzz@hotmail.com
----------=A
Few Great WWW Links!=-

My General Homepage URL is: http://www.caprica.com/~jd/
The "World of Radio" Webpage: http://www.caprica.com/~jd/rf-world.html
Taral Hicks Fan Club WebPage: http://www.caprica.com/~jd/taralfan.html
---
Alan Keyes for US President in 2000! The "Teddy Roosevelt" of our era!
Please browse: http://www.declaration.net for more info on Alan Keyes!
---

## 1220. Mailing Lists Frequently Asked Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: ?ISA-2922-JP?B?GyRCQmcySBsoSg==?= <shortckt@primenet.com>
Message-ID: <33D27DD6.1381@primenet.com>
Source record: 92382

```
Mailing Lists Frequently Asked Questions

There are too many questions to answer individually, but
the answers are online: http://www.qsl.net/k7on/qslfaq.htm
```

## 1221. Mitrek and Mitrec

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: derekt@col.hp.com
Message-ID: <5qu2tf$qom$1@nonews.col.hp.com>
Source record: 92383

Every now and then I see people posting for sale Mitrec radios.
I have worked with Motorola Mitrek radios. Is the Mitrec another Motorola
radio? Or just another way to spell Mitrek?

Thanks
Derek Toeppen
WA0ZTI
derekt@col.hp.com

# 1222. Re: New Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <mMYpf6A8vm0zEwQn@pacsat.demon.co.uk>
Source record: 92384

In article <33D26138.571@primenet.com>, ?ISA-
2922-JP?B?GyRCQmcySBsoSg==?= <shortckt@primenet.com> writes
>New Web Site
>http://www.primenet.com/~shortckt

How about telling us all what its about then!

I might then go have a look!

73 Simon GM4PLM
+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

## 1223. Power Supply Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: gradyr@mindspring.com
Message-ID: <gradyr-2007972113020001@user-37kbboc.dialup.mindspring.com>
Source record: 92385

Does anyone know of a 12 volt, 30 amp (or more) power supply kit? Would anyone have any plans to build one? Would this build a good project for a "newbie"?

Thanks for the help!
Grady
KF4LD0

# 1224. Re: Help Needed Finding Prescaler IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5qth7b$agr@hpscit.sc.hp.com>
Source record: 92386

In article <33D0FA8D.54D3@hiwaay.net>, Gene Marcus <mmarcus@hiwaay.net> wrote:
>I am attempting to repair a 23cm FM ATV transmitter made by
>TD Systems. I have narrowed the problem down to the
>1.2 Ghz prescaler IC. From the circuit analysis I believe this to be a
>divide by 128 IC. The part number on the IC is 506 and the schematic
>indicates M8506. Attempts to find this IC in Mouser and Digi-key
>have been unsuccessful. Can any help me locate a dealer that
>handles this IC, or recommend a replacement?
>
>Thanks in advance,
>
>Gene Marcus W3PM GM4YRE
>Huntsville, AL
>mmarcus@hiwaay.net

It's not "M8506", it's "MB506", by Fujitsu. I designed that
IC into the HP 5334B frequency counter C channel. You could
order one as a replacement part from your HP service center.
The HP part number is 1820-5276.

Rick Karlquist, N6RK
HP Santa Clara Division
rkarlqu@scd.hp.com

## 1225. q202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Stephane Lecours <lecourss@total.net>
Message-ID: <01bc955b$a7f44f60$b164eccd@total.net.total.net>
Source record: 92387

I have big probleme with my duplexer , I dont have my 80 db between my tx
-rx.

My duplexer made with a stub in heliax and 4 cavity.
Please send my all of information on a type of configuration for a duplexer
at 600khz.

## 1226. Ceramic trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-20 00:00:00 UTC
From: Tony Hwang <oolong@netcom.ca>
Message-ID: <33D2A309.1372@netcom.ca>
Source record: 92388

I may be in need of a few ceramic trimmers with a values
between 6pF(smallest) to about 25pF(biggest).
My IC-765 is acting up and those plastic trimmers may need
to be replaced soon.(Those in the PLL ckt). I am looking for a
place to order them. Any one knows the source for this stuff?
Thanks, 73
Tony, VE6CGX

# 1227. FS: Tubes - Low $

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Daniel Nelson <djn@goodnet.com>
Message-ID: <33D40714.C2A@goodnet.com>
Source record: 92309
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.antiques.radio+phono,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.shortwave

Common tubes for about 1/3 of new. My list has some 50K tubes on it,
while some additional 100K are not cataloged yet. Tubes are sold as
USED, Tested, with 30 day warranty and shipment on approval. Email me
for large list (300 K-Bytes). Occasional sweep, audio and transmitting
tubes. E-Mail me for wants as well.

Sales over the last 5 years has proven quality, I stand behind each and
every sale.
--
Daniel Nelson
djn@goodnet.com
<:)
An Object at Rest
Cannot be Stopped

# 1228. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5r0re5$bt6@dfw-ixnews6.ix.netcom.com>
Source record: 92310

In <33D354C8.23C9@taxes.net> Jim <jstrohm@taxes.net> writes:
>
>Can you say "type acceptance"?

Can you say, "Amateurs may build one amplifier per year in this band
without type acceptance for their personal use."?

>
>And I didn't think 572Bs or 811s had enough gain
>at 50 MHz to qualify as amplifiers. Of course,
>if you slide down 23 MHz from 6 meters....

# 1229. Re: Ceramic trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5r14hh$a8r@mtinsc03.worldnet.att.net>
Source record: 92311

Try:

http://www.mouser.com/

or maybe...

http://www.avnet.com/

73, Woody

Tony T. Hwang wrote:
>
> Hello fellow homebrewers
> Could someone point me where I can buy some of this
> ceramic trimmers values ranging from 10 to 25pF or so.
> I need a few to settle down my Icom HF XCVR which has
> plastic trimmers.
> TIA
> Tony, VE6CGX

--
de Woody, WB4QXE, woody/white@worldnet/att/net (Non-spamers, change /
to . )
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

# 1230. Needing info Mixer, Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5r0jpi$srl$1@rosenews.rose.hp.com>
Source record: 92312

Hi there!

I ordered an NE602AN mixer from Dan's Small Parts.

Danny didn't have an NE602 so he sent me an NE612.

Does anyone have info on the 612 that they can share?

Dan says they are the same thing, but I dont know, I
dont have the specs or pinouts to compare.

Also, I bought some 455kc ceramic resonators but
haven't found any circuits that use them. The appear
to have only 2 leads coming out and I am only familiar
with ceramic/crystal filters. Would I use them like
crystals in a filter arrangement?

Thanks radiomen!

tony

# 1231. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Andy <andy@microcosm.net>
Message-ID: <5r1bi2$cou@paperboy.world-net.net>
Source record: 92313

Guinney Pigg wrote in article <33d38dc8.12455479@m3-hh-alpha.03.net>...
>Are there any good introductory books about how radio receivers work
>and how to build them?
>
>I like to listen to shortwave, but find that most of the 'affordable'
>receivers come with a cheap antenna. I've gotten to the point where
>I'd rather build my own (receiver and antenna). It's been a long time
>since I've touched a soldering iron (senior year of high school -
>1979), but I'm game to re-learn what I've forgot since high school..
>
>Any suggestions for the eager beginner?
>
>I also have in my possesion about 25 feet (maybe more) of
>10 Base 2 Ethernet cable. It is shielded RG-58 Type 20 AWG cable.
>Should I try to strip the shielding and use the wire to build an
>antenna?
>
>Thanks for the help....
>
>
>Guinney Pigg
>
>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
>
>The Problem is not Technology -
> It's the morality of the people who use It.
>

I reccommend looking for the book "30 Simple Radio Receivers" or something
like that (Sorry, not in front of me) on www.amazon.com or a bookstore.
It has numerous receivers, all different levels of difficulty.

# 1232. F.S. Plate Xformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Greg Bailey <gbailey@mail.sdsu.edu>
Message-ID: <33D43624.67A4@mail.sdsu.edu>
Source record: 92314

For Sale:

UTC Plate transformer. Model/Type S-49

Single primary @ 120 VAC 60 Hz.

Single (center tapped) secondary, with the following voltage taps:
4,200 V, 3,200 V, and 3,000 V. Secondary rated at 0.3 Amps.

The "pig" measures approximately 7.25 inches square and 6" high. It
mounts with the terminals vertically downward (through the chassie).

Condition appears to be new. The primary terminals have been soldered
to, but the secondary are still virgin. Electrically high potted at 5
KV.

Hang a pair of 866's to this device and bask in the blue of yesterday,
or, couple it to a bridge of diodes and bypass yesterday.

Price, IF you will pick it up in person the cost is $50. If I got to
ship it to you the cost will be $50 for the xformer, $50 for me to build
a wooden box, plus greyhound or UPS costs.

Oh did I tell you this thing tips my bathroom scales at about 30 lbs. I
didn't really weigh it, because my bathroom scales are upstairs and the
xformer is in the garage. In other words it would require me to carry
it up.....

If you are planning a KW, this is the potmetal that will hold the rig to
the floor.

First come first served. If you are not happy with this rock crusher I
will refund your cash. Count on it.

Greg

greg.bailey@sdsu.edu

# 1233. Re: CA3160E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <33D3F0A7.7AC1@tir.com>
Source record: 92315

Try here:

http://www.amc.com/chipdir/chipdir.html

When I linked to the chip directory I found your part number with a
"PDF" file. You'll want Adobe's Acrobat reader which you can get for
your platform (apple,unix,ibm,etc)at:

http://www.adobe.com

There is a lot of material available on the net that is in this format.

Bill KU8H

## 1234. testing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: patrick.hocchuan@itworks.com.ph
Message-ID: <869459638@itworks.com.ph>
Source record: 92316

```
* Crossposted from: alt.acting

testing.. can anyone read me?

... Information Transferworks Company -- connecting you today for tomorrow
___ Blue Wave/DOS v2.30
```

# 1235. Re: GE MASTR Progress Line Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Chris Nicholson <csnichol@delcoelect.com>
Message-ID: <33D35E05.626B@delcoelect.com>
Source record: 92317

dfbutt@mail.netshop.net@netshop.net wrote:
>
> Our Club just came into some GE Progress Line Repeaters. However,
> we have no manuals for the VHF Units (we do for the UHF ones). We need the
> Terminal Strip diagrams for these units. If you can help, please e-mail me.
>
> Thanks,
> David
> VE7LDB

These are Mastr progress and not plain Progress line rigs
right? Mastr pro uses solid state rx and hybrid tx with 3 tubes.
the power supply for these and terminal strip are the same for all
bands. I not sure about the all Progress line wich is all tubes.
73 Chris N9LLO

# 1236. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Marco Baaij PE1PNA <mbaay@casema.net>
Message-ID: <33D29C5D.2718@casema.net>
Source record: 92389

123

# 1237. Re: test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Marco Baaij PE1PNA Holland <mbaay@casema.net>
Message-ID: <33D29D3D.543F@casema.net>
Source record: 92390

Marco Baaij PE1PNA wrote:
>
> 123
123

# 1238. test again

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Marco Baaij PE1PNA <mbaay@casema.net>
Message-ID: <33D29CD1.3142@casema.net>
Source record: 92391

12345

# 1239. SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19970721035900.XAA01168@ladder01.news.aol.com>
Source record: 92392

TO ALL HOMEBREWERS
I BUILT A REALLY NICE 6 METER AMP USEING THE 3-500 TUBE
PUTS OUT A KILOWATT INPUT WITH A EXCITER PROVIDING 35 WATTS DRIVE
CAN USE THE 3-400** 572B **811**3-1000 TUBES TOO.
IT IS A ZERO BIAS G-G CONFIGURATION
SUITED FOR SSB AND CW SERVICE IN THE 50 MHZ BAND
TUNED INPUT, GRID METER, RF OUTPUT METER, AND PLATE METER
PI- L OUTPUT NETWORK FOR A HIGH ORDER OF HARMONIC SUPPRESSON
FOR MORE INFO AND A LAYOUT OF THE MAJOR COMPONENTS
AND SCHEMATIC OF SIX METER LINEAR AMPLIFER PLEASE EMAIL ME
I ALL SO BUILT UP SOME SIX METER 2 KILOWATT WATT METERS TOO

73S AND GOOD DX JOSEPH

# 1240. GE MASTR Progress Line Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: <>
Message-ID: <5qun6r$s7l$1@noc.van.hookup.net>
Source record: 92393

Our Club just came into some GE Progress Line Repeaters. However,
we have no manuals for the VHF Units (we do for the UHF ones). We need the
Terminal Strip diagrams for these units. If you can help, please e-mail me.

Thanks,
David
VE7LDB

## 1241. Amateur Radio BBS + Inter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: no_spam@phx-az.com
Message-ID: <9707201954116309@phx-az.com>
Source record: 92394

```
**********
ArizonaONE
Data Services
**********

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ON-LINE AMATEUR RADIO CALLSIGN LOOKUP

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+1-602-912-0225

Practical Peripherals Modems

FREE ACCESS
-----------

+1-602-912-0225

BBS SYSOP SERVICES:
-------------------

UUCP Service Available To Other BBS's - Contact The Postmaster
For Details On How To Receive A UUCP Feed From This System.

Internet LISTSERV Services Available To Interested Parties - Contact
The Postmaster For Details.

+1-602-912-0225
---
* OLXWin 1.00b * Bakersfield: California's Hot Spot!
```

## 1242. UPS parts for GEL cell charger?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33d32e52.75495840@news.erols.com>
Source record: 92395

Homebrewers: I have a bunch of old (and possibly serviceable) GEL cell batteries. I'm hoping to press them into QRP service. I was thinking about how to charge them, when I remembered that I have an unused computer UPS laying around.

Has anyone used the charger circuitry in one of these beasts for the charging ham application Gell Cells? How about disconnecting the inverter circuitry and turning the UPS into a 12 volt supply/Gell Cell charger?

Any suggestions on how to determine which of my batteries are save-able?

Thanks, 73 Bill N2CQR

# 1243. Re: Info about S-AV17?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5qua93$p9b$1@news1.rmi.net>
Source record: 92396

Marco Baaij (mbaay@casema.net) wrote:
: Hello OM/YL !!

: From a Ham-friend, i got a powermodule.
: It is a powermodule from TOSHIBA, the S-AV17.
: I know he's working around the 2 Meter band.
: Can anyone help me with some info or a datasheet of this module??
: I want to find out, which pin is for what.

This is a 50 watt version of the SAV-7, which is a 25 watt module.
Yes, they are for the 2 meter band.
I will see if I can find a tech sheet on them...

73
Jonesy W3DHJ

# 1244. Re: Rate Ten-Tec Transceiver Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: dwentz@accessus.net
Message-ID: <5qvop6$gd1$1@news.accessus.net>
Source record: 92397
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have built the 6 Meter and the 220 kits. I realy enjoyed building the units, TenTec has been most helpfull answering a few of my questions. I would recomend anyone wanting to build their own equiptment to take a good look at TenTec.

73's hope this helps.

Dale Wentz / KB9JJA

In article <33CCFB45.652F4F0C@myself.com>, dirkb@myself.com says...
>
>What does everyone think about Ten-Tec's 6-meter/2-meter/220 mhz
>transceiver kits? How do they compare to commercial rigs? Are they a
>good value? Are they difficult to assemble?
>--
>Best Regards,
>
>+-------------------------------------+------------------+
>+ Dirk Bremer St. Charles MO | Member of AR8000,+
>+ Senior Analyst/ (25 miles west | SABRENT, SCAN-L, +
>+ Software Engineer of St. Louis) | and TRUNKCOM +
>+ for CADP, | mailing lists, +
>+ St. Peters MO. | SABRE and SCARC +
>+ Business email: dirkb@myself.com | radio clubs. +
>+ Confidential email:jdbremer@msn.com | Equipment: +
>+ Voice:314-922-9158 extension 652 | AR8000 +
>+ Fax: 314-922-9175 | BC230XLT +
>+-------------------------------------+------------------+
>+ Pursuant to US Code, Title 47, Chapter 5, +
>+ Subchapter II, 227, any and all non-solicited +
>+ commercial email sent to this address is subject to +
>+ a download and archival fee in the amount of $500.00 +
>+ US. Emailing denotes acceptance of these terms. +
>+-----------------------------------------------------+

# 1245. Invitation to Visit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: KB8TNQ <kb8tnq@voyager.net>
Message-ID: <33D350DA.31B31E75@voyager.net>
Source record: 92398
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,uk.radio.amateur
Body handling: HTML body converted to readable text

Hi gang:

Great news! We have two new Web Sites for you to check out. The first, The KB8TNQ Ultimate Amateur Radio Page! is a great source for all kinds of information on the Amateur Radio hobby. It's been up since 11 May, 1997 and is generating some great feedback.

The other, The Central Michigan Amateur Radio Club Web Site is mainly about our club and it's activities, but we have added a FREE "Trader's Page". If you have some ham gear or computer items to sell, this is the place to be. With posts all over the internet, this site will soon be our most popular, so come on in and give us a look!

7-3,
Jim (KB8TNQ)

Hi gang:

Great news! We have two new Web Sites for you to check out. The first, The KB8TNQ Ultimate Amateur Radio Page! is a great source for all kinds of information on the Amateur Radio hobby. It's been up since 11 May, 1997 and is generating some great feedback.

The other, The Central Michigan Amateur Radio Club Web Site is mainly about our club and it's activities, but we have added a FREE "Trader's Page". If you have some ham gear or computer items to sell, this is the place to be. With posts all over the internet, this site will soon be our most popular, so come on in and give us a look!

7-3,

Jim (KB8TNQ)

# 1246. Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: yeahright@biteme.com
Message-ID: <33d38dc8.12455479@m3-hh-alpha.03.net>
Source record: 92399

Are there any good introductory books about how radio receivers work
and how to build them?

I like to listen to shortwave, but find that most of the 'affordable'
receivers come with a cheap antenna. I've gotten to the point where
I'd rather build my own (receiver and antenna). It's been a long time
since I've touched a soldering iron (senior year of high school -
1979), but I'm game to re-learn what I've forgot since high school..

Any suggestions for the eager beginner?

I also have in my possesion about 25 feet (maybe more) of
10 Base 2 Ethernet cable. It is shielded RG-58 Type 20 AWG cable.
Should I try to strip the shielding and use the wire to build an
antenna?

Thanks for the help....

Guinney Pigg

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The Problem is not Technology -
It's the morality of the people who use It.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

# 1247. Re: A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Todd Little <little@ameritech.net>
Message-ID: <33D39D78.CAC5BD65@ameritech.net>
Source record: 92400
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Jonathan wrote:

> No, I just mistyped it. Also, my figures for forward gain in dB is an
> aproximate extrapolation from the specs for a 2 element quad, which
> has about the same gain as a 3 element yagi.

Can you provide the details of this "extrapolation"? Differences
in gain between short yagis and short quads disappear quickly as
the boom length approaches multiple wavelengths.

> You have to realize that raw data on quad antennas is relaticely
> non-existant for quads over 4 elements. Nobody else to my knowledge
> has ever recorded any such data for a common quad over 4 elements, much
> less for one that is log-spaced and has an aluminum boom. I believe mine is
> unique in it's particular design and combination of materials.

Huh? Any decent modeling program based upon any of the NEC models
can tell you what the gain will be. Having done extensive modeling
of yagis, quagis, and quads at VHF/UHF, I can tell you that there
is little in appreciable gain to be had in quads over yagis when you
hit 3+ wavelengths.

> What I can tell you for sure is that with 6 watts output from the rig,
> I was able to register a solid reading of 10 dB over S9 in San Diego
> from Inglewood, CA which is about 120 Miles from me. My quad is about 40'
> above the ground. My Ringo Ranger is 50' above the ground and is not
> at all heard by the same station in San Diego with his squelch open, nor
> does it even move his S-meter. Perhaps that will give people a more
> tangible idea of the gain. Of course, results do depend upon terrain
> too. There are some hindering conditions I must overcome for that
> contact including a range of palisades and a small mountain range.
> That's why they call this the Los Angels basin, because we're
> surrounded by crests on all sides, except for a fraction of our
> shoreline, but even half of our shoreline also has very high ridges
> seperating the city from the beach.

Anecdotal evidence is just that. I've worked Oklahoma from Illinois
on 6 meters loading up my 2 meter ringo ranger. That certainly
isn't an endorsement for a 2 meter ringo on 6.

> Yes 13 dB would be right for a yagi the same size, but this is a quad
> and quads generally have about 1/3 ro 1/2 more gain than a yagi when
> the quad's elements are the traditional even-spacing.

This is only true for very short quads. At multiple wavelengths, the
differences are negligible.

> using log-spacing
> opimizes the gain. I guestimate my forward gain is likey 18 dB, but I
> thought I'd better give a margin for error which is why I stated the
> above range in my first post.

Guestimate? Have you modeled your antenna with any reasonable
modeling program? The NEC based programs are fairly accurate and
would likely show you that any such differences in a quad versus
yagi are negligible.

> I don't know which newsgroup you read this in but after this I won't
> be posting to *.misc after this because it generated an annoying
> automatic message which I did not want or solicit. I hope it doesn't put me on
> any mailing list or I'll be having a fit with a certain someone's ISP
> admin.
> But if it didn't then I'll just ignore it and drop the newsgroup.

The appropriate newsgroup would either be rec.radio.swap (if you are
indeed "selling" these "plans"), or rec.radio.amateur.antenna if you
are posting the designs.

73,
Todd
N9MWB

PS I love quads and feel they are great antennas for beginners and
for simple construction projects. I'm also a realist and don't
want to see others mislead by inappropriate "guestimates".

PPS Do you think you could make your signature file longer? :-(

--
Unsolicited business offers sent to my e-mail address will be considered
a request for me to proofread the offer and in turn reimburse me $500
for my time and effort for each offer received. Receipt of said e-mail
constitutes acceptance of this offer. Let dick@durbin.senate.gov
and senator@moseley-braun.senate.gov know what you think of e-mail SPAM.
Support the anti-Spam amendment, see http://www.cauce.org/

# 1248. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Marco Baaij PE1PNA Holland <mbaay@casema.net>
Message-ID: <33D3A474.380@casema.net>
Source record: 92401

TS950SDX wrote:
>
> TO ALL HOMEBREWERS
> I BUILT A REALLY NICE 6 METER AMP USEING THE 3-500 TUBE
> PUTS OUT A KILOWATT INPUT WITH A EXCITER PROVIDING 35 WATTS DRIVE
> CAN USE THE 3-400** 572B **811**3-1000 TUBES TOO.
> IT IS A ZERO BIAS G-G CONFIGURATION
> SUITED FOR SSB AND CW SERVICE IN THE 50 MHZ BAND
> TUNED INPUT, GRID METER, RF OUTPUT METER, AND PLATE METER
> PI- L OUTPUT NETWORK FOR A HIGH ORDER OF HARMONIC SUPPRESSON
> FOR MORE INFO AND A LAYOUT OF THE MAJOR COMPONENTS
> AND SCHEMATIC OF SIX METER LINEAR AMPLIFER PLEASE EMAIL ME
> I ALL SO BUILT UP SOME SIX METER 2 KILOWATT WATT METERS TOO
>
> 73S AND GOOD DX JOSEPH
>
Hello, Joseph

Please let me see something!!!

73's, Marco de PE1PNA

# 1249. Re: A survey question for you

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33D352A2.4571@taxes.net>
Source record: 92402
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

After reviewing the responses to your post -- how about
trying THIS:

Submit the plans as an article to QST. You can get paid
as much as $60 a page!! And they will even let you
advertise your plans in the article.

Is this a great country, or what?

N6OTQ

# 1250. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33D354C8.23C9@taxes.net>
Source record: 92403

Can you say "type acceptance"?

And I didn't think 572Bs or 811s had enough gain
at 50 MHz to qualify as amplifiers. Of course,
if you slide down 23 MHz from 6 meters....

# 1251. Re: CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33D353A2.6B8F@taxes.net>
Source record: 92404

Free Cable wrote:
>
> CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY
>
> Just a few inexpensive parts from Radio Shack and a little time and you can descramble every cable channel. See all your favorite movie channels,pay per view etc
>
> To recieve detail instructions and diagrams on how to construct your own Cable Box Descrambler
> Mail $5.00 CASH MONEY ORDER CHECK and SASE to:
>
> S&G Enterprise
snip

This does't work, but here's what Seth will send you for $5.
Please circulate these plans throughout the world whenver you see
the "cable box descrambler" ad.

And if you get the "new improved" plans (some of which do still work)
please post those too.

///PAY TV DECODER PLANS///

MATERIALS REQUIRED:

1 - Radio Shack mini-box ( #270-235)
1 - 1/4 watt resistor, 2.2k-2.4k ohm
(RS #271-1325)
1 - 75pf-100pf variable capacitor
(Hard to find)
2 - F61a chassis-type coaxial
connectors (RS #278-212)
12" - No. 12 solid copper wire
12" - RG59 coaxial cable

///INSTRUCTIONS///

1. Bare a length of No. 12 gauge solid
copper wire and twist around a 3/8"
nail or rod to form a coil of 9 turns.
Elongate coil to a length of 1 1/2"
inches and form right angle bends on
each end.

2. Solder the variable capacitor to the coil. It doesn't matter where you solder it, it still does the same job. The best place for it is in the center with the adjustment screw facing upward.

Note: When it comes time to place coil in box, the coil must be insulated from grounding. This can be done by crazy-glueing a piece of rubber to the bottom of the box, and securing the coil to it.

3. Tap coil at points 2 1/2 turns from ends of coil and solder to coaxial chassis connectors, bringing tap leads through holes in chassis box. Use as little wire as possible.

4. Solder resistor to center of coil and ground other end of resistor to chassis box, using solder lug and small screw.

5. Drill a 1/2" diameter hold in mini-box cover to permit adjustment of the variable capacitor from the outside. Inspect the device for defects in workmanship and place cover on mini-box. Tighten securely.

6. Place device in line with existing cable on either side of the converter box and connect to television set with the short piece of RG59 coaxial cable. Set television set to HBO channel.

7. Using a plastic screwdriver (non-metallic) adjust the varible capacitor until picture tunes in. Sit back, relax, and enjoy!!!

## 1252. Help with noisy fuel pump!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: jimp911@aol.com
Message-ID: <19970721194401.PAA23932@ladder02.news.aol.com>
Source record: 92405

Need suggestions on ways to suppress EMI from the fuel pump in my Toyota truck.

The pump is submerged in the tank and is fed with unshielded wiring. I tried several snap-on ferrite chokes, but it made little difference.

The hash this pump emits is s-9+ on HF, and the noise blanker in my TS-50 has little effect.

Thanks & 73

Jim W1UK

# 1253. WANTED! Simpson 260 Schematic/Parts List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-21 00:00:00 UTC
From: k0qz@primenet.com
Message-ID: <5r0mpl$k5l@nntp02.primenet.com>
Source record: 92406

HI Gang!
If anyone out there had the schematic diagram and parts list for a
Simpson 260 Meter and wouldnt mind photocopying it or scaning it into
a JPEG and sending it to me, I would greatly appreciate it as I have
an old one that I am trying to restore to operating condx.
Snail Mail to
Mike Baker K0QZ/7
P.O.Box 42033-203
Phoenix, AZ. 85080-2033
Or E-Mail to k0qz@primenet.com

Thanks in advance..... 73's Mike

## 1254. Ceramic trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5r100c$hd2@tor-nn1-hb0.netcom.ca>
Source record: 92318

Hello fellow homebrewers
Could someone point me where I can buy some of this
ceramic trimmers values ranging from 10 to 25pF or so.
I need a few to settle down my Icom HF XCVR which has
plastic trimmers.
TIA
Tony, VE6CGX

# 1255. FS-80&40 mtr. xmitter KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19970722023100.WAA21469@ladder02.news.aol.com>
Source record: 92319

Hi All;
I have a Brand new, never opened 80 and 40 metter CW transmitter in KIT form.
Made by an electronics firm here on Long Island, I suspect in the 60's.
The kit also requires you to punch or drill the chassis and front panel with a paper templete(supplied), wind the plug in coil on a supplied form, etc. This is a complete TUBE XMITTER in KIT FORM.
Price is $125- shipped CONUS.
Thanks es 73.....RICH RLUCCH2098@aol.com

# 1256. Re: Receiver Splitter Information Required.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <33d934d6.12998249@news.cmc.net>
Source record: 92320

On Thu, 17 Jul 1997 23:07:03 GMT, sparc@ihug.co.nz (Kevin Mitchell)
wrote:

>G'Day All,
>
>I have been doing some reading regarding Receiver Splitting from one
>Receive antenna, but have so far been unable to find any information
>on how to construct one. I can purchase one, but I would like to try
>and build on first.
>
>The reason for the Splitter is so it can be used at our repeater site,
>which has muiltipule repeaters.
>
>If anyone can help could you please E-mail me or reply via the news
>group.
>
>E-mail
>
>sparc@ihug.co.nz
>Mitchell.Kevin.KF@bhp.com.au
>
>Best Regards
>
>Kevin, ZL1UDD.
>
>
>E-mail: sparc@ihug.co.nz
>Packet: ZL1UDD@ZL1AB.#11.NZL.OC
>:Amateur Radio helped Pioneer
> the way the World Communicates
> Today.:
>
These devices are most commonly referred to as receiver antenna
combiners. Antenna Specialists of Solon, OH builds several combiners.

Gary
THIS REPLY DOES NOT REPRESENT ANY OFFICIAL POSITION of
MY EMPLOYER. It represents only MY PERSONAL opinion.

# 1257. 900 MHz Cordless exciter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <869539490@infoway.com>
Source record: 92321

I am looking for more details on operating in the 902-928MHz amateur
band (I'm Advanced Class) with a Uniden 900MHz EXP95 Cordless telephone
that operates FM. Base transmit 926-27.95 MHz, Handset 902.05-904
Base rated 9V, handset labeded 4V Sealed Lead-Acid 500 mAH.

I am curious about adapting an external battery back to the handset,
and running the base from another battery source.
(Such as 13.8 volt lead-acid.)
I assume I can build my own charger for the Handset battery by just
calculating for a 2 cell gel-cell of 500mAH rating.

My questions:

1. What is maximum voltage for base, handset?

2. Is there a design for a pre-amp/amplifier to use with such units?
3. Do I have any restriction living in SF Bay Area other than
normal 1500 watt/lowest power to achieve communication guidlines?

4. Is there a class E amplifier schematic available for this app?

5. I presume I can use directive arrays to match my expected
location during my extended excursion.

6. Does anyone offer such a device commercially?

Thanks for help.
73, Don n6mce

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

## 1258. Re: Ceramic trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <o85qDaA9pG1zEwbd@pacsat.demon.co.uk>
Source record: 92322

In article <33D2A309.1372@netcom.ca>, Tony Hwang <oolong@netcom.ca>
writes
>I may be in need of a few ceramic trimmers with a values
>between 6pF(smallest) to about 25pF(biggest).
>My IC-765 is acting up and those plastic trimmers may need
>to be replaced soon.(Those in the PLL ckt). I am looking for a
>place to order them. Any one knows the source for this stuff?
>Thanks, 73
>Tony, VE6CGX
>
>

Try DownEast Microwave at www.downeastmicrowave.com

73 Simon GM4PLM

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 1259. Mods. for YAESU FT-416 2mtr. walkie

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: tony@shore.net
Message-ID: <5r1q17$rvb@fridge-nf0.shore.net>
Source record: 92323
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,
Can you help with any kind of mods. for the Yaesu FT-416
(PO5) 2 meter walkie?
Please send them to tony@shore.net

73
Tony

## 1260. 10 Mtr for Clipperton L

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: ns1z@agate.net
Message-ID: <33d46bc7.248410@news.agate.net>
Source record: 92324

I recently acquired the Dentron Clipperton L amplifier. Does anyone out there know the modification to put it on 10 meters? Now the coverage is 160 to 15 but the sunspots WILL increase......

# 1261. Re: Ceramic trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33D49C8D.323F@erols.com>
Source record: 92325

Tony Hwang wrote:
>
> I may be in need of a few ceramic trimmers with a values
> between 6pF(smallest) to about 25pF(biggest).
> My IC-765 is acting up and those plastic trimmers may need
> to be replaced soon.(Those in the PLL ckt). I am looking for a
> place to order them. Any one knows the source for this stuff?
> Thanks, 73
> Tony, VE6CGX

I purchased a kit of capacitors for my 761 from Icom. I believe the cost was about $12.00. Replacement was not easy! I had to remove the metal shield soldered to the main PC board. It corrected my VCO lock problems though.

I believe the problem with the original plastic trimmers is corrosion. You might get some extended life out of them by rotating them several times and then realigning them. Eventually they'll probably have to be replaced however.

# 1262. Re: Ceramic trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33D49D1A.328F@erols.com>
Source record: 92326

Tony T. Hwang wrote:
>
> Hello fellow homebrewers
> Could someone point me where I can buy some of this
> ceramic trimmers values ranging from 10 to 25pF or so.
> I need a few to settle down my Icom HF XCVR which has
> plastic trimmers.
> TIA
> Tony, VE6CGX
By the way, Icom does supply ceramic replacements for the plastic
trimmers.

# 1263. Re: WANTED! Simpson 260 Schematic/Parts List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: rbaker@worldchat.com
Message-ID: <07-22-1997.6091@worldchat.com>
Source record: 92327

Hi For two bucks I will copy and send a copy to you
If interested E-Mail Me at rbaker@worldchat.com
Rae

# 1264. Re: Japanese transistors - where to get them?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: rbaker@worldchat.com
Message-ID: <07-22-1997.6090@worldchat.com>
Source record: 92328

In article <ionXnWAQd4zzEwLl@two-way.demon.co.uk> philip de
cadenet <phil@two-way.demon.co.uk> writes:
>In article <hsyaueewanknu.pminews@frank.chem.utoronto.ca>, Frank
Bures
><fbures@address.in.the.sig> writes
>>I would appreciate an advice on where to get Japanese discrete
semiconductors
>>in North America. I am talking about 2SCnnnn, 2SBnnnn and 2SKnnnn
types.
>>Any dealers, representatives, shops?
>>
>>Namely I am looking for 2SB832, 1kV PNP.
>>
>>Thanks a bunch!
>>
>>73
>>
>>
>>Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
>>fbures@alchemy.chem.utoronto.ca (use this address for replies)
>>
>>
>Hi Frank,
>
>Try RF Parts in San Marcos, CA.
>There're in QST.
>
>73
>
>Phil in the UK G4ZOW/M
>--
>philip de cadenet

Hi

Try Premier Parts Source
4141 Sladeview Unit 16
Mississauga,Ont
Bob Winton
(905) 820-8248

I buy there

Rae

# 1265. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <3q7ynVA7IK1zEw5U@two-way.demon.co.uk>
Source record: 92329

In article <5r0re5$bt6@dfw-ixnews6.ix.netcom.com>, Gerald Schmitt
<kc5egg@ix.netcom.com> writes
>In <33D354C8.23C9@taxes.net> Jim <jstrohm@taxes.net> writes:
>>
>>Can you say "type acceptance"?
>
>Can you say, "Amateurs may build one amplifier per year in this band
>without type acceptance for their personal use."?
>
>
>>
>>And I didn't think 572Bs or 811s had enough gain
>>at 50 MHz to qualify as amplifiers. Of course,
>>if you slide down 23 MHz from 6 meters....
>
Can you hear me cotton chopper?

G4ZOW

# 1266. Pinouts for US transistors please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <WqUFWxAJdQ1zEw8i@pacsat.demon.co.uk>
Source record: 92330

Hello All

I need some help identifying some pinouts for some US transistors
please:

BS170P A seemingly E line version I have got in my DEM kit

PN2222 A TO92 style packaged device, but which one!

All help much appreciated

73 Simon GM4PLM
+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

# 1267. Info about S-AV17?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: eugene.welcome@rook.wa.com
Message-ID: <1861335637-970722114422@rook.wa.com>
Source record: 92331

Info about S-AV17?????

>From a Ham-friend, i got a powermodule.
>It is a powermodule from TOSHIBA, the S-AV17.
>I know he's working around the 2 Meter band.
>Can anyone help me with some info or a datasheet of this module??
>I want to find out, which pin is for what.
>Please send me a email, when you have some info.

Hi Marco:

The S-AV17 should be an easy unit to use. Input RF of 400 milliwatts
for 50 watts output. Class C operation. Freq. range 144 to 148 mHz.

```
,------------------------,
||||| TOSHIBA |||||
)|| S - A V 1 7 ||(
||||| |||||
'-1--2------------3-----4-'
| | | |
```

Pin #1 RF input 50 Ohms
Pin #2 Power level control
Pin #3 13.8 Volts DC supply
Pin #4 RF Output 50 Ohms
The metal tabs provide the electrical ground as well as heat sink
mounting.

I need the data sheet myself and I am going to explore the Toshiba
web site today. If I find more info and applications, I will let you
know what I find.
_ ,,/|
\'o 0'
73, Gene, K7"EEK" !! a =(_"_)= ?? He ate my Mouse !
U
eugene.welcome@eagles.wa.com

# 1268. Help Identify Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Curtis Scholl <cscholl1@ford.com>
Message-ID: <33D517F9.37AE@ford.com>
Source record: 92332

Hello the Group!!

About 10 years ago I purchased a bunch of "poly paks" of
transistors. The only identifying mark is

SYL 101 or SYL 1101 or SYL 1001 and I have had a terrible time
identifying what they are as NPN PNP FET etc.. I made a guess and
thought they might have been Sylvania but they don't know either.

They are metal canned and looking down from the top they are 3/32"
deep and nearly 1/2" wide with rounded ends and looking at them standing
on the leads they are square. The leads are tree with two set close
together and separated by distance from the third.

I have seen this case before but do not know the TO-??? id.

Any help appreciated

Curtis Scholl
cscholl@juno.com

# 1269. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33D4CC97.6572@taxes.net>
Source record: 92333

Gerald Schmitt wrote:

> Can you say, "Amateurs may build one amplifier per year in this band
> without type acceptance for their personal use."?

Sure can. But the listing really didn't look like an
"I built an amp" post, it looked more like a "I built ten of these
and can build 50 more by next week" post. The offer for sale
of 6-meter wattmeters reinforces this.

The fact that world-famous CB DXer philip de cadenet <phil@two-
way.demon.co.uk> put in his two pence worth suggests that these
amps may have applications on bands other than 6 meters.

Still, I'd like to see a working 811A 6-meter amp. I'll email
the original poster. Sometimes you guys take yourselves way
too seriously.

## 1270. cw program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: wi5s@cq.net
Message-ID: <33d53faf.104357582@news.iamerica.net>
Source record: 92334

You can download a free Morse code program at:

http://www.cq.net/users/wi5s/

Let me know how you like it.

## 1271. Field Day Photo's on Web

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: AE0Q / V31RY <v31ry@ix.netcom.com>
Message-ID: <5r3elj$2lb@sjx-ixn7.ix.netcom.com>
Source record: 92335

A collection of pictures of hams, Field Day setups,
and others are at:

http://www.qsl.net/ae0q/

Free software and links, too.

73 -- Glenn AE0Q / V31RY

## 1272. Re: Booklet on homebrew antennas (Portable & Emergency)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970722182923.10772F-100000@oso.slonet.org>
Source record: 92336
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Bill....Where is Oregon area one? What are you trying to accomplish?
Cliff K7RR

# 1273. Re: Rate Ten-Tec Transceiver Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Mike Magnuson <et@micron.net>
Message-ID: <33D578A6.6D9D@micron.net>
Source record: 92337
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

J. Dirk Bremer wrote:
>
> What does everyone think about Ten-Tec's 6-meter/2-meter/220 mhz
> transceiver kits? How do they compare to commercial rigs? Are they a
> good value? Are they difficult to assemble?
> --
> Best Regards,
>
> +-------------------------------------+------------------+
> + Dirk Bremer St. Charles MO | Member of AR8000,+
> + Senior Analyst/ (25 miles west | SABRENT, SCAN-L, +
> + Software Engineer of St. Louis) | and TRUNKCOM +
> + for CADP, | mailing lists, +
> + St. Peters MO. | SABRE and SCARC +
> + Business email: dirkb@myself.com | radio clubs. +
> + Confidential email:jdbremer@msn.com | Equipment: +
> + Voice:314-922-9158 extension 652 | AR8000 +
> + Fax: 314-922-9175 | BC230XLT +
> +-------------------------------------+------------------+
> + Pursuant to US Code, Title 47, Chapter 5, +
> + Subchapter II, 227, any and all non-solicited +
> + commercial email sent to this address is subject to +
> + a download and archival fee in the amount of $500.00 +
> + US. Emailing denotes acceptance of these terms. +
> +-----------------------------------------------------+
I have built the 6 meter FM Transceiver, and had excelent results. The
manual was very well put together with explanations and very useful
information. The alignment is simple, and the equipment needed would be
found in just about every shack, no matter how small. Before buying this
kit, I looked at other kits available, and found that for the money the
Ten Tec has more features and is more complete(ie Case, mic, etc.)than
most of the other kits I looked at. Also with one little mistake that I
made in parts identification, Ten Tec help with finding the problem and
then rushed the part to me.
With this, I would not hesitate to construct any of the Ten Tec Kits or
buy any of there equipment.
I am telling you this as I feel that as hams, if we find a product or
kit that lives up to the ads, we need to let others know.

73's hope this is what you were looking for

Mike Magnuson / KC7NAZ

# 1274. pointer on mod uniden bc210xlt for wxsat reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: rmf@ultra01.santafe.edu
Message-ID: <ydwwmiwu5s.fsf@ultra01.santafe.edu>
Source record: 92338

Hi,

I read the latest QST on wxsat reception. I thought it would
be fun (and cheap) to modify an old uniden bc210xlt scanner to have a
large enough passband to permit wxsat reception. I have read that some
scanners you can bypass the existing passband filter and provide your
own with a capacitor. Can this be done to the bc201xlt.

I don't have a schematic for this scanner. However, I was
hoping someone on the net could provide me with some pointers and or
advice.

thanks,
Rob Farber
N5RUQ

# 1275. Re: Ceramic trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: Daniel Nelson <djn@goodnet.com>
Message-ID: <33D5900C.F7C@goodnet.com>
Source record: 92339

Simon Lewis wrote:
>
> In article <33D2A309.1372@netcom.ca>, Tony Hwang <oolong@netcom.ca>
> writes
> >I may be in need of a few ceramic trimmers with a values
> >between 6pF(smallest) to about 25pF(biggest).
> >My IC-765 is acting up and those plastic trimmers may need
> >to be replaced soon.(Those in the PLL ckt). I am looking for a
> >place to order them. Any one knows the source for this stuff?
> >Thanks, 73
> >Tony, VE6CGX
> >
> >
>
> Try DownEast Microwave at www.downeastmicrowave.com
>
> 73 Simon GM4PLM
> +---------------------------------------------------------------------+
> | Simon Lewis GM4PLM Editor - EMN |
> | European Microwave News - Supporting Microwave Radio Across Europe |
> | Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
> +---------------------------------------------------------------------+
==========
By the way, I have about 50 lbs of compression and air variable trim
caps for sale for very low $.

Email me for list!
--
Daniel Nelson
djn@goodnet.com
<:)
Beware Cause isn't Effect

## 1276. 2m Vertical Colinear?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-22 00:00:00 UTC
From: David McKain <mckain@cemr.wvu.edu>
Message-ID: <33D508A2.F48@cemr.wvu.edu>
Source record: 92340

Looking for plans, experience in constructing and using a 2m (or 440)
vertical colinear - Interested in any info
Thx
KC8GGV
mckain@cemr.wvu.edu

# 1277. 10 y 24 Ghz en Espa&#65533;a.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Jose_Manuel <psalteri@apdo.com>
Message-ID: <33D54FF9.E3E1E435@apdo.com>
Source record: 92259

Hola , reciban un cordial saludo , &#65533;algun colega trabaja en 24 Ghz o en 10 Ghz ??
Es para compartir experiencias sobre construccion de equipos de esas bandas y experiencias sobre "fontaner&#65533;a fina" .
Muchas gracias.

# 1278. 8751 Keyer Homebrew code/schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: n4zbb@pagesz.net
Message-ID: <33d57e03.15977696@pinta.pagesz.net>
Source record: 92341

Does anyone know of a homebrew 8751/8752 keyer ?

Ken (N4ZBB)

# 1279. Re: Fire Dept Taking radio Bids

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: mchenry@say.net
Message-ID: <33d58c15.22958461@saynews.say.net>
Source record: 92342
Cross-posted to: misc.emerg-services,rec.radio.amateur.homebrew,rec.radio.swap

On 11 Jun 1997 05:47:46 GMT, "Stanley Koontz" <stush@toolcity.net>
wrote:

>Hello
>
>My local Volunteer Fire Dept. is taking bids for UHF Radios with following
>specs;
>
> 3 - Mobiles - >8 ch - 35 Watts or greater
> 5 - Handhelds
>
>Any bids appreciated.
>--
>Stanley Koontz BS
>stush@toolcity.net

Time for you to get a copy of the NEW RULES.......FCC, PART 88

## 1280. COR circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Deen Attan <denatan@tm.net.my>
Message-ID: <33D4DB6E.92A0D00B@tm.net.my>
Source record: 92343

I am looking for a simple circuit of CARRIER OPERATED RELAY to make a
BACK TO BACK REPEATER.Could any one help me on the circuit? Thanks
Malaysian Amateur Radio Station
9M2DA
Deen Attan
P.O.Box 102
84007 Muar, Johore,Malaysia.
http://www.angelfire.com/biz/perintisjati/index.html

Malaysian Amateur Radio Transmitters Society homapage
<http://www.promalaysia.com.my/~marts>

# 1281. Re: Booklet on homebrew antennas (Portable & Emergency)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Bill Merwin <billm@datacomm.com>
Message-ID: <33D5D446.52C463C@datacomm.com>
Source record: 92344
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Clifford Buttschardt wrote:

> Bill....Where is Oregon area one? What are you trying to accomplish?
> Cliff K7RR

Oregon District 1 ARES is roughly the NW corner of Oregon. It is comprised of Clackamas, Clatsop, Columbia, Multnomah,
Tillamook, Washington and Yamhill counties. During the flood of 1996, all 7 of my counties as well as 13 other provider
services were activated. Made for a long weekend. 6 days 18 hour averages.

I am trying to compile a booklet to be made available to any "new to the hobby" or "new to antenna building" hams. I
have "elmer'd" more than a few hams who got their license, bought an HT and thought that was all there was to the hobby.
The first time I helped them build something and then they saw it work, it opened up a new whole arena for the hobby. I
am just trying to make that type of information available to others. So many times, I have purchased a "How To" guide
to antenna building only to be overwhelmed by all the techno-babble. I have built many antennas from one-page
photocopied instructions with great success.

"Build a field and they will come!" I just want to make easy plans available. If the person wants to go on and learn
more about why it works, then great. At least something was available to pique their interest in the first place.

73 de K7BKS
--
==========
Bill Merwin - K7BKS, Net Manager
ARES Oregon District 1
e-mail billm@datacomm.com
k7bks@juno.com
Packet k7bks@k7iqi.or.usa.noam
10-10 member - 62540
==========

# 1282. Doppler indicator & LCD for MicroMint Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: "Lawrence R. Brandt" <Lawrence_R_Brandt@ssb.com>
Message-ID: <33D64820.A7374616@ssb.com>
Source record: 92345
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc,rec.radio.amateur.misc
Body handling: HTML body converted to readable text

Hi All,

I have 2 questions. First is does anyone have a circuit to attach to a Roanoke

Doppler design and add digital bearing info? I could just fudge the 4 bit output

to read multiples of 22.5 degrees, but that does not add any accuracy.

Basically what I want is a circuit that can judge the time between when

a trailing pulse is detected and another event (oneshot firing) occurs. Then

take this number and display it as a 0-360 degree display. But I realize to

do this I will need to know when the period is over, when the 360 mark has been

reached. As I sit here thinking about this, I may have an answer but need some

help making it work!

I will need a clock that can count from 0 to 359 in a certain period

defined by a "start counting" trigger and a "latch & display" trigger.

In the doppler, this could be the zero crossing point of the tone (as start)

and the firing of the oneshot to enable the display. I'd need to include a

calibration pot to vary the clock period, so that there are 360 clocks between

zero crossings. If the doppler clock were a multiple of 360 and not 22.5, this

would be easier! ( & with appropriate output and/or display logic)

But has anyone seen such a circut for a Roanoke doppler? There is a company

around that sells a unit with a display like this, but how does it work?

(I'd like the output to use an LCD display, if possible)

Second question:

If I have the above bearing as a number between 0 and 359, and my GPS

is outputting RS232 data for my current position & heading, is there a simple

circuit to:

Decode the RS232 current bearing info (16550/8250 UART, I assume),

Aquire the doppler's relative bearing info (serial or parallel),

Display a resutant bearing that is relative to true north (which the GPS is).

I have an original MicroMint BASIC-52 controller card with serial, parallel &

terminal outputs, so a program to do this would be easy to do, but could a dedicated

chip or small circuit do the same thing?

BTW, does anyone have info for interfacing a LCD display (small one, 2X16 for example)

to these Micromint controllers? I've seen a few aritcles but not the one I'm looking for.

I'd use this controller as a DF caluclator to get the true bearing, have a switch to "read" this bearing and save it to use in triangulation calulations, perhaps weighted by a "quality" measurement for the bearing. I'm working on the program for the triangulation and target

location but I'll need a small display (RS has one but I'd need details!)

Thanks for hanging in there!

Thanks & 73s,

Larry "Hello officer, its a qubical quad for direction finding, is there a problem?!" Brandt

AA1EA

---|

Larry Brandt - AA1EA

lrbrandt@statestreet.com

# 1283. FS: Toobes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: thehossman@aol.com
Message-ID: <19970723192100.PAA22780@ladder02.news.aol.com>
Source record: 92346

I have a large number of tubes available. If you are interested, please
e-mail me at:
"thehossman@hotmail.com"

Qty Boxed Price Qty Min Price Qty 8-Pin, etc.
Price
1 1G3/1B3 $4 1 2AD6 $3 5 1G3GT/
1 2AS2 $4 1 2D21 $3 1B3GT $3
2 3A3/3B2 $4 1 3HQ5 $3 1 1K3 $3
1 5U4BG $4 1 4DT6A $3 1 5Y3GT $3
1 5Y3GT $4 1 4HM6 $3 2 6AS7G $3
1 6AG5 $4 2 4JC6 $3 1 6BK4 $3
1 6AH6 $4 1 4JD6 $3 2 6BQ6/
2 6AK5 $4 1 4KT6 $3 6CU6 $3
1 6AK6 $4 1 5AQ5 $3 3 6D6 $3
2 6AN5 $4 1 6AF4 $3 2 6V6 $3
1 6AU4GTA $4 1 6AH6 $3 1 6Z10 $3
1 6AU6GTA $4 1 6AL5 $3 1 12AY3 $3
1 6AV6 $4 1 6AN5 $3 1 12D4 $3
1 6AX8 $4 4 6AQ5 $3 1 12DQ6B $3
1 6AY3 $4 1 6AS5 $3 4 12SN7GT $3
2 6BA6 $4 1 6AW8 $3 1 12SQ7 $3
2 6BC5 $4 1 6BA6 $3 1 12V6GT $3
2 6BF5 $4 1 6BH6 $3 1 17BE3 $3
2 *6BH6 $4 2 6BQ7 $3 1 17BF11 $3
2 6BK7B $4 1 6BZ6 $3 2 17JZ8 $3
1 6BN6 $4 1 6C4 $3 1 21JZ6 $3
1 6BQ7 $4 1 6CG7 $3 1 25L6GT $3
3 6CB6A/ 1 6CL8 $3 1 38HE7 $3
6CF6 $4 2 6CQ8 $3 2 50L6 $3

4 6CL6 $4 1 6CZ5 $3 1 OD3 $3
2 6CL8A $4 1 6DE6 $3 1 6528 $3
2 6CW4 $4 1 6EA5 $3 1 75 $5
1 6CZ5 $4 2 6EB8 $3
1 6D4 $4 1 6ER5 $3
2 6EA5 $4 1 6GH8 $3 Qty Metal
8 6EB8 $4 1 6GM6 $3 1 6AC7 $3
1 6EH7 $4 1 6HB7 $3 3 6AG7 $3
1 6FQ7 $4 1 6J6 $3 1 6C5 $3
1 6FV8 $4 2 6KE8 $3 1 6J5 $3
1 6GF7A $4 1 6T8 $3 1 6L7 $3
1 6GH8A $4 2 6X4 $3
1 6GM6 $4 3 8FQ7/
3 6J4 $4 8CG7 $3

1 6J6 $4 1 8JV8 $3
3 6K7 $4 1 10LZ8 $3
1 6KE8 $4 1 12FX5 $3
3 6SJ7 $4 3 OA5 $3
1 6W4GT $4 2 OB2 $3
1 7F8 $4 2 5654 $3
1 8EM5 $4 1 5696 $3
1 12AL5 $4 1 5726 $3
1 12BH7A $4 2 5749 $3
1 12DT5 $4 1 5750 $3
1 35L6GT $4 3 5814 $3
2 OB2WA $4 1 6136 $3
1 OC2 $4 1 6189 $3
1 OG3 $4 1 6197 $3
2 5651WA $4 1 6201 $3
1 5749 $4 1 747 $3
4 5763 $4
1 6112 $4
1 6977 $4
1 S-5018 $4
(silicon rectifier)

# 1284. Re: Booklet on homebrew antennas (Portable & Emergency)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33D5DBCF.48C2@taxes.net>
Source record: 92347
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I can suggest a couple of obvious candidates for
this booklet:

Copper Cactus
Twinlead J-pole

Plans for both these antennas have appeared in one or more of
the newsgroups this thread is posted to, and are readily available
in DejaNews or on AltaVista. In addition, the Copper Cactus
is available on at least one web site, and probably is listed
in some of the big search engines.

I hope that in the best of ham radio and internet tradition, this
booklet is made available for copying costs.

N6OTQ

# 1285. Re: FREE SEX SITE..password is

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <5r5siv$9ub$1@newsd-111.bryant.webtv.net>
Source record: 92348

0987263278@compuserve.com

BILL TURNER

# 1286. Looking for source for bandpass filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Dana Gould <NOSPAMdgould@bev.etn.com>
Message-ID: <01bc9796$673ef8c0$4ce06e97@pc3527.bev.etn.com>
Source record: 92349

Hi,

I'm looking for a reasonably priced source for one or two bandpass filters, about 40 to 50 khz bandwidth, in the 70 to 90 mhz range for a homebrew up-converting hf receiver. Any suggestions?

Thanks,
--
Dana Gould
NOSPAMdgould@bev.etn.com

# 1287. New Amateur Website

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: MicroChip <microchip@centuryinter.net>
Message-ID: <33D65205.5909@centuryinter.net>
Source record: 92350
Cross-posted to: alt.ham-radio.packet,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Hello everyone,

I finally found some amateur radio related news groups thanks to a
friend of mine. Id like to call your attention to the latest and (I hope
soon one of) the greatest amateur radio websites on the net.

My site is still under cunstruction but the primary structure and basic
links are there. More links and content will be added every couple days
as my time allows and I locate more links.

This site is at http:/www.qsl.net/kc8aco and a big thanks to Al, K3TKJ
at http://www.qsl.net/ for providing space for my pages.

73's to all and happy browsing.
--
WARNING TO SPAMMERS -- ANY AND ALL SPAM TO MY ADDRESS(S) ARE REDIRECTED
TO THE ORIGINATING SERVICE PROVIDER FOR ACCOUNT TERMINATION AND TO LEGAL
AUTHORITY FOR PROSECUTION.
==========
God grant me the serenity
to accept things I cannot change,
Courage to change things I can,
and Wisdom to know the difference.
----------
Its not what happens to you,
Its what you do about it.
---------========== MicroChip =========---------
mailto:kc8aco@qsl.net http://qsl.net/kc8aco

# 1288. Re: Pinouts for US transistors please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Bill <clinker@geocities.com>
Message-ID: <33D6A837.251A@geocities.com>
Source record: 92351

Hi Simon,

I found it in the chip directory at

http://www.amc.com/chipdir/chipdir.html

Bill KU8H

# 1289. Re: FREE SEX SITE..password is

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <5r5s6l$9rf$1@newsd-111.bryant.webtv.net>
Source record: 92352

BILL TURNER

## 1290. NUDE !!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Izzy <"Don't repley">
Message-ID: <5r62ca$dbo@halley.pi.net>
Source record: 92353

You just have to see this!

Its a page with nude girls.

You will find more pics then in any Newsgroup!!

http://www.geocities.com/Area51/Cavern/1802/nude.htm

Don't tell your friends!!!

# 1291. Re: UPS parts for GEL cell charger?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Russ Hanks <b4eddwrh@smtp.lmk.usace.army.mil>
Message-ID: <5r5l6h$gmb$1@AesSedai.wes.army.mil>
Source record: 92354

wmeara@erols.com (Bill Meara ) writes: >

I have an unused computer UPS laying around.
>
> Has anyone used the charger circuitry in one of these beasts for the
> charging ham application Gell Cells? How about disconnecting the
> inverter circuitry and turning the UPS into a 12 volt supply/Gell Cell
> charger?

> Thanks, 73 Bill N2CQR

We've been using a 12v 1000w inverter at our deer camp for both
a battery charger and as an inverter. Gel cells aren't fully charged
until they reach about .4v higher than wet cell (lead acid) batteries.
I wouldn't worry about it, but you could adjust the output voltage with
a resistor change at the charge controller IC. The max charge rate on
gell cells is about 10% of their amp hour rating. Your UPS will
exceed that. Our 1000w inverter seems to charge marine batteries at
about a 50amp rate. You will need a current limiting circuit.

I use a Radio Shack 350ma universal charger at 6 or 12v to
charge my gel cells. I put jumpers on whichever plug is convenient
(check polarity). You should be careful not to leave them on there
too long, since there is no taper charge control. Note that 350ma is
less than 10% of the 4ah 6 or 12v batteries I normally use, and
overnight is the longest time I leave them on there.

About the only way to
see if the gel cells are good is to charge them and then see how long
they run, and how long they'll hold the charge. I'd certainly keep the
inverter portion. It will use some power, but it could be real handy
for 120v in case of emergency, even if you had to run it off of your
car battery. Let me know what you want for the UPS if you're inclined to
sell it.

Russ

# 1292. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Greg Bailey <gbailey@mail.sdsu.edu>
Message-ID: <33D6EDB9.2AB4@mail.sdsu.edu>
Source record: 92355

No hard feelings... but I think I would do some more scrounging on the used SW Receiver market.

Building a SW receiver is an underaking that only the tested solder throwing engineer/types would try. Let me point out some of the negatives:

1. Calibration of frequency (knowing what frequency you are listening to) is going to be almost impossible. Improper selection of capacitors in the VFO will cause it to drift, and so on.

2. Backlash, dial indication, etc.

3. Oscillation in the IF, bandwidth of the RF section/s, etc.

4. BFO?

And so on... God there are a million others. I would say to build a receiver is about ten times more a pain than a transmitter. A Transmitter can use a crystal to stay on frequency. Once you modulate it and rid yourself of paracitics (SP) you have it made. But a receiver... wrongo.

So what is the alternative: Start scrounging for used (tube type) SW receivers. Hammerland made millions of HQ-110, and HQ-100. Globe, Heath, and others made good receivers. I would avoid a Heath only because it is homebrew and thus home screwed-up.

Receivers surface all the tiime. List on this net: WTB SW REC for beginner. Many guys have an old box of tubes (receiver) in their basement. If they thought they could stimulate a person into hamdom using their old receiver they will probably give you the thing.

I would rather scrounge than build (a receiver). I learned the code, got a license, and enjoyed a number of years using an ARC-5 WWII aircraft receiver. Now they are probably $$$ as collector items, but others are not. Scrounge. And write me back when you either buy or build. I would like to hear what happened.

Greg

# 1293. DDC Video Amplifier - query

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33d680a3.0@cheese.pcug.org.au>
Source record: 92356

I have a component called a DDC Video amplifier on an old circuit board I obtained. It is a VA23 type. I'm wondering if any reader knows much about them - ie input and output impedences, amplification ratio, max power output, max frequency of operation, whether they are linear and if they can be used in homebrew transmitters.

Any responses would be appreciated.

73,

Peter VK1PK


_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

# 1294. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: Demolition Man <demoman@rollanet.nospam.org>
Message-ID: <33D65ABA.4B28@rollanet.nospam.org>
Source record: 92357

Gerald Schmitt wrote:
>
> In <33D354C8.23C9@taxes.net> Jim <jstrohm@taxes.net> writes:
> >
> >Can you say "type acceptance"?
>
> Can you say, "Amateurs may build one amplifier per year in this band
> without type acceptance for their personal use."?
>
yeah, even i got that question right on the exam
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

## 1295. ceramic resonators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-23 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5r5qe7$m0v$1@rosenews.rose.hp.com>
Source record: 92358

I'm still looking for any information on
ceramic resonators. Anyone have any
experience with them?

How are they used? Mine are 455kc
with 2 leads coming out.

Normal ceramic filters usually have 3 leads
so I am at a loss. I understand they are
basically piezoelectric ceramic elements,
but how does one use them in a small broadcast
radio project's IF section?

Thanks in advance

tony

# 1296. Re: HeatSink nylon hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33d63bf7.25086005@news.pipeline.com>
Source record: 92260

Robert Ogburn <ogburn@standfast.com> wrote:

>David Shalita wrote:
>>
>> Hi,
>>
>> I purchased by mail order last year, a nice assortment of insulting
>> mounting
>> hardware for heatsinks and TO-3 transistors and IC's (LM317K), assorted
>> nylon shoulder washers, screws, nuts but have lost the source company
>> name. Just built a multiple output power supply with several LM317K TO-3
>> IC's and depleted all my nylon heatsink hardware.
>>
>> After checking with Dan's Small Parts and DC Electronics, I am running
>> out of ideas.
>>
>> Please suggest some possible sources. These were just assortments of
>> nylon parts in small plastic bags.
>>
>> 73, W6MIK...Thanks
>> --
>> Dave Shalita,
>> af389@lafn.org
>> Van Nuys, CA

>Try HdB Electronics in Redwood City, California.

Or you might call your local hardware store.
The ones I deal with in Tulsa have lots of nylon.
I originally used s bunch of 6-32 screws to replace
the metal screws in the switch covers in the kitchen
and bathroom, where someone might get shocked,
and went on to use them asa a supplu point for lots
other stuff.

No mica transistor washers, tho.

Good luck.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)

# 1297. http://www.potg.com/ A free comedy radio show on the web!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970724034000.XAA28190@ladder02.news.aol.com>
Source record: 92261

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.

Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."

Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.
The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

## 1298. $$$-REWARD-$$$ VHF-UHF SNIFFER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: msisco9939@aol.com
Message-ID: <19970724035001.XAA15174@ladder01.news.aol.com>
Source record: 92262

I am looking for plans or information on a 50MHZ-600MHZ wide band
super sensitive analog field strenght meter. Needs to be able to respond
to the power levals of a garage type door transmitter at a distance of
1-2 feet.
Sure would appreciate any information.............Monty

## 1299. Homebrew Duplexer info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: ac486@chebucto.ns.ca
Message-ID: <5r6lj2$ofp$1@News.Dal.Ca>
Source record: 92263

Hello All,

Does anyone know where I can find info on building duplexer's for
various combinations of 6, 2, & 70 cm ?

Thanks,

Dave , VE1DAY

Elmsdale, N.S. Canada ac486@chebucto.ns.ca

# 1300. Re: Need circuit for RF sense for GE Master II PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: yaesutom@aol.com
Message-ID: <19970724063301.CAA25064@ladder01.news.aol.com>
Source record: 92264

>I am using a GE Master II PA on 6 meters with my Alinco as the driver.
>I am looking for a circuit to sense the RF from the xcvr to kick in
>the xmt relay in the Master II. Anybody have one ?
>Thanks,
>Carl
>WA1KPD
>
>

Well, you can probably do it with 1 diode, 1 NPN Transistor like 2N2222,2N3904...,1 .01uF cap, 1 resistor (maybe somewhere around 1-10k).

Put one end of the resisor on the RF in from the amp. Put the other end of the resistor on the anode side of the diode. The cathode side of the diode goes on the Base of the NPN transistor. Then a .01uF capacitor goes on the Base of the transistor and ground. Put the emitter of the transistor on ground. Then, with a relay, put one end of the relays coil on +V and the other end on the collector of the transistor.

So, a little of the RF coming into the amp is rectified and filtered (diode and capacitor), and puts a little bit of DC bias on the base of the transistor to turn it on. You might have to experiment with the resistor value.

Is this for SSB operation? If it is then you will probably need some kind of delay before the amp kicks off. Maybe a high value capacitor across the relay coil would work to keep the relay on after the transistor shuts off breifly (SSB).

yaesutom@aol.com
http://members.aol.com/yaesutom

# 1301. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: s002veb@alpha.wright.edu
Message-ID: <5r709l$jiu$5@alpha.wright.edu>
Source record: 92265

Guinney Pigg (yeahright@biteme.com) wrote:
: Are there any good introductory books about how radio receivers work
: and how to build them?

: I like to listen to shortwave, but find that most of the 'affordable'
: receivers come with a cheap antenna. I've gotten to the point where
: I'd rather build my own (receiver and antenna). It's been a long time
: since I've touched a soldering iron (senior year of high school -
: 1979), but I'm game to re-learn what I've forgot since high school..

You might be happier modifying, for your early efforts.

For instance, I started buying cheap SW portables at garage sales, figuring oout what made them bad, and rebuilding them. Some of them had real good circuitry but were lousy mechanically, some were total junk.

So you start by replacing sections. First find the detector and build a BFO to inject there. Later build a more stable VFO. Later still, add a good IF filter.

In time, you might find nothing left of the original radio (if you build it in modules). However the junk radio gave you a platform to test each circuit in turn.

Another approach is to start at the audio end and work towards the front end. This won't perform for you till you're nearly finished, but the circuits go from easy to harder as you progress in that direction.

Look into the integrated circuits that exist these days. There are chips that do just about anything. You can build an AM reciever with one chip and an audio amplifier, if you want to go minimal.

As for antennas, unless you are transmitting, concern yourself just with getting copper in the sky. This gets to be a diminishing return, beyond a certain point is no improvement, but too short is a killer. When you get beyond a random length wire, you begin to restrict what it can do.

For instance, cutting the wire to a particular length for a particular band improves that band at the expense of others. Designing an antenna with "gain" in one direction means it will have loss in another.

You could just not worry about it. Not yet.

Get the Radio Amateur's Handbook. Even an older one. Read the early chapters, and the early parts of later chapters. Don't worry about not understanding all of it.

: I also have in my possesion about 25 feet (maybe more) of
: 10 Base 2 Ethernet cable. It is shielded RG-58 Type 20 AWG cable.
: Should I try to strip the shielding and use the wire to build an
: antenna?

Heck no, that'd be a waste of cable. For SWL, a longwire works as well.

BTW, does it actually say RG-58? Many ethernet cables are 92 ohms. Even so, keep it for later. Makes real good audio cable, too.

## 1302. HTX-212 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: PETER DUGGAN <17453@ican.ca>
Message-ID: <01bc97f7$f058d0c0$9b57f8ce@peterdug>
Source record: 92266

HTX-212 info on extending the TX and the RX range above the 140's into the 150-160-170's

thanks for your time

## 1303. Mic for HTX-202?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: bbwb@wonder.net
Message-ID: <5r7gcv$ki6$2@gte1.gte.net>
Source record: 92267

I purchased a headset at the local parts house to use with my HTX-202.
I measured the head set mic at 6.5K and the HT needs 1.2K. Anyone
have any ideas on how to get the head set to match or do I have to
change the mic element? Thanks.

Bud

## 1304. Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: James Patterson <PattersJ@ecid.cig.mot.com>
Message-ID: <33D747EE.2C412ED5@ecid.cig.mot.com>
Source record: 92268
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

Does anyone know how to build a tower?

I want to build a tower about 100' high.

Can anyone help with some ideas or designs?

thanks

James

# 1305. Re: HeatSink nylon hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5r7nia$kfr$1@news.rmi.net>
Source record: 92269

Annette Hinshaw (aruder@pipeline.com) wrote:
: Robert Ogburn <ogburn@standfast.com> wrote:
: >David Shalita wrote:
<snip>
: >>....and depleted all my nylon heatsink hardware.
: >>
: >> Please suggest some possible sources. These were just assortments of
: >> nylon parts in small plastic bags.

: >Try HdB Electronics in Redwood City, California.

: Or you might call your local hardware store.
<snip>
Good suggestion!! I walked thru Eagle Hardware in the S.E. Denver
Metroplex <g> yesterdy and was bowled over by the qty of nylon
hardware and fasteners that they had. (It's so easy to wear out
a pair of shoes in a place like that! :-)

73
Jonesy W3DHJ

--
SK

## 1306. Need TNC Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5r7tte$en8$2@nr1.toronto.istar.net>
Source record: 92270
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

I am in need of complete TNC-2 Clone plans,based on Z80 CPU, Downloadable from the Internet.

The Schematics given at the TAPR site are incomplete,and no foils are given.

I need schematics,foils (comp side,solder side,silkscreen),rom images, documentation.

Gary Tait, VE3VBF

# 1307. Need circuit for RF sense for GE Master II PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: cnord@snet.net
Message-ID: <33d6a5b3.592227@news.snet.net>
Source record: 92271

I am using a GE Master II PA on 6 meters with my Alinco as the driver.
I am looking for a circuit to sense the RF from the xcvr to kick in
the xmt relay in the Master II. Anybody have one ?
Thanks,
Carl
WA1KPD

## 1308. HTX-212 Power cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5r7tb0$en8$1@nr1.toronto.istar.net>
Source record: 92272

I am curious,what does the '212 use as a power cable disconnect,if
at all.

Gary Tait, VE3VBF

# 1309. Special Event Certificate W6JBT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: Tom Oliverius <tkoliver@telis.org>
Message-ID: <33D77E7B.22BA@telis.org>
Source record: 92273
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc

W6JBT, The Citrus Belt Amateur Radio Club in San Bernardino California,
will be operating from 1600Z to 2000Z on Saturday, July 26, 1997.

This is a celebration of the club's 50th anniversary.

Frequencies will be 3.850, 7.240, 14.250, and 21.350, two meter phone
and packet. CW contacts will be on random frequencies.

For a commerative Certificate/QSL after contact, send your QSL and a
9"X12" SASE to:

W6JBT
Cirtus Belt ARC
P.O. Box 3788
San Bernardino, CA 92413

73 de WB6EEW

# 1310. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <wDGj9GAOLz1zEwKC@two-way.demon.co.uk>
Source record: 92274

In article <33D4CC97.6572@taxes.net>, Jim <jstrohm@taxes.net> writes
>Gerald Schmitt wrote:
>
>> Can you say, "Amateurs may build one amplifier per year in this band
>> without type acceptance for their personal use."?
>
>Sure can. But the listing really didn't look like an
>"I built an amp" post, it looked more like a "I built ten of these
>and can build 50 more by next week" post. The offer for sale
>of 6-meter wattmeters reinforces this.
>
>The fact that world-famous CB DXer philip de cadenet <phil@two-
>way.demon.co.uk> put in his two pence worth suggests that these
>amps may have applications on bands other than 6 meters.
Jim, it was yourself that mentioned this possibility, I only commented
on your post. Please re-read your post.
>Still, I'd like to see a working 811A 6-meter amp. I'll email
>the original poster. Sometimes you guys take yourselves way
>too seriously.
Hi Jim,
I agree with what you say about that amp supplier but not about the
world famous bit, maybe if you'd gone back 20 years!
Met a chap a few weeks ago thats been sitting behind his illegal (sic)
TS50 on 11m for the past couple of years and has clocked up a confirmed
244 countries. Nothing special I hear you say, but never the less ok for
18' of ali on the worlds noisiest band. I think I helped to convince him
it was time to consider taking his ticket to enjoy the hobby even more
and reduce his chances of being busted big time and loosing his radio
equipment.
I definately agree with you in that most licenced op's take the hobby
far too seriously.

Phil G4ZOW/Xtreme mobile 8 X 2SC2879 homebrew.

PS. Jim, I have a Siemens 10kw broadcast tx for sale c/w Telefunken
exciter, all solid state except final, tunes in 100hz steps from 1.5 -
29.999Mhz and all modes including SSB. And yes, it's 3-phase and heavy.
Complete with all manuals and in perfect working order.
If your interested that is.

# 1311. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33D7A32D.33BE548A@direct.ca>
Source record: 92275
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

Bob Miller wrote:

> Re removing ICs. (snip) The trick is to find an old American Beauty
? soldering iron that takes a copper slug type tip (approximately 3/8
> inch diameter) and then fashion new tips from 3/8 inch od copper tubing...
> (snip)

It's easier than that. Use a small torch, or one of those
high-temperature heat guns. Works for SMD too - like reflow
soldering in reverse. Just be careful... :-)

My favourite technique for removing chip resistors and capacitors
is to use two soldering irons with little tips. Heat each end of the
component, and then use the two irons as tongs to lift it off. Easy!

--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

# 1312. FS: Tube Equipment/ NOS-Oil Caps/ Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <33D7BDF0.3703@ix.netcom.com>
Source record: 92276
Cross-posted to: alt.music-lover.audiophile.hardware,alt.marketplace.funky-stuff.forsale,rec.music.makers.marketplace,alt.guitar.amps,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

7/24

For Sale:

Sherwood S-3000-III FM-stereo capable Tuner
-excellent working condition; in good alignment; very sensitive;
accurate tracking
-no MPX-operating mono/ proprietary jack easily modded into universal
MPX out
-original Sherwood branded tubes
-the tuner sounds wonderfull!!

Sherwood S-1000-III mono Integrated amp
-excellent working condition
-2 x 7868-good (Bogen) included/ 2 x 6eu7 / 1 x 6k11
-has 2 mic inputs AND 4/8/16 ohm taps and 70v

Both with metal cabinets in very good cosmetic condition (few face
scratches on tuner)
$95.00 each or $175.00 for both + shipping

NOS Oil Caps

11 Westcap 1uf 400v code 2150005685
( 2 x lot 1522/ 6 x lot 2058/ 3 x lot 6146)

8 Sangamo 1uf 300v code cpv 09a1kd105j

$75.00 for all. I would prefer to sell all, hence discount.
$45 for 10
$25 for 5.

Tubes; will not separate

NOS-

RCA- 6am4 / 3hm5(ha5)marked Holland / 6md8 /5u5 /6mk8 / 8ba11 / 6hb7 /
6mq8 / 6cg8a / 3dt6/ 6gm6 / 8bm11 / 6ja6 / 6bh8 / 5aq5 / 3au6 / 6mu8 /
6aq5a / 2cy5 / 3x-5cL8a/
12hg7 / 6n7a /6jc6a
Zalytron- 2as2 / 3ha5 / 2x 4bz6 6ea8 / 6ba11 / 6hg8 / 17jn6
Raytheon- 12cn5/ 2x-6ak5 / 2x 10gk6
GE- 3a3c(aw3/b2) / 13z10 / 6gm6
Westinghouse- 2x-6k6gt
Sylvania- 2cy5 / 10gk6
Realistic- 6bn6

Clarostat -60-92-a
Zenith - 13z10
Hytron -1269
Tung Sol 6eu8
Mullard- 15cw5/PL84

Used-

RCA- 2x-6fq7(cg7) / 6hq5 / 4x 6bq6gtb / 6cu6 / 6gm6 / 12d4 / 17jn6 /
8am8 / 12L6gt / 6ea8 / 6dr7 / 6cj3(ch3)
GE- 6cj3 / 6dw4b / 6bk4 / 6eL4a
Tung Sol- 6bj6 / 6bq6gtb(cu6)
Sylvania- 6le8 / 6ea3
Connectron 5u8 / 6gy6
Raytheon- 2x-22bw3
Magnavox 6hq5 / 6dt6a
Zalytron- 17jn6

$75.00 for all + shippping

All prices + shipping via UPS COD from 30345

Please reply to:

rl1856@ix.netcom.com

Thank you,

Ross Lipman

--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

# 1313. Re: Ranger Bible

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33d7b6bc.3587810@news1.mnsinc.com>
Source record: 92277

On Sun, 13 Jul 1997 10:08:23 -0500, Tomcat121356@webtv.net (Thomas Beard) wrote:

> I have gone to the ranger bible
>section and tried to get into the information
>but cannot. It keeps bring up the poster
>(name and password) I dont know what they are. Can anyone help me get
>in.
> Thanks

Hi Thomas!

Only a WEB-TV'er could say this without giving even a HINT of what URL he is trying!

Help us to help you!

1) What is the URL you are trying? We can't tell from your message!

2) Are you wanting information on a VIKING Ranger? or the newer 10m Ranger rigs?

Bry, AF4K

# 1314. Re: lectrokit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33d7b7c0.3847551@news1.mnsinc.com>
Source record: 92278

On 18 Jul 1997 05:00:24 GMT, danandamym@aol.com (DanandAmyM) wrote:

>Is the lectrokit company still in business? I read an old article about a
>kit they offered.

If they are in business, you will likely find their address at:

http://www.mnsinc.com/bry/mega/megakits.htm

# 1315. Re: WANTED! Simpson 260 Schematic/Parts List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: alex_x@iserv.net
Message-ID: <33d6f34b.66288374@snews2.zippo.com>
Source record: 92279

On 21 Jul 1997 15:11:01 -0700, k0qz@primenet.com (Mike Baker)
wrote:

>HI Gang!
> If anyone out there had the schematic diagram and parts list for a
>Simpson 260 Meter and wouldnt mind photocopying it or scaning it into
>a JPEG and sending it to me, I would greatly appreciate it as I have
>an old one that I am trying to restore to operating condx........

As an added sidenote, you may want to verify the series number
of the target meter, found just above the pivot point on the
meter face.... this will help insure that the documentation
matches the actual meter guts! (My favorite is the series 3
with the integral 5Kv range)

Good Luck To You,

Alex_X

'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'

Alex's Electronic Test Bench --> www.iserv.net/~alexx
'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'`'

# 1316. Re: Needed Desprately

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33d7b83a.3969594@news1.mnsinc.com>
Source record: 92280

On Sat, 19 Jul 1997 18:05:12 GMT, ace@home.com (ace is the place)
wrote:

>I just purchased a LW-51 50 watt 6/2 meter transmitter. I need the
>matching power supply or a pinout of the power connector.
>
>LW-51 Double Deluxe 2 & 6 meter Transmitter

What company makes that transmitter?

# 1317. Re: COR circuit wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <5r8pfi$qpb@canyon.sr.hp.com>
Source record: 92281

Deen Attan (denatan@tm.net.my) wrote:
> I am looking for a simple circuit of CARRIER OPERATED RELAY to make

I don't have anything handy, but an easy way is to use an op-amp connected as a comparator monitoring the D.C. voltage change across the primary of the output audio transformer. There will normally be no voltage drop from the cutoff output transistor (squelch closed) to a couple hundred millivolts with the squelch open and the output transistor conducting. You may have to experiment a bit, depending how you reference the comparator inputs and power. Of course, this assumes the AF output uses a transformer match to the speaker.

Don K6LTS
donrm@sr.hp.com

## 1318. Design Your QSL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: sebring@zebra.net
Message-ID: <33D8170F.4D1D@zebra.net>
Source record: 92282

Your design. On-line. Colorful and affordable. See samples at
http://www.zebra.net/~sebring/qsls.htm

# 1319. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <33D7B28B.1D2F@boeing.com>
Source record: 92283

Greg Bailey wrote:
>
> No hard feelings... but I think I would do some more scrounging on the
> used SW Receiver market.
>
> Building a SW receiver is an underaking that only the tested solder
> throwing engineer/types would try. Let me point out some of the
> negatives:
>
> 1. Calibration of frequency (knowing what frequency you are listening
> to) is going to be almost impossible. Improper selection of capacitors
> in the VFO will cause it to drift, and so on.
>
> 2. Backlash, dial indication, etc.
>
> 3. Oscillation in the IF, bandwidth of the RF section/s, etc.
>
> 4. BFO?
>
> And so on... God there are a million others. I would say to build a
> receiver is about ten times more a pain than a transmitter. A
> Transmitter can use a crystal to stay on frequency. Once you modulate
> it and rid yourself of paracitics (SP) you have it made. But a
> receiver... wrongo.
>
> So what is the alternative: Start scrounging for used (tube type) SW
> receivers. Hammerland made millions of HQ-110, and HQ-100. Globe,
> Heath, and others made good receivers. I would avoid a Heath only
> because it is homebrew and thus home screwed-up.
>
> Receivers surface all the tiime. List on this net: WTB SW REC for
> beginner. Many guys have an old box of tubes (receiver) in their
> basement. If they thought they could stimulate a person into hamdom
> using their old receiver they will probably give you the thing.
>
> I would rather scrounge than build (a receiver). I learned the code,
> got a license, and enjoyed a number of years using an ARC-5 WWII
> aircraft receiver. Now they are probably $$$ as collector items, but
> others are not. Scrounge. And write me back when you either buy or
> build. I would like to hear what happened.
>
> Greg
I agree with Greg. I am an engineer with quite a bit of experience in
the several areas needed for a reciever...parts engineering, RF, digital

signal processing, PC fabrication, ESD protection, MIL-STD certified soldering, etc. I did a quick sketch of a receiver I wanted and produced a parts list. Even without minimum buys and availability, and so forth, I found that it would take about $350 to $500 for one without the case, knobs and pretty things. This assumed that I did the CAD and had the negative produced locally ($5 to $15 depending upon their mood)> I looked at the surplus market and found several as good or equal in this price bracket.

Although I would enjoy building the receiver, I enjoy using it better. I figured it would take about 6 months to 1 year depending on the time I could get free from my other activities.

I had experienced this before when I upgraded a BC-342N by replacing a couple of tubes with plug-in modules with miniature tubes..."modern tubes" which were about the same size as the existing tube had two or three sections which could improve things a bit. It just wasn't worth the effort. This was about 35 years ago and I wasn't and "expert" in the area.
Ralph

## 1320. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <33D81622.892@hevanet.com>
Source record: 92284
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

Most parts come off pretty easily with a hot-air gun. You have to play
with the temperature and time a little. For delicate stuff, grab it
with tweezers while you heat. for ordinary rugged ics, turn it upside
down. Heat it up and give it a whack. The parts will fly off.
Wear eye protection.
miker

> > I've heard of people successfully pulling ICs off of soldered
> > boards, but personally haven't had great luck. The capacitors
> > come off easily enough with a soldering iron and are well
> > worth taking.
--
Please remove NOSPAM from return address before replying.

# 1321. Re: HTX-212 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33D80E01.5C1B@ix.netcom.com>
Source record: 92285

PETER DUGGAN wrote:
>
> HTX-212 info on extending the TX and the RX range above the 140's into the
> 150-160-170's
>
> thanks for your time

It's in the manual, if you have it. Sorry, mine's in the car right now, and it's raining out. If you don't have the manual, send me back an e-mail and I'll get back to you in a day or two.

It's something simple like holding down the F key and the Shift key while turning on the power switch. Coverage is then from 137-174 MHz (FM only). You cannot save the out-of-band freqs in memories, though you can keep them in the 2 VFO memories. I think that is a feature that they added to the HTX-242. I believe that extending the range also allows TX on MARS/CAP.

--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html

# 1322. Re: Pinouts for US transistors please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-24 00:00:00 UTC
From: Mike Willis <"m.j.willis "@rl.ac.uk>
Message-ID: <33D71BF1.34F7@rl.ac.uk>
Source record: 92286

Why would anyone want a pinout for a U/S transistor? to replace
it perhaps?

# 1323. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <33D8D383.248C@atl.org>
Source record: 92209
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

James Patterson wrote:
>
> Does anyone know how to build a tower?
>
> I want to build a tower about 100' high.
>
> Can anyone help with some ideas or designs?
>
> thanks
>
> James

Get yee down to the local engineers book store and
pick up an introductory statics book and a materials
reference book of some kind. Most everything you need
to know will be there. The calculations aren't difficult.
As for the base, you can take a look at a soil mechanics
book, bang a pipe into the ground to test and scale to
meet your needs. As an alternative you can check with the
folks that sell the aeromotor windmills. If I recall
correctly, they have plans for folks who want to build
there own windmill towers. Last of all, for a cookbook
approach, see if you can dig up an old riggers or
millwrights guide. Plenty of plans these.

-bob
wb4mnf
If you don't know how it works, you shouldn't be messing with it :-)

## 1324. Circuit Diagrams Galore

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Harry Lythall <no@spam.please>
Message-ID: <01bc9944$a6174520$260664c3@acz732k>
Source record: 92210
Cross-posted to: uk.radio.amateur,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,aus.radio.amateur.misc

Hi all,

Due to the large number of visitors to my homepage I have now put another 'mirror' page on the net. The URLs are:

http://user.tninet.se/~acz732k/
http://hem2.passagen.se/sm0vpo

The page is still growing and more projects will be added in the forthcoming week.

Have fun with QRP (and QRO)/homebrew de Harry, SM0VPO,
(G4VVJ) Upplands V&#65533;sby, Sweden.

# 1325. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5rb6uf$a6e@hpcvsnz.cv.hp.com>
Source record: 92211

Don Huff (don_huff@HP.com) wrote:

: One way to do it is to simply buy a PC board for the "R2" phasing
: type direct conversion receiver described by Campbell in Jan 93 QST (and
: duplicated by hundreds, including myself). Remember, the receiver

If Don hadn't mentioned this, I was about to! You can also homebrew
a direct conversion receiver, without buying the board, if you really
want.

: A comment about "knowing what frequency you are on". I have no tuning
: dial

If you _do_ feel a need to know your frequency, the very simple way is
to count it. In a direct conversion receiver, you just count the
local oscillator, and that _is_ the frequency...plus or minus any
offset for the audio tone of a CW or FSK signal. But for sideband
or AM, it is just the carrier frequency. The counter should be either
very well shielded, or able to be turned off, because you will find
it generates lots of RF "hash."

Finally, I know Don has started some experiments with using DDS chips
for the local oscillator for a DC receiver. It seems like they'd
offer a way for "digital" type people to generate a decent LO, and
know what frequency it's on just from the digital info sent to it.
Perhaps Don can offer comments if he's had time to get anything going.
(Hope I'm not getting you in trouble here, Don!)

--
Cheers,
Tom
tomb@lsid.hp.com

# 1326. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Geoff Blake <geoff@palaemon.demon.co.uk>
Message-ID: <EDw6vJ.8JH@palaemon.demon.co.uk>
Source record: 92212
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

N8XYN (jim.N8XYN@worldnet.att.net) wrote:
: Walt Davidson wrote:
: >
: > On Thu, 24 Jul 1997 13:17:50 +0100, James Patterson
: > <PattersJ@ecid.cig.mot.com> wrote:
: >
: > >Does anyone know how to build a tower?
: > >I want to build a tower about 100' high.
: > >Can anyone help with some ideas or designs?
: >
: > You have to order a truck-load of bricks and a few sacks of sand and
: > cement. Then just start building. Upwards.
: >
: > In this country we call it a "folly". :-)
: >
: > 73 de G3NYY
: >
: > --
: > Walt Davidson Email: walt at dial dot pipex dot com

: Building a 100 ft tower isnt something I want to tackle! The stress at
: the lower levels of such a structure are HUGH! Buy a nice used tower.

Didn't they knock a few down near Bedford a few years ago? Maybe Fred Dibner
will know.

Geoff
--
--
Geoff Blake geoff@palaemon.demon.co.uk linux 2.0.29
Chelmsford g8gnz@g8gnz.ampr.org i586
Intel create faster processors - Microsoft create slower processes

# 1327. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <33D90BC9.65DD@HP.com>
Source record: 92213

Greg Bailey wrote:
> 
> No hard feelings... but I think I would do some more scrounging on the
> used SW Receiver market.
> 
> Building a SW receiver is an underaking that only the tested solder
> throwing engineer/types would try. Let me point out some of the
> negatives:
> 
> 1. Calibration of frequency (knowing what frequency you are listening
> to) is going to be almost impossible. Improper selection of capacitors
> in the VFO will cause it to drift, and so on.
> 
> 2. Backlash, dial indication, etc.
> 
> 3. Oscillation in the IF, bandwidth of the RF section/s, etc.
> 
> 4. BFO?
> 
> And so on... God there are a million others. I would say to build a
> receiver is about ten times more a pain than a transmitter. A
> Transmitter can use a crystal to stay on frequency. Once you modulate
> it and rid yourself of paracitics (SP) you have it made. But a
> receiver... wrongo.
> 
> So what is the alternative: Start scrounging for used (tube type) SW
> receivers. Hammerland made millions of HQ-110, and HQ-100. Globe,
> Heath, and others made good receivers. I would avoid a Heath only
> because it is homebrew and thus home screwed-up.
> 
> Receivers surface all the tiime. List on this net: WTB SW REC for
> beginner. Many guys have an old box of tubes (receiver) in their
> basement. If they thought they could stimulate a person into hamdom
> using their old receiver they will probably give you the thing.
> 
> I would rather scrounge than build (a receiver). I learned the code,
> got a license, and enjoyed a number of years using an ARC-5 WWII
> aircraft receiver. Now they are probably $$$ as collector items, but
> others are not. Scrounge. And write me back when you either buy or
> build. I would like to hear what happened.
> 
> Greg

Hi Greg OM,

I have lost track of the original poster, so I hope this can reach him
and my apologies for using your post as a conduit!

I have been hamming and tinkering for over 42 years, and it is my observation
that it has never been easier to build a good performing receiver than it is today!
One way to do it is to simply buy a PC board for the "R2" phasing type direct conversion receiver described by Campbell in Jan 93 QST (and duplicated by hundreds, including myself). Remember, the receiver circuitry is
almost all AUDIO, since this is where all the gain is located in a DC receiver. (Almost) anyone can build this receiver, and a simple VFO for the local oscillator. I highly recommend anyone not familiar with the
phasing method of generating SSB to review it (it has been around for many
decades), as well as the article. The R2 has outstanding performance, (mine hears 1 uV on 40M, has over 110 dB dynamic range, has 55 dB of opposite
sideband suppression), can cover the range of LF to microwaves depending on
the input mixers, has beautiful audio quality, is a very flexible building block, and fits on a board 3.5 by 4.5 inches or so. Take a look.

A comment about "knowing what frequency you are on". I have no tuning dial
or frequency display whatsoever for my homebrew TX and RX, which I use on CW and FSK (amtor and pactor). I have never found it necessary to have
a frequency readout. I can tell when I am in the band or not, and that is really all that matters. Mind you, I am talking about "need", not "would be nice", and I am talking about general ragchewing operation
Have a net frequency you want to get on? Find it once
when the other station is on, and then mark your tuning knob for that frequency.
That always gets me close enough, although I am strictly a random ragchewer,
not a BBS user on FSK.
When I am in a QSO, especially on FSK, I am often amazed at the importance
other ops place on frequency readouts, to the nearest 0.1 Hz. For example, I have
had several ops ask me, while engaged in a Pactor QSO, how I can operate without any frequency readout. I then ask them (answering a question with a
question): "What frequency are we on now?". They might say "7071.5051 KHz".
I then ask them, "Is that your mark or space frequency?" or, "What is the carrier offset

in your rig when using the CW I.F. filter in FSK mode?". Those things have
to be known to determine what the frequency readout is really telling you. I have yet to
work more than a couple of ops (thousands of QSO's over 13 years), who could answer
both of those questions. So, what is the significance of all those digits there
on the frequency display? They are significant only if you know what they are
telling you, and what they are not.

Lastly, I would also suggest what has already been suggested by others: Buy an
existing receiver (transceivers don't cost that much more) that is NOT working
(prices get better that way), and fix it. You will learn almost as much as
building from scratch, with no metal work, painting/layout or other fabrication
to do. Just the fun stuff: circuit debugging and modifying.

GL and 73,
Don, W6JL

# 1328. Re: HP 1720A scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5rb9ug$rhp@hpscit.sc.hp.com>
Source record: 92214

In article <5radv5$c2o@nntpb.cb.lucent.com>,
Eric Beck <ericbeck@lucent.com> wrote:
>Hi -
>
>Does anyone know the approximate age of the HP1720A
>scope design? This was a portable dual trace scope with
>275 MHz bandwidth.
>
>I was unable to locate the the literature
>on this product at HP's web site, which goes back to the
>early 70's.

I believe it went out of production in 1977.
(Or maybe that was the 1722).

>Any idea's on the value of this instrument today?

It would depend on condition, since they are virtually
unrepairable. They weren't very reliable even when new
(I used several over the years). In the rare event you
had one where everything worked perfectly (and the CRT
wasn't dimmed out as usual), it might be worth as much
as $300. If it has any problems, the value plumments
precipitously.

>
>Thanks,
>
>Eric Beck
>
>

Rick Karlquist N6RK
HP Santa Clara Division
rkarlqu@scd.hp.com
>

# 1329. Re: ceramic resonators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEDxw7v.7CH@netcom.com>
Source record: 92215

In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
Tony Zugec <tonyz@rose.hp.com> wrote:
>I'm still looking for any information on
>ceramic resonators. Anyone have any
>experience with them?
>
>How are they used? Mine are 455kc
>with 2 leads coming out.
>
>Normal ceramic filters usually have 3 leads
>so I am at a loss. I understand they are
>basically piezoelectric ceramic elements,
>but how does one use them in a small broadcast
>radio project's IF section?

The two terminal ones are cheap replacments for quartz crystals,
used for the timing oscillators in a lot of consumer gear like
TV remote controls, CD Players and the like. Maybe you could
use it for a BFO, but not as a bandpass filter.

Check out the Digikey catalog, they sell both types.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 1330. Ameritron AL80 electronic ALC diagram PSE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <33d92f8b.843991@news.interbusiness.it>
Source record: 92216
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi, Friends! I'm looking for contact somebody having an Ameritron AL80
that uses a so-called "Dynamic ALC" that i'm interested to reproduce
in my SB-220.
Thanks for any kind answer.
73 de Vanni I8JJB
e-mail: grainone@caserta.peoples.it
--
Vanni R.
Caserta,Italy

# 1331. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33d88981.129679023@news.erols.com>
Source record: 92217

Homebrewers: As a recent successful receiver-builder, I feel obligated to jump in and encourage others to share in the fun! Its just not that difficult! I agree that a super-het is probably not a good "first HB project" but you don't really need to be a very advanced and experienced builder to produce a very useable receiver.

Over the years, I've heard may very technically comptent hams say that "transmitters are fun to build but receivers are too hard." Maybe this comes from the old days when some of the modern components were unavailable. I'm not sure... but I don't think its true anymore.

I just completed a version of Doug DeMaw's "Barebones superhet" for 20 meters. Real simple: Mixer circuit, VXO, one IF amp, product detector, AF amp. For the IF filter I used one 3.579 Mhz computer clock crystal with a resistor to ground. The rx is very stable, very quiet and very sensistive. I can easily copy lots of DX SSB sigs with my "in-the-trees" dipole. This is only my second major Homebrew project (the first was a transmitter) but it only took me about a months and I don't think I spent more than 100 dollars.

For ideas check out the June 82 issue of QST or look at the 75 meter SSB reciever that Doug DeMaw has in the "QRP Classics" book.

Have fun! Fear not! Good luck!

73 Bill N2CQR

## 1332. Freq. counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5r8s6i$oth@tor-nn1-hb0.netcom.ca>
Source record: 92287

I was thinking about getting a handdy freq. counter.
Is there such a thing in the market?; combination
RF sig. generator and freq. counter(two functions in one box)
Kit form will be even better.
Tony, VE6CGX

# 1333. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19970725002100.UAA14497@ladder01.news.aol.com>
Source record: 92288

G4ZOW:
CAN YOU SAY" IDIOTS"
CAN YOU SAY " I BUILT ONE FOR MY SELF"

CAN YOU SAY " YOUR A COTTON CHOPPER"

# 1334. Re: SIX METER AMPLIFIERS BUILT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19970725001600.UAA14164@ladder01.news.aol.com>
Source record: 92289

SIR: CAN YOU SAY" IDIOTS"
CAN YOU SAY " I BUILT ME ONE"
CAN YOU SAY " PERSONAL USE"
CAN YOU SAY " 572B AND 811 HAVE GAIN"
CAN YOU SAY " 50 MHZ - 23MHZ =27 MHZ"
CAN YOU SAY " EXTRA CLASS"

# 1335. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: rod7rg@aol.com
Message-ID: <19970725021600.WAA22788@ladder01.news.aol.com>
Source record: 92290

Hi
I suggest you either purchase a used receiver or build one of the kits available through various suppliers (try ac6v's page at http://pw2.netcom.com/~ac6v/pageas.html..try the topic "kits").

As for the coax, short one end of two seperate but equal lengths and fasten the braid onto an insulater...i.e. a piece of plastic cut from a pop bottle...and use another length to connect it to ur receiver.

Good Luck and have fun.

Rod
KL7RG/8

# 1336. CAN YOU SAY"SIX METER AMPS"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19970725004801.UAA16400@ladder01.news.aol.com>
Source record: 92291

**********RULE
97.315a**********
THERE'S A LOT OF EX-CB'ERS THAT DONT UNDERSTAND MY POSTING
FROM LAST WEEK ABOUT SIX METER AMPS
1ST..... I BUILT ONE ONLY FOR ME IN 1997 .......OK A 3-500 AMP
2ND.....I BUILT ONE ONLY FOR ME IN 1996 ........OK A 572B AMP
3RD....I BUILT ONE ONLY FOR ME IN 1994........OK A 811A AMP
" THATS WE'RE I'M AT" CAN YOU SAY EXTRA CLASS
IM NOT SELLING AMPS I DONT SELL AMPS
I BUILTED THEM MAKE THEM WORK PLAY WITH THEM AND
TAKE THEM APART AND DO IT AGAIN "CAN YOU SAY FUN"
I DO MAKE WATT METERS AND A FEW TUNERS
AND I DID OFFER TO SELL FOR MY COST THE PLANS FOR SOMEONE TO BUILD
THERE OWN AMP FOR SIX METERS USEING THESE TUBES
AND IVE HAD A LOT OF REPLYS FROM MEN THAT ARE INTERESTED
IN THIS AND I THANK THEM
WHAT WE NEED IS MORE AMATEURS WORKING THE BANDS AND
THERE MINDS AND NOT RUNNING THERE MOUTHS AND BEING
IDIOTS

joseph

# 1337. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: jw@alpha1.csd.uwm.edu
Message-ID: <5r9b2r$tis@uwm.edu>
Source record: 92292
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

James Patterson (PattersJ@ecid.cig.mot.com) wrote:
: Does anyone know how to build a tower?
:
: I want to build a tower about 100' high.
:
: Can anyone help with some ideas or designs?
:
: thanks
:
: James

Do you mean grab some pipe and spark up the welder?

Cool!

jw
--
==========
John C. Wilke, BA, BSN, GN (jw@alpha1.csd.uwm.edu)
WB9UAI EN-62aw
==========

## 1338. F.S. - Tubes, books, radios...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970725040800.AAA14882@ladder02.news.aol.com>
Source record: 92293

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco plus radio related publications. Schematics for many older radios and TV's - just $3 delivered. Tube Manuals, Tube Substitution books, Service Manuals, radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #711-T.

# 1339. WTB: 19" Relay Rack 3 feet High

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: W2OKF <szachara@gulftel.com>
Message-ID: <01bc98b9$4f67b6a0$db3aded0@WalterS.Szachara>
Source record: 92294

I am looking for a small enclosed desktop rack cabinet about three feet high that uses 19 inch standard relay rack panels. Please e-mail direct with price and condition.

Thanks for reading...

Regards,

Walt, W2OKF
Foley, AL 36535

## 1340. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: "Dr. Jackle" <drjackle@webspan.net>
Message-ID: <33D839C5.DBD04221@webspan.net>
Source record: 92295
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

Removing components is not the problem ( I use a desoldering braid to get the solder of the board and gently pull out the part ), the problem is finding people who might want them.

I have a partial list of ic's posted at www.webspan.net/~drjackle/ic.htm if you see any thing you like or you don't e-mail me at drjackle@webspan.net and will arrange something.

# 1341. Antique Tube Radio, Pre WW II, Lafayette

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: in717@cleveland.Freenet.Edu
Message-ID: <5r9eqv$q3v@alexander.INS.CWRU.Edu>
Source record: 92296

Hi, I've got for sale on Ebay's Auction Web:
Antique Tube Radio, Lafayette, Pre WW II. The outside case is basically shot. It has the face plate marked with Lafayette and has 2 swastikas, which is what leads me to believe that it is pre- WW II. It has a plate affixed to the back of the chassis marked G7417, which I believe is a serial number. It has 5 vacum tubes, they are marked as follows:
2 are 35-51, 47, 24A, 80. I think that each number should be preceeded by a " G ". All the tubes are Wards Super Airline except the 80 which is Nat. Union Electic. The unit will power up and all the tubes glow. I ran it for 5 mins. It didn't catch fire, smoke, or smell, also it didn't produce any sound. The original case is a round top (cathedral type?). Buyer pays 18 lbs. S&H, Please e-mail me with your zip code for acutal shipping cost.

http://www2.ebay.com/aw/itemfast.cgi?item=yuy27741
--

## 1342. Vacuum Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: in717@cleveland.Freenet.Edu
Message-ID: <5r9jb4$so8@alexander.INS.CWRU.Edu>
Source record: 92297

```
Hi,
I've got some OB2 Tubes for sale. They are pull outs from a home
built unit that used 100 together. The manufactures are: CBS, RCA,
Remington Rand, IBM.

1 $2.00 + $1.00 S&H
10 $15.00 + $3.00 S&H
25 $25.00 + $5.00 S&H

e-mail: in717@cleveland.freenet.edu

Thanks for your time.
--
```

# 1343. Re: CAN YOU SAY"SIX METER AMPS"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33d850ef.3447916@news.online.no>
Source record: 92298

please use lower case characters, it is so much easier to read!

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1344. FYI: 121 Ham Mailing Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33D8A605.6864@ix.netcom.com>
Source record: 92299

121 Updated Ham Mailing Lists and Reflectors at URL:
http://pw2.netcom.com/~ac6v/pageae.html
73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 1345. FD3 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: franky B <frankyb@glo.be>
Message-ID: <33D93785.2956@glo.be>
Source record: 92300

Hello tnx for reading this message.

a few day ago I bought an antenna FD3, it's a wire antenna from abt 20M

Now i have 2 possibilities to install it.
1. in one line from north to south on about 8m
2. in north - south east with the balun on 12m but as inverted V

what's the best way to do it...?

tnx in advance
ON4CEL
frankyb@glo.be

# 1346. HP 1720A scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Eric Beck <ericbeck@lucent.com>
Message-ID: <5radv5$c2o@nntpb.cb.lucent.com>
Source record: 92301

Hi -

Does anyone know the approximate age of the HP1720A
scope design? This was a portable dual trace scope with
275 MHz bandwidth.

I was unable to locate the the literature
on this product at HP's web site, which goes back to the
early 70's.

Any idea's on the value of this instrument today?

Thanks,

Eric Beck

# 1347. Re: 10 y 24 Ghz en Espa&#65533;a.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Jim Phillips <phillips@spacestar.net>
Message-ID: <33D8CFB9.2A6F@spacestar.net>
Source record: 92302

Jose_Manuel wrote:
>
> Hola , reciban un cordial saludo , &#65533;algun colega trabaja en 24 Ghz o
> en 10 Ghz ??
> Es para compartir experiencias sobre construccion de equipos de esas
> bandas y experiencias sobre "fontaner&#65533;a fina" .
> Muchas gracias.

Hola, Jose, I have designed and (had) built terresterial microwave from
2Ghz -> 18 Ghz. por Contel de California en United States.

Me espana es feces.

Do you speak english? -or- spanglish?

Jim

# 1348. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <33D90381.44F4@HP.com>
Source record: 92303
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

James Patterson wrote:
>
> Does anyone know how to build a tower?
>
> I want to build a tower about 100' high.
>
> Can anyone help with some ideas or designs?
>
> thanks
>
> James

Hi James OM,

Judging from the context of your post, I suspect you may have never seen a
100 foot tower. First, I would look around and find examples of even smaller
towers, and examine closely how they are built. That alone will give you
a real-world idea of what is involved, to just duplicate an existing design.
However, home-built towers have been successfully made in all kinds of shapes
and sizes and materials. A friend of mine welded up (and had hot-dipped galvanized),
a 60-foot tower which he then mounted into the top of a 100 foot tower, and used
as a rotating mast to hold stacked yagis for the 80M thru 70CM bands. He also
made all his own yagi arrays, including a full size 80M 3L. And he did all this
work alone.

73,

Don, W6JL

# 1349. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <33D89F0A.733C@worldnet.att.net>
Source record: 92304
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

Walt Davidson wrote:
>
> On Thu, 24 Jul 1997 13:17:50 +0100, James Patterson
> <PattersJ@ecid.cig.mot.com> wrote:
>
> >Does anyone know how to build a tower?
> >I want to build a tower about 100' high.
> >Can anyone help with some ideas or designs?
>
> You have to order a truck-load of bricks and a few sacks of sand and
> cement. Then just start building. Upwards.
>
> In this country we call it a "folly". :-)
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: walt at dial dot pipex dot com

Building a 100 ft tower isnt something I want to tackle! The stress at the lower levels of such a structure are HUGH! Buy a nice used tower.

# 1350. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Dana Gould <NOSPAMdgould@bev.etn.com>
Message-ID: <01bc98ff$f687ab20$4ce06e97@pc3527.bev.etn.com>
Source record: 92305

Greg Bailey <gbailey@mail.sdsu.edu> wrote in article
<33D6EDB9.2AB4@mail.sdsu.edu>...
> No hard feelings... but I think I would do some more
> scrounging on the used SW Receiver market.
>
> Building a SW receiver is an underaking that only the
> tested solder throwing engineer/types would try. Let
> me point out some of the negatives:
> <snip long list of negatives>

Well, there are receivers and receivers. Certainly a high-performance SW receiver is a serious undertaking, but there have been quite a few relatively simple single and multi-band SW receiver projects published in QST, 73, Pop. Electronics, etc. Some of which provide quite reasonable preformance.

I'm not really trying to argue with you. If the original poster is more interested in listening than building, then scrounging a good, used SW receiver is probably the best advice. Well, that and putting up a good antenna. But I for one enjoy throwing solder even when, sometimes, my ambitions get ahead of my skills. After all, one does not become a tested solder thrower without throwing solder.

To the original poster. The closest thing in the amateur radio community to a 'Radio Receiver Building for Dummies' book is the Amateur Radio Handbook from the ARRL. There are also some other good books like the 'W1FB QRP Notebook', etc. Check out the ARRL site at http://www.arrl.org, you'll find books listed under 'ARRL Publications' under 'ARRL Products and Services'.
--
Dana Gould, WA1UIW
NOSPAMdgould@bev.etn.com

## 1351. Glowbugs (tubes)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <33D8BAD1.2775@tir.com>
Source record: 92306

I am playing around with an "on-line tube manual" project. Is there any interest among home brewers in such a thing. We have a chip directory and all sorts of info on-line for solid state parts, but no tube manual.

Bill KU8H

# 1352. Re: 10 y 24 Ghz en Espa&#65533;a.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <OhSz0YAcPL2zEwXs@pacsat.demon.co.uk>
Source record: 92307

In article <33D54FF9.E3E1E435@apdo.com>, Jose_Manuel <psalteri@apdo.com>
writes
> Hola , reciban un cordial saludo , &#65533;algun colega trabaja en 24 Ghz o
>en 10 Ghz ??
> Es para compartir experiencias sobre construccion de equipos de esas
>bandas y experiencias sobre "fontaner&#65533;a fina" .
> Muchas gracias.
>

I think I get the idea of your message Jose, if you look at
www.pacsat.demon.co.uk you will find a website dedicated to amateur
microwaving

73 Simon GM4PLM

please email in english if you need more help, my spanish is not so
good!

```
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+
```

## 1353. ...Your Invited: "Grand Re-Opening"..

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-25 00:00:00 UTC
From: erwrt@usa.net
Message-ID: <5rafep$o65@buck.innerx.net>
Source record: 92308

YOUR INVITED!

We cordially invite you to the...
"GRAND RE-OPENING" of our Web Presence.

Double click, or cut and paste this URL
http://www.cyberbundle.com

FOR A LIMITED TIME...Receive a FREE gift worth
$99.00, as our appreciation for stopping by.

Our Motto...
Teaching people how to effectively market on the
Internet, one entrepreneur at a time.

## 1354. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: Cantaloupe@Butterfly.Net
Message-ID: <5rbi1c$bn@crack.usaor.net>
Source record: 92218
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

miker <mreiney@hevanet.com> wrote:

>Most parts come off pretty easily with a hot-air gun. You have to play
>with the temperature and time a little. For delicate stuff, grab it
>with tweezers while you heat. for ordinary rugged ics, turn it upside
>down. Heat it up and give it a whack. The parts will fly off.
>Wear eye protection.
>miker

>> > I've heard of people successfully pulling ICs off of soldered
>> > boards, but personally haven't had great luck. The capacitors
>> > come off easily enough with a soldering iron and are well
>> > worth taking.
>--
>Please remove NOSPAM from return address before replying.

A propane torch works REAL fast! Especialy on radios that go
BEEEP. Just kidding Try using solderwick or one of those
desoldering irons.PRACTICE on a junk circiut board first to get the
hang of it.

From The Four Tenward Lounge ......OOTMAN
A/K/A Flying Cantnaloupe

# 1355. ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: MICHAEL SMITH <mjs@now-online.com>
Message-ID: <01bc99e0$8097fe60$075bcecf@mjs>
Source record: 92219

ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
NICE.. E-MAIL WITH INFO... THANKS MIKE....
--
mjs@now-online.com

# 1356. INFO WANTED ON JOHNSONS FLEETCOM 2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: MICHAEL SMITH <mjs@now-online.com>
Message-ID: <01bc99e0$072ac9e0$075bcecf@mjs>
Source record: 92220
Cross-posted to:
rec.ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

LOOKING FOR ANY INFO ON JOHNSON FLEETCOM 2 RADIOS. A SERVICE MANUAL WOULD
BE GREAT. BUT REALLY NEED INFO ON TUNNING THE RECIEVER... E-MAIL ME WITH
INFO... THANKS MIKE....
--
mjs@now-online.com

# 1357. Re: Needing info Mixer, Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: dennyd@ibm.net
Message-ID: <33da4db2.0@news1.ibm.net>
Source record: 92221

In <5r0jpi$srl$1@rosenews.rose.hp.com>, tonyz@rose.hp.com (Tony Zugec) writes:
>Hi there!
>I ordered an NE602AN mixer from Dan's Small Parts.
>Danny didn't have an NE602 so he sent me an NE612.
>Does anyone have info on the 612 that they can share?
>

From the spec sheets they look close - it's not clear what the difference is.
Go to www.semiconductors.philips.com/search/ and search on 602 to find specs
and ap notes on the NE/SA602 (and other misc stuff with 602 in the part number).
Then do the same on 612.

Good luck

# 1358. KB8TNQ/CMARC Pages UPDATED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: KB8TNQ <kb8tnq@voyager.net>
Message-ID: <33DA132B.D082AEBD@voyager.net>
Source record: 92222
Cross-posted to: rec.radio.amateur.homebrew,,rec.radio.amateur.equipment,,rec.radio.amateur.space,,rec.radio.amateur.antenna,,rec.radio.amateur.digital.misc,,uk.radio.amateur,,alt.hamradio.packet
Body handling: HTML body converted to readable text

Hi Gang!

I'd like to take a minute to invite you to stop into the Central Michigan Amateur Radio Club's Web Site, as well as the KB8TNQ Ultimate Amateur Radio Page! as soon as you can.

The first Site, CMARC's, is located at: http://www.kb8uyz.com/cmarc and offers information about our club. Additionally, and perhaps our biggest addition to the Site, (The "Trader's Page") offers FREE SPACE for you to post your items for sale. The guidelines are posted, so check it out.

The second, KB8TNQ's Page, is located at: http://www.kb8uyz.com/kb8tnq and is a great source for those in the hobby and those who are looking to get into Amateur Radio. With links to many other great sites, you'll have to stop in to check it out.

Thanks for your time and be sure you leave your comments and URL in the guestbooks, as we're always looking to add new ones.

7-3,
Jim KB8TNQ

Hi Gang!

I'd like to take a minute to invite you to stop into the Central Michigan Amateur Radio Club's Web Site, as well as the KB8TNQ Ultimate Amateur Radio Page! as soon as you can.

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Thanks for your time and be sure you leave your comments and URL in the guestbooks, as we're always looking to add new ones.

7-3,

Jim KB8TNQ

# 1359. Refurbished Electronic Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: smcone@ma.ultranet.com
Message-ID: <729230.57398@news.ma.ultranet.com>
Source record: 92223

X-Newsreader: Binary Newsreader for OS/2 - Version 1.25 - UNREGISTERED

New and refurbished electronics at very low prices.
Merchandise includes...

Computer Monitors
Computer Motherboards
Computer Add-in Cards
SIMMS
Computer-controlled MIDI Keyboards
Pocket Computers and accessories
PDA (Electronic Diaries) and accessories
Video equipment
Home Automation equipment
Test equipment

..and much more, new merchandise added weekly.

Please visit our WEB page at:

http://www.ultranet.com/~smcone/

or E-Mail us at:

smcone@ma.ultranet.com

for an E-Mail catalog.

**********
SMC Electronics

Quality Sales and Service since 1975.

## 1360. Refurbished Electronic Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: smcone@ma.ultranet.com
Message-ID: <729230.60587@news.ma.ultranet.com>
Source record: 92224

X-Newsreader: Binary Newsreader for OS/2 - Version 1.25 - UNREGISTERED

New and refurbished electronics at very low prices.
Merchandise includes...

Computer Monitors
Computer Motherboards
Computer Add-in Cards
SIMMS
Computer-controlled MIDI Keyboards
Pocket Computers and accessories
PDA (Electronic Diaries) and accessories
Video equipment
Home Automation equipment
Test equipment

..and much more, new merchandise added weekly.

Please visit our WEB page at:

http://www.ultranet.com/~smcone/

or E-Mail us at:

smcone@ma.ultranet.com

for an E-Mail catalog.

**********
SMC Electronics

Quality Sales and Service since 1975.

## 1361. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: mspuds
Message-ID: <5rdjuk$dv7@drn.zippo.com>
Source record: 92225

In article , laura says...
>
>Bob Miller wrote:
>
>> Re removing ICs. (snip) The trick is to find an old American Beauty
>? soldering iron that takes a copper slug type tip (approximately 3/8
>> inch diameter) and then fashion new tips from 3/8 inch od copper tubing...
>> (snip)
>
>It's easier than that. Use a small torch, or one of those
>high-temperature heat guns. Works for SMD too - like reflow
>soldering in reverse. Just be careful... :-)
>
>My favourite technique for removing chip resistors and capacitors
>is to use two soldering irons with little tips. Heat each end of the
>component, and then use the two irons as tongs to lift it off. Easy!
>
>--
>Laura Halliday "C'est une femme mutine, assez elegante,
>ve7ldh@direct.ca grave et legere, ayant le sens
>Grid: CN89mg du confort et du plaisir en tout."
> - C. Deneuve
I have a solder pot.... put boad in count to 15, lift board out, turn component
side down and tap..... If it don't come off, you didn't need it.
Spuds

## 1362. PS upgrade/repair kit for Drake L4/L7 PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970726212001.RAA00104@ladder01.news.aol.com>
Source record: 92226

Have collected parts together to rebuild or upgrade the Drake L4PS or L7PS. All parts are new. Included are 250 mfd capacitors (25% more than originals for improved regulation, cost over $15 if you can even find them), diodes (3A @ 1000v, not the 1A 600v standard in the L4PS), equalizing resistors for the capacitors, equalizing resistors for the diodes (if your supply uses them), a 30 watt ALC resistor to replace the 7 watt original (when it blows it puts HV on the ALC pot and blows it, has not been available for over 10 years for the L4B), bleeder resistors, 0.82 ohm "fuse" resister, and a 220v muffin fan (run on 110v for super quiet or 220v for max air) to really keep things cool. Total for all parts is $115 plus UPS extra, conus only.

Capacitors are new, computer grade with screw terminals, I adapt them with a wire down the side for essentiall drop in replacement with the originals.

Thanks.

Evan
K9SQG@AOL.com

# 1363. FS: Plate Tank Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33DA6B3B.7234@calweb.com>
Source record: 92227

For Sale:
Hope it is appropriate to list here as it is a part for
home brew projects.

2. each 2 pole, 18 position, ceramic rotary switch, silver contacts and
constructions similar to that used in Collins avionics
hf KW level amplifiers. These were removed from HI Voltage test loads
and are like new. long 1/4 inch shafts with standard 3/8 inch mounting
hole. $ 50 for the pair with Millen ceramic flex shaft couplers and
extension shafts w/panel bushings included to add flexibility in
mounting.

Tnx for the read.

Bob, KE6F
Sacramento, CA 95827

# 1364. Re: Glowbugs (tubes)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: N8KFE@ix.netcom.com
Message-ID: <33DAABD5.213F@ix.netcom.com>
Source record: 92228

Bill wrote:
>
> I am playing around with an "on-line tube manual" project. Is there any
> interest among home brewers in such a thing. We have a chip directory
> and all sorts of info on-line for solid state parts, but no tube manual.
>
> Bill KU8H

Bill
Sounds like a great idea. Tube manuals are getting hard to come by these days.

Greg N8KFE

## 1365. FS: 3B28's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: Daniel Nelson <djn@goodnet.com>
Message-ID: <33DAB86E.2A68@goodnet.com>
Source record: 92229
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.ham-radio.swap,rec.radio.amateur.homebrew

I have a number (50+) of 3B28 tubes for $7.00 ea + shipping. Each is
tested, boxed and warrantied. I ship w/invoice so you can see what you
get before payment. Let me know interest!
--
Daniel Nelson
djn@goodnet.com
<:)
Beware Cause isn't Effect

## 1366. 6 Meter Beacon

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: "Ed Mathes, RPA-C" <emathes@servtech.com>
Message-ID: <33DAE5F7.7C4A@servtech.com>
Source record: 92230

I am in the process of building the 6-meter beacon featured in CQ-VHF magazine.

I am having problems finding a source for the toroids and final transister (2N2335). MOST places want a minimum order. These parts total less than a few dollars....anyone have them lying around the junk box?

--
Edward J. Mathes, RPA-C ANTI-SPAM: Remove the 'x' in xemathes@servtech.com
Internal Medicine PLEASE help SLOW the SPAM
emathes@servtech.com

---

Opinions above are mine and mine alone.
Opinions above are NOT medical advice.
If you don't like these opinions, make up some of your own.

---

"Politics should be limited in its scope to war, protection of property, and the occasional precautionary beheading of a member of the ruling class."
-P.J. O'Rourke

---

# 1367. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: Gene <genespeed@sprintmail.com>
Message-ID: <33DACD69.17CB@sprintmail.com>
Source record: 92231
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

Use copper braid and hope like heck you don't lift a trace up.
Buy a cheap butane (Buffalo Tools-5 bucks) torch and hope against the
above with the addition of hoping you don't remove other surface mounts.
Spend big dollars on a specialized hot air device.

or...

Find some old boards and pratice!
Use some liquid flux to help speed up the flow when using braid.
Dental picks work great for one leg at a time removals.
Beware the glue when done with all the pins.
Well spaced pins and/or componets with cheaply done solder process-
use the braid and gently lift.
Postage stamp IC's with very narrow spaces and excellent solder dip
process- use hot air or torch.
Use tweezers (various types but use what is comfortable to your grip)
to grasp a cap or resistor surface mount and go back and forth with
a soldering tip untill you can lift it up with a gentle pull.
The above will obviously leave solder behind so when you install a new
cap or resistor in it's place just pin it down with the tweezers and
reverse the process.(removing the old solder is a waste of time)
Practice makes perfect.
Gene (15 years as a consumer products technician,CD's,VCR's,Camcorders,
CB's,Audio stuff Home and Car, I've seen it all in surface mounts, and
screwed up many (hardknocks). Every part is unique and requires that
special handling and/or technique to remove it - there is no single
proper way to answer what is the correct way)

## 1368. Q: Info on toner transfer using label stock

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-26 00:00:00 UTC
From: jdc@cci.com
Message-ID: <EDy6Ko.IJC@sunsrvr6.cci.com>
Source record: 92232

I saw a web page describing the use of some type of label stock
for toner transfer PC board construction. It sounds like a
cheap alternative to Press-n-Peel and those other $1 a sheet
toner transfer papers. Unfortunately, I didn't save a bookmark.

Anybody run into this, and have the address handy? Or remember
the type of label stock?

73..Jim N2VNO

--
James D. Cronin, Sr. Software Engineer
Directory and Operator Services, Northern Telecom
jdc@cci.com
jdcronin@nt.com

# 1369. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33da93e5.44250161@news.pipeline.com>
Source record: 92233

For positives, skip to bottom, but if you like negatives, read on:

Greg Bailey <gbailey@mail.sdsu.edu> wrote:

>No hard feelings... but I think I would do some more scrounging on the
>used SW Receiver market.
>
>Building a SW receiver is an underaking that only the tested solder
>throwing engineer/types would try. Let me point out some of the
>negatives:
>
>1. Calibration of frequency (knowing what frequency you are listening
>to) is going to be almost impossible. Improper selection of capacitors
>in the VFO will cause it to drift, and so on.
>
>2. Backlash, dial indication, etc.
>
>3. Oscillation in the IF, bandwidth of the RF section/s, etc.
>
>4. BFO?
>
>And so on... God there are a million others. I would say to build a
>receiver is about ten times more a pain than a transmitter. A
>Transmitter can use a crystal to stay on frequency. Once you modulate
>it and rid yourself of paracitics (SP) you have it made. But a
>receiver... wrongo.
>
>So what is the alternative: Start scrounging for used (tube type) SW
>receivers. Hammerland made millions of HQ-110, and HQ-100. Globe,
>Heath, and others made good receivers. I would avoid a Heath only
>because it is homebrew and thus home screwed-up.
>
>Receivers surface all the tiime. List on this net: WTB SW REC for
>beginner. Many guys have an old box of tubes (receiver) in their
>basement. If they thought they could stimulate a person into hamdom
>using their old receiver they will probably give you the thing.
>
>I would rather scrounge than build (a receiver). I learned the code,
>got a license, and enjoyed a number of years using an ARC-5 WWII
>aircraft receiver. Now they are probably $$$ as collector items, but
>others are not. Scrounge. And write me back when you either buy or
>build. I would like to hear what happened.
>
>Greg

Take a wire about 60 ft long, and string it out your window.
If you have 1--T, just short the jacket to the center at both
ends and call it good.

Take another wire and hook it to a good ground, preferably
NOT the water system, but one in the ground if you can.

Take a piece of Galena crystal from a rock shop ($0.50?)
and solder a lead from it to the ground. Mount this on the
middoe of a piece of 1 X 4 board 6 inches long.

Take a 2-inch safety pin and bend the head at right angles
to the body. Screw this to the same board close enuff to
the galena that the point can be bent over to scratch LIGHTLY
against teh top of the galena.

Attach a wire to the same screw as the pinhead. run this wire
to one side of a headphone, the lighter the better, such as one
of those that come with the shirt-pocket receivers. attach
another wire to the other side of the headphone, and run that
wire to the antenna.

put the earphone in your ear.

WARNING ! NOT DURINT A THUNDERSTORM !

Just thought I'd mention.

Give a listen, while you fondle the pin. The sdratching will
help tune it.

When you have done that, and gotten a signal, you may
wish to add a small, broadband amplifier. They, too, are
easy to build.

Then you may wish to add a tank circuit to filter out all but
one band.

Then go back to eht books and you will have MUCH less
trouble trying to see where to start.

You willl have the confidence of having FIRST BUILT, then
NEXT, MODIFIED (redesigned) a receiver.

After that, the world is your, er, ah, shellfish.

Good luck

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)

# 1370. Re: Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33da9069.43358234@news.pipeline.com>
Source record: 92234

"David Peach" <dpeach@earthlink.net> wrote:

>I need help locating a good antena tuner project. My Elmer says that it is
>not difficult to build one, but I need to know where to start. I am very
>new to homebrewing and would appreciate all the help I can get.
>
>David
>KE4ROB

May I suggest?

1) go to used book stores until you find an older ARRL handbook.
they have simpler tuner projects.

2) call or write Fair Radio in Lima Ohio, and ask if they have a TU
-9B or lower. If less than $50, get it, and you willhave most of the
project. The TU (Tuning Unit) comes off the WW2-era BC-365
or something like that.

3) look in ARRL handbooks for a simple project that will help y9ou identify
the major parts and placements of your tuner, and rewire the TU to
that design.

Then enjoy, and start thinking how to redesign it better yet,

That way you will have all the fun of total lhomebrew, plus the fun of
traditional exotic elitism, plus you will learn a whale of a lot, which is
a big part of the fun of ham radio.

Also, this is something you can re-do over again as you get better.
It will laast you many years of use and rebuilding, if you treat it well.

It's a thought.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)

# 1371. Re: Receiver Splitter Information Required.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33da915d.43602540@news.pipeline.com>
Source record: 92235

sparc@ihug.co.nz (Kevin Mitchell) wrote:

>G'Day All,
>
>I have been doing some reading regarding Receiver Splitting from one
>Receive antenna, but have so far been unable to find any information
>on how to construct one. I can purchase one, but I would like to try
>and build on first.
>

>sparc@ihug.co.nz
>Mitchell.Kevin.KF@bhp.com.au
>
>Best Regards
>
>Kevin, ZL1UDD.
>
>
>E-mail: sparc@ihug.co.nz
>Packet: ZL1UDD@ZL1AB.#11.NZL.OC
>:Amateur Radio helped Pioneer
> the way the World Communicates
> Today.:
>
You DID say you'd rather build, right?
You might look into Strip-Line filters and Band-pass,
and Band-reject, and cavity filters, and after you have
read up on those, you might seek in the past indexes of
electronics magazines for how to make them out of the
commonest materials.

F'instance, I made a cavity duplexer, once from 1-lb coffee cans.

For lower freq's, it might take a couple washtubs and a sheet
of tin, but shouldn't.

For lower freq's you can go to Band pass and Strip line.

I have a 2-meter and had a 6-meter filter.

The first is a 12-inch piece of 1/2-inch copper water tubing in a Bud box.
Courtesy of ARRL handbook, and probably in the British book also.

The second was a stripn of brass, and other stuff in a Bud box.
Cost me about $3. All junk parts.

Hope this helps, and good luck.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)

## 1372. Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <5re9he$7v6$1@mandolin.qnet.com>
Source record: 92236
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

For those who might be still interested in the "good source for amplifier tips" discussion, I have now uploaded all the parts ( 14 ) to my FTP site. You can access the FTP site from my home page and down load each part separate.

http://www.av.qnet.com/~kn6dv

REFORM
Unless the reformer can invent something which substitutes attractive virtues for attractive vices, he will fail.
(Walter Lippmann)

# 1373. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc9a36$625b66c0$3f102399@peter->
Source record: 92237
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Paul DiSciascio <thenut@netaxs.com> wrote in article
<33D92F1A.3CC1C80D@netaxs.com>...
> I am looking for some schematics for a transmitter that will transmit
> voice or even just CW on 170.245 MHz.

That's an odd frequency to transmit on.

## 1374. F.S. - Tubes, books, radios, etc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970727043600.AAA10230@ladder02.news.aol.com>
Source record: 92238

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco plus radio related publications. Schematics for many older radios and TV's - just $3 delivered. Tube Manuals, Tube Substitution books, Service Manuals, radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #711-T.

## 1375. Re: 6 Meter Beacon

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: ibthebigma@aol.com
Message-ID: <19970727072501.DAA18692@ladder02.news.aol.com>
Source record: 92239

Mouser will send US addresses paid by credit card with no minumum order -
only actual shipping charges added. 73 Dave.

# 1376. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: pssmit@aol.com
Message-ID: <19970727073701.DAA05366@ladder01.news.aol.com>
Source record: 92240

In article <33D8D383.248C@atl.org>, BOB DUCKWORTH <bob@atl.org> writes:

>James Patterson wrote:
>>
>> Does anyone know how to build a tower?
>>
>> I want to build a tower about 100' high.
>>
>> Can anyone help with some ideas or designs?
>>
If you have the skills give it a go.
If not, buy one.
At least a commercial one has some guarantee.

73 de Paul, G4BJG.

# 1377. - FEM/ISO MALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: LOOK@ME.COM
Message-ID: <5rf6a9$nel@news1-alterdial.uu.net>
Source record: 92241

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women or couples you fantasize about

THIS IS JUST A SMALL SAMPLE OF WHATS INSIDE THIS SITE AND IT A FREE SITE
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http://escortguide.com

## 1378. DC Rx post-mixer diplexer frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <rWRODFAZ5z2zEwQA@lfheller.demon.co.uk>
Source record: 92242

In a DC Rx with a diode DBM, what frequency should the diplexer be designed for? I was thinking of about 9 KHz, as this is about three times the audio image frequency, but Rick Campbell's Mini R2 seems to use about 6.6 KHz, working back from the component values.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

## 1379. Re: ceramic resonators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <8mlLPAAKvz2zEwQ8@lfheller.demon.co.uk>
Source record: 92243

In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
<mzenier@netcom.com> writes
>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>Tony Zugec <tonyz@rose.hp.com> wrote:
>>I'm still looking for any information on
>>ceramic resonators. Anyone have any
>>experience with them?
>>
>>How are they used? Mine are 455kc
>>with 2 leads coming out.
>>
>>Normal ceramic filters usually have 3 leads
>>so I am at a loss. I understand they are
>>basically piezoelectric ceramic elements,
>>but how does one use them in a small broadcast
>>radio project's IF section?
>
>The two terminal ones are cheap replacments for quartz crystals,
>used for the timing oscillators in a lot of consumer gear like
>TV remote controls, CD Players and the like. Maybe you could
>use it for a BFO, but not as a bandpass filter.
>
>Check out the Digikey catalog, they sell both types.

The two-lead ones used to be used in place of the decoupling capacitor
across an IF amplifier transistor emitter resistor. Alternatively, they
could be used with appropriate capacitors to make cheap ladder filters.
I did this many years ago.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 1380. Pointer to Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2707970903490001@wd1v.mv.com>
Source record: 92244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney
http://www.mv.com/ipusers/wd1v

# 1381. Re: CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: ctwla@ix.netcom.com
Message-ID: <5rfqkb$953@dfw-ixnews9.ix.netcom.com>
Source record: 92245

Any one who has the guts to come up with something like that, (a coil and a var cap) he knows there is sucker born every minute.
Therefore he deserves $5 from all of us.
C Thomas

In <33D353A2.6B8F@taxes.net> Jim <jstrohm@taxes.net> writes:
>
>Free Cable wrote:
>>
>> CABLE BOX DESCRAMBLER BUILD YOUR OWN DESCRAMBLER FAST CHEAP AND EASY
>>
>> Just a few inexpensive parts from Radio Shack and a little time and you can descramble every cable channel. See all your favorite movie channels,pay per view etc
>>
>> To recieve detail instructions and diagrams on how to construct your own Cable Box Descrambler
>> Mail $5.00 CASH MONEY ORDER CHECK and SASE to:
>>
>> S&G Enterprise
>snip
>
>This does't work, but here's what Seth will send you for $5.
>Please circulate these plans throughout the world whenver you see
>the "cable box descrambler" ad.
>
>And if you get the "new improved" plans (some of which do still work)
>please post those too.
>
>///PAY TV DECODER PLANS///
>
> MATERIALS REQUIRED:
>
>1 - Radio Shack mini-box ( #270-235)
>1 - 1/4 watt resistor, 2.2k-2.4k ohm
> (RS #271-1325)
>1 - 75pf-100pf variable capacitor
> (Hard to find)
>2 - F61a chassis-type coaxial
> connectors (RS #278-212)
>12" - No. 12 solid copper wire
>12" - RG59 coaxial cable

>
>
> ///INSTRUCTIONS///
>
>1. Bare a length of No. 12 gauge solid
>copper wire and twist around a 3/8"
>nail or rod to form a coil of 9 turns.
>Elongate coil to a length of 1 1/2"
>inches and form right angle bends on
>each end.
>
>2. Solder the variable capacitor to
>the coil. It doesn't matter where you
>solder it, it still does the same job.
>The best place for it is in the center
>with the adjustment screw facing upward.
>
>Note: When it comes time to place coil
>in box, the coil must be insulated from
>grounding. This can be done by crazy-
>glueing a piece of rubber to the bottom
>of the box, and securing the coil to it.
>
>3. Tap coil at points 2 1/2 turns from
>ends of coil and solder to coaxial
>chassis connectors, bringing tap leads
>through holes in chassis box. Use as
>little wire as possible.
>
>4. Solder resistor to center of coil
>and ground other end of resistor to
>chassis box, using solder lug and small
>screw.
>
>5. Drill a 1/2" diameter hold in mini-
>box cover to permit adjustment of the
>variable capacitor from the outside.
>Inspect the device for defects in
>workmanship and place cover on mini-
>box. Tighten securely.
>
>6. Place device in line with existing
>cable on either side of the converter
>box and connect to television set with
>the short piece of RG59 coaxial cable.
>Set television set to HBO channel.
>
>7. Using a plastic screwdriver (non-metallic)
>adjust the varible capacitor until picture
>tunes in. Sit back, relax, and enjoy!!!

## 1382. ICOM capacitor problem?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33dbbb07.883578@news.online.no>
Source record: 92246

```
tnx fer the info about IC765/IC761
DF9IC remarks that it is even problems with IC471
trimmer capacitors was replaced and sensitivity was improved in his
transceiver
```

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 1383. Quick and easy front panels

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <33DBC027.26A6@aade.com>
Source record: 92247

I've posted an application note on how to make sexy front panels
at my URL below.
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

# 1384. Re: Needing info Mixer, Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33dbd7d3.997987@news.online.no>
Source record: 92248

On 26 Jul 97 19:19:14 GMT, dennyd@ibm.net (Dennis) wrote:

>In <5r0jpi$srl$1@rosenews.rose.hp.com>, tonyz@rose.hp.com (Tony Zugec) writes:
>>Hi there!
>>I ordered an NE602AN mixer from Dan's Small Parts.
>>Danny didn't have an NE602 so he sent me an NE612.
>>Does anyone have info on the 612 that they can share?
>>
>
>From the spec sheets they look close - it's not clear what the difference is.
>Go to www.semiconductors.philips.com/search/ and search on 602 to find specs
>and ap notes on the NE/SA602 (and other misc stuff with 602 in the part number).
>Then do the same on 612.
>
>Good luck
>
I have the data books for NE602/612 and NE604/614 but it seems
impossible to tell what is the real improvement for the latter items

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1385. Re: ceramic resonators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33dbd643.597693@news.online.no>
Source record: 92249

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?

I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin
---
Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1386. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: "Ed Mathes, RPA-C" <emathes@servtech.com>
Message-ID: <33DC3594.73F6@servtech.com>
Source record: 92250
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Peter Gottlieb wrote:
>
> Paul DiSciascio <thenut@netaxs.com> wrote in article
> <33D92F1A.3CC1C80D@netaxs.com>...
> > I am looking for some schematics for a transmitter that will transmit
> > voice or even just CW on 170.245 MHz.
>
> That's an odd frequency to transmit on.

I believe it's on of the itinerate business freqs.

In my neck of the woods...McDonalds uses it for their drive-thru
headsets...
--
Edward J. Mathes, RPA-C ANTI-SPAM: Remove the 'x' in
xemathes@servtech.com
Internal Medicine PLEASE help SLOW the SPAM
emathes@servtech.com
---
Opinions above are mine and mine alone.
Opinions above are NOT medical advice.
If you don't like these opinions, make up some of your own.
---
"Politics should be limited in its scope to war, protection of property,
and the occasional precautionary beheading of a member of the ruling
class."
-P.J. O'Rourke
---

# 1387. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-27 00:00:00 UTC
From: Alan_M_Cameron@compuserve.com
Message-ID: <33db925d.1308812@news.compuserve.com>
Source record: 92251
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

On Thu, 24 Jul 1997 13:17:50 +0100, James Patterson
<PattersJ@ecid.cig.mot.com> wrote:

>Does anyone know how to build a tower?
>I want to build a tower about 100' high.
>Can anyone help with some ideas or designs?

James, before starting to build the tower have you got the space?
I think you need to give a few more details before any sensible
answers are to be expected.
Is the tower to be self supporting or guyed?
Self supporting towers like electricity grid towers are major
constructions and not to be taken lightly.
Guyed are possible to construct but will require a large area
of ground to place the guy anchors in.

I have seen a 100 foot tower made of special triangular extruded
aluminium built and erected. The sections are 10 feet long and bolted
together with corss bracing like a lattice. Each 10 foot length is
bolted to the next until 100 feet reached. You will also require a
*gin* pole to enable you to pull the thing upright. That will have to
be at least 60 feet in length. So you will need a 100 foot tower and a
60 foot tower. You will laso need a gin pole to erect the 60 foot gin
pole vertically at the end of the 100 foot tower. That means you will
need a gin pole for the gin pole erection. That secondary gin pole
needs to be about 10 feet long.

You will need guying at about 20 foot intervals up the tower and at
least four front/back/left/right .

I suggest you re-examine the need for a 100 feet tower. You did not
say what the purpose was. Perhaps you do not need quite as high?

Best of luck in the construction.

Alan G3OGJ
G3OGJ

## 1388. MRF477 transistors wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: jmort@vossnet.co.uk
Message-ID: <5rif16$4ag@serv1.vossnet.co.uk>
Source record: 92160

Does anyone have any MRF477 transistors please. Needed to replace my P.A. stage.

thanks

Mark Clayton

# 1389. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: 708042@ican.net
Message-ID: <MPG.e468b3eca72e7e3989682@news.ican.net>
Source record: 92161
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <33dcbc82.2074052@news.mindspring.com>, sco@sco-inc.com says...
> Paul DiSciascio <thenut@netaxs.com> wrote:
>
> >I am looking for some schematics for a transmitter that will transmit
> >voice or even just CW on 170.245 MHz. If someone could draw some up and
> >email them to thenut@netaxs.com I would really appreciate it.
> >
> >Thanks in advance,
> >N3SML

McDonalds and such are worldwide so what about a DXCC/WAC/WAS/WAP? HEHE

--
Doug Smith 708042@NO_SPAM.ican.net
CQ DX DE VE3IYB 144.200MHz USB
Looking for 6M QRP gear
az183@freenet.toronto.on.ca
mgb@jerrys.rogerswave.ca

## 1390. Wanted: circuit for low power transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Mike white <m_white@juno.com>
Message-ID: <01bc9b72$0f0fc500$54b31d80@mm59049-pc.mitre.org>
Source record: 92162

Hi. I'm thinking of a small transmitter project for portable use. I have a nice portable receiver, and would like a transmitter with the following characteristics:

20 or 40 meter cw, preferably both bands
10 watts or so (not quite QRP)
VFO control over cw portions of the bands
Reasonable stability and keying
Compact size, suitable for portable use
Operates on some reasonable voltage, like 6 or 12 VDC
No hard-to-find parts

I have in mind a final package about the size of a small book, that I can carry in my luggage, and use with a simple dipole. Can anyone point me to a design or schematic for a transmitter that fills the bill? Thanks.

Mike, N4PDY
--
Mike White
mwhite@mitre.org

My opinions are my own, not my employer's.

# 1391. TS830S Filter Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Raj Singh VE6RAJ <singhraj@nospam.cadvision.com>
Message-ID: <33DC9772.6E08@nospam.cadvision.com>
Source record: 92163

Hi:
Does anyone know if there is a mod out there to allow a TS830S to use
the CW filters in LSB mode. Preferably switchable so I can still use
them in CW mode.

73
Raj VE6RAJ

---
Raj Singh
email: mailto:singhraj@cadvision.com

# 1392. Minicircuits ERA MMIC at 10GHz? ...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199707281343.KAA12002@netra01.origin.com.br>
Source record: 92164

Hi all. Thanks for reading this:

Does anybody has any info on any ERA's performance at 10.5GHz? I saw some Minicircuits PDF files that has some plots showing 10.3GHz performance. The published "S" parameters data reach 8GHz and I extended them to 10.3GHz based on this plottings, in order to symulate the circuit using PUFF software.
The Idea is to use a pair of them as a post-mixer TX pre-driver and L.O. amplifier (a 10GHz xverter using DEM building blocks is under construction). Simpler than the original DEM modules, more or less the same gain/nf, NO BIAS circuits ...

Thanks on any info.

Regards,
Marcus Ramos
PY3CRX(GG66qj)

## 1393. homebrew transceivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: "Christopher S. Bradford" <csb@together.net>
Message-ID: <33DCFF5F.2404@together.net>
Source record: 92165

I've found many sources for homebrew transceivers, but I'm looking for recommendations... from personal experiences, what works and what doesn't? Can I throw together a 80-10m hf cw station for under $50? Can these homebrew projects utilize linear amps so that I can put out 100 watts or more? Is it worth it all to build my own transciever? (I'd like to build one with a digital display and I've seen many kits and schematics with parts lists)

I'd appreciate any help I can get and recommendations !!!!

thx 73

N1ZPP
Christopher Bradford

# 1394. Re: homebrew transceivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33DCE3BE.2969FF81@direct.ca>
Source record: 92166

Christopher S. Bradford wrote:

> I've found many sources for homebrew transceivers, but I'm looking for
> recommendations... from personal experiences, what works and what
> doesn't? Can I throw together a 80-10m hf cw station for under $50?

There's all kinds of stuff out there in the literature. Transmitters
are easy. Good receivers are tough. But they all work, to varying
degrees. You might start with _Solid State Design for the Radio
Amateur_ and _QRP Power_ as sources of ideas. I like KK7B's
designs, and think the Norcal 38 Special is cute; your mileage
may vary.

> Can these homebrew projects utilize linear amps so that I can put out
> 100 watts or more? Is it worth it all to build my own transciever?
> (I'd like to build one with a digital display and I've seen many kits
> and schematics with parts lists)

Of course they can. Were you planning to build the amplifier too?
Whether you plan to or not, you must build an excellent transmitter,
because 100 watts or more means your signals must be that much
cleaner.

What do you expect to get out of this project? A single-band
transceiver can be a fascinating and rewarding project, but
multi-band gear is tough to get right, even for experienced
builders.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

# 1395. Re: DC Rx post-mixer diplexer frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5rit0q$129@hpcvsnz.cv.hp.com>
Source record: 92167

Leon Heller (leon@lfheller.demon.co.uk) wrote:
: In a DC Rx with a diode DBM, what frequency should the diplexer be
: designed for? I was thinking of about 9 KHz, as this is about three
: times the audio image frequency, but Rick Campbell's Mini R2 seems to
: use about 6.6 KHz, working back from the component values.

I've been doing some thinking about this question in a bit broader sense for a while, but haven't tried to put theory into practice yet. I've laid out some of my ill-conceived plans below, and welcome comments on them.

I think the answer for the limited question posed by Leon lies in the flatness you want in your audio response; if a 50 ohm load is presented to the mixer at all frequencies, the mixer "won't care" what the cutoff frequency is.

Then the question is what response you should want, and why you would limit it to be less than DC to light. For voice communications, I think 300Hz to 3kHz is the normally accepted desired bandwidth. You might want to have a filter that has a bit higher cutoff frequency than this at the front end, because it's not a very high order filter and doesn't have a very sharp cutoff...so to get the 300-3k passband flat to, say, 1dB, you'd need a higher cutoff in the filter.

Something I've done in my professional work in a similar situation is divide the many poles of the filter I want to build up into groups, and implement each group as a separate set of R-L-C components (or active filter sections or even digital filter sections). So, the leading filter might not be a "Butterworth" or "Chebychev" or "Eliptical" but would implement just two or three poles of an overall Butterworth (etc.) response. There can be quite a bit of math involved in figuring out the R's L's and C's for such separated filters, especially if each section implements several poles. But the result is an overall response that's much "cleaner" than you can get by cascading simple Butterworth (etc) three or four pole filter sections.

For a DC receiver, though, my thoughts--my plans--are to have the cutoff of the post-mixer filter be rather high...a few tens of kilohertz. It will be followed with a preamplifier which has distortion products for signals in that band on the order of 140dB below the signal levels. That is, it will be an extremely low distortion "audio" preamp. And it will be low noise, too...it appears that somewhere around 0.6 nanovolts/rtHz is possible. I'd like to then digitize the "audio" with a 24-bit stereo delta-sigma ADC, and process the result in a DSP for sideband rejection and detection of various modes (and fine-

tuning??)

But getting back to filter cutoff...it seems to me the reason to limit the bandwidth going into the next amplifier is to keep that amplifier from being driven to the point of causing distortion products that interfer with the desired signal. If the amplifier can have low enough distortion out to high enough frequency, then the filter can have a higher cutoff frequency.

Comments on all these ideas are most welcome, especially before I go off building much hardware.

On a related topic: I have a nice Watkins-Johnson diode DBM whose data sheet suggests that (at least in some sense) better performance can be obtained by terminating the mixer in a short at the image frequency, rather than terminating it in 50 ohms from DC to light. Does anyone have comments on that? It would be a lot easier for me to build a filter whose input impedance dropped below 50 ohms above the filter cutoff frequency, and this data sheet suggests that might not be a bad thing to do.

Also a note about impedances: for what it's worth, I measured a MiniCircuits level 7 DBM for IF output source impedance. It was roughly 10 ohms greater than the source impedance I used to drive the RF input port...so about 60 ohms with a 50 ohm source. It was nearly independent of LO port drive level, so long as the drive level was above about 5 dBm. It increased as the drive level was decreased below this level. This was done with RF and LO ports driven with signals around 10MHz, producing a nominal 1kHz IF port output, terminated in 50 ohms. (It was measured using an HP35665A Dynamic Signal Analyzer and math functions, with inputs driven by an HP3326A Two Channel Synthesizer. Hope this doesn't sound too much like an ad for our equipment; I don't really intend it that way.)

--
Cheers,
Tom
tomb@lsid.hp.com

## 1396. Re: DC Rx post-mixer diplexer frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970728210401.RAA06231@ladder02.news.aol.com>
Source record: 92168

The real reason for terminating the mixer at the image frequency is to keep ALL the ports from jumping all over the place in impedance. BUT. To terminate the DC receiver at it's image is audio (the other side of zero beat.) If you want the 3 dB advantage of killing the stuff on the other side, (Noise), then you need to terminate the mixing products in I and Q separate 90 degree channels. Just what was done with the little R-2 derivitive. I haven't kept up with it due to lack of interest, but glanced at the articles when they appeared. They exist over the last couple of years in QST. I can't see where terminating the mixer at 6 or 10 KHz is going to buy you or the mixer anything.

W4ZCB

# 1397. Re: ceramic resonators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-2807971601100001@k4dii.ksc.nasa.gov>
Source record: 92169

In article <5r5qe7$m0v$1@rosenews.rose.hp.com>, tonyz@rose.hp.com (Tony Zugec) wrote:
> How are they used? Mine are 455kc
> with 2 leads coming out.
> Normal ceramic filters usually have 3 leads
> so I am at a loss.

tony-

Ceramic filters are essentially the same as crystal filters. The 3 leads connect to a network of resonators inside, that are probably surface-mounted on a ceramic substrate.

It may be possible to build a filter using several discrete ceramic resonators. However, I suspect what you have may have been intended for a different purpose. One example of a single-resonator application, would be as part of an FM detector. Another would be as a BFO frequency determining element.

To use your resonators, it would be a good idea to try to find some information about their characteristics. Is there a manufacturer's name and/or part number stamped on them?

73, Fred, K4DII

# 1398. Re: Minicircuits ERA MMIC at 10GHz? ...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <17tdCTAk2R3zEwYS@pacsat.demon.co.uk>
Source record: 92170

In article <199707281343.KAA12002@netra01.origin.com.br>, Marcus Ramos
<mramos@originet.COM.BR> writes
>Hi all. Thanks for reading this:
>
>Does anybody has any info on any ERA's performance at 10.5GHz? I saw some
>Minicircuits PDF files that has some plots showing 10.3GHz performance. The
>published "S" parameters data reach 8GHz and I extended them to 10.3GHz
>based on this plottings, in order to symulate the circuit using PUFF
>software.
>The Idea is to use a pair of them as a post-mixer TX pre-driver and L.O.
>amplifier (a 10GHz xverter using DEM building blocks is under
>construction). Simpler than the original DEM modules, more or less the same
>gain/nf, NO BIAS circuits ...
>
>Thanks on any info.
>
>Regards,
>Marcus Ramos
>PY3CRX(GG66qj)
>

Hello Marcus, yes they work fine at 10 GHZ! Im sure the data went up
that high on the new series of MAR devices

Download the datasheets from their website. www.minicircuits.com
if I remember, if not follow the link from my website below

73 Simon

Better using MGF1302's though.
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 1399. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <33DCF5F3.E79@HP.com>
Source record: 92171

Tom Bruhns wrote:
> 
> Don Huff (don_huff@HP.com) wrote:
> 
> : One way to do it is to simply buy a PC board for the "R2" phasing
> : type direct conversion receiver described by Campbell in Jan 93 QST (and
> : duplicated by hundreds, including myself). Remember, the receiver
> 
> If Don hadn't mentioned this, I was about to! You can also homebrew
> a direct conversion receiver, without buying the board, if you really
> want.
> 
> : A comment about "knowing what frequency you are on". I have no tuning
> : dial
> 
> If you _do_ feel a need to know your frequency, the very simple way is
> to count it. In a direct conversion receiver, you just count the
> local oscillator, and that _is_ the frequency...plus or minus any
> offset for the audio tone of a CW or FSK signal. But for sideband
> or AM, it is just the carrier frequency. The counter should be either
> very well shielded, or able to be turned off, because you will find
> it generates lots of RF "hash."
> 
> Finally, I know Don has started some experiments with using DDS chips
> for the local oscillator for a DC receiver. It seems like they'd
> offer a way for "digital" type people to generate a decent LO, and
> know what frequency it's on just from the digital info sent to it.
> Perhaps Don can offer comments if he's had time to get anything going.
> (Hope I'm not getting you in trouble here, Don!)
> 
> --
> Cheers,
> Tom
> tomb@lsid.hp.com

Hi Tom,

You devil, you. (No, just kidding).
Regarding DDS. Yes, I have a DDS VFO running for my R2 receiver (will
work of course for
any receiver, DC or superhet). In on-the-air use, I cannot tell any
difference between using it
and using an analog VFO. For those of you who do not know what DDS
stands for, it
means Direct Digital Synthesis. You can now buy a chip, such as the

AD9850 from Analog Devices,
which is smaller than your small fingernail, SMT, and can generate any
frequency in the HF
range (125 MHz crystal clock is required to run it). A VFO can fit in a
shielded enclosure
which is a one inch cube. This eliminates analog VFO building (no tuned
circuits, no drift
problems, no limited tuning range/bandspreading, no mechanical
reduction drives and double-bearing capacitors). I am currently working
(subject to summertime interrupt projects like painting my 1200 feet of
3-rail fence) on a rotary-encoder to vary the frequency instead of using
a
computer (ugh) like I am now. This is one of the bases for my comment
that
it has never been easier to homebrew a receiver than it is now, and it
is
getting easier all the time.

73,
Don, W6JL

# 1400. Re: Q: Info on toner transfer using label stock

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <uyZLAKA1rl3zEwqf@pacsat.demon.co.uk>
Source record: 92172

In article <EDy6Ko.IJC@sunsrvr6.cci.com>, "James D. Cronin"
<jdc@cci.com> writes
>
>I saw a web page describing the use of some type of label stock
>for toner transfer PC board construction. It sounds like a
>cheap alternative to Press-n-Peel and those other $1 a sheet
>toner transfer papers. Unfortunately, I didn't save a bookmark.
>
>Anybody run into this, and have the address handy? Or remember
>the type of label stock?
>
>73..Jim N2VNO

Hi Jim

This is easy!

Get hold of some standard laser transparency sheets, they are easy to
obtain. You don't need expensive sheets of dedicated pcb ones.

You need to print on them so that the PCB layout will come out the right
way up. The idea is to make a sandwich up like this

iron
|------------|

==================== transparency
-------------------- ink side
==================== pcb copper

Place a sheet of kitchen tissue paper, or something similar named in
your country on the transparency and then place a WARM iron on the top
of the sandwich, This will heat up the ink and melt it to the copper.
Leave it to cool then GENTLY peel the transparency off leaving the ink
on the copper.

tip; make sure the copper is clean, give it a good scrub with a pan
scourer!

I have transfered some really fine pcb tracks using the above method inc
a layout for a 3.4 ghz transveter!

73 Simon GM4PLM

Good luck!

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |

```
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+-------------------------------------------------------------------+
```

# 1401. FS: Controller Board, Opto Input, Relay Interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: John in Roseville <rtwodtwo@jps.net>
Message-ID: <33dd27f2.0@blush.jps.net>
Source record: 92173
Cross-posted to: sci.electronics.design,rec.radio.swap,rec.radio.amateur.homebrew

8748/8749 Single chip Controller Board, Opto Input Interface with 8
inputs, Relay Interface with 8 Relays.

All these boards are $10 each and that includes shipping!
They are assembled and tested. Board size is 4.625 X 3.425 inches.
I have 95 each of the 8748 boards, 50 each of the Opto input boards
and 45 each of the Relay boards. I will not make any more when
these run out.

See:
http://home.cwnet.com/rtwodtwo/board.htm

mailto:rtwodtwo@cwnet.com

--
John in Roseville CA USA.

# 1402. Re: Receiver Splitter Information Required.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33dd267b.16110875@news.online.no>
Source record: 92174

```
>sparc@ihug.co.nz (Kevin Mitchell) wrote:
>
>>G'Day All,
>>
>>I have been doing some reading regarding Receiver Splitting from one
>>Receive antenna, but have so far been unable to find any information
>>on how to construct one. I can purchase one, but I would like to try
>>and build on first.
>>
>
>>sparc@ihug.co.nz
>>Mitchell.Kevin.KF@bhp.com.au
>>
>>Best Regards
>>
>>Kevin, ZL1UDD.
>>
>>
a passiv splitter has 6dB loss, consists of 3 resistors

/----- 18 ohm --- RX1
ant-----------18 ohm--------/
\-------18 ohm --- RX2
as shown for 50 ohm system (standard values)
```

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1403. Re: ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <33DD38F2.3184@one.net>
Source record: 92175

Woody White wrote:
>
> You could 'brew a custom transformer...
> Woody
>
> MICHAEL SMITH wrote:
> >
> > ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
> > NICE.. E-MAIL WITH INFO... THANKS MIKE....

It would be a pretty neat transformer that could handle the DC.

How much current do you need, and how much do you want to spend? One simple way is to buy a 12 VDC to 120 VAC inverter and plug a "wall transformer" into it. Wallmart recently was selling low-power inverters for under $50, and a wall transformer capable of several hundred milliamps is less than 10 bucks (I think(?)).

Rich W2RG

# 1404. Re: ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5rjm7u$64r@mtinsc04.worldnet.att.net>
Source record: 92176

Opps!!!!! Somehow missed the "DC"...

Another Idea, depending on the power required (not too much)... Use a
60 Hz osc. driving a automotive audio amp. Set input level for 9VAC
out. An ALC circuit at the amp input, sensing the output would provide
regulation if needed.
Woody

Rich Griffiths wrote:
>
> Woody White wrote:
> >
> > You could 'brew a custom transformer...
> > Woody
> >
> > MICHAEL SMITH wrote:
> > >
> > > ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
> > > NICE.. E-MAIL WITH INFO... THANKS MIKE....
>
> It would be a pretty neat transformer that could handle the DC.
>
> How much current do you need, and how much do you want to spend? One
> simple way is to buy a 12 VDC to 120 VAC inverter and plug a "wall
> transformer" into it. Wallmart recently was selling low-power inverters
> for under $50, and a wall transformer capable of several hundred milliamps
> is less than 10 bucks (I think(?)).
>
> Rich W2RG

--
de Woody, WB4QXE, woody/white@worldnet/att/net (Non-spamers, change /
to . )
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

## 1405. Linear amp output meter adj?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Don Hamiel <d308@pacbell.net>
Message-ID: <33DD634A.3C9B@pacbell.net>
Source record: 92177

I have an old SBE SB1-LA amplifier. It has two meters, one is output and the other is current. The problem I have is the output meter is reading a lot less than it's really doing. On 20 meters for example, The meter reads appx. 200 watts or "2" on the meter. However, when going through a wattmeter it shows roughly 500 watts. Is this normal? I've only had the amp a few months. I had to replace a filter cap after one blew up. The amp uses 6ea, 6sj6 sweep tubes. Is there any way to make the meter read a little more true and will it read true on all bands?

Any help? thanks..de Don N6NLX.

# 1406. Re: ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5rjbua$ehu@mtinsc04.worldnet.att.net>
Source record: 92178

You could 'brew a custom transformer...
Woody

MICHAEL SMITH wrote:
>
> ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
> NICE.. E-MAIL WITH INFO... THANKS MIKE....
> --
> mjs@now-online.com

--
de Woody, WB4QXE, woody/white@worldnet/att/net (Non-spamers, change /
to . )
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

# 1407. Re: INFO WANTED ON JOHNSONS FLEETCOM 2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33DD6A42.17B4@earthlink.net>
Source record: 92179
Cross-posted to:
rec.ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

MICHAEL SMITH wrote:
>
> LOOKING FOR ANY INFO ON JOHNSON FLEETCOM 2 RADIOS. A SERVICE MANUAL WOULD
> BE GREAT. BUT REALLY NEED INFO ON TUNNING THE RECIEVER... E-MAIL ME WITH
> INFO... THANKS MIKE....
> --
> mjs@now-online.com

What band is your Fleetcom II on?? VHF or UHF?? I have the UHF manuals
for the 558 and 559 models....Used to work on them at a EFJ shop
15+ years ago...

Chris
WB5ITT

## 1408. Re: IC's and other sh!!.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33DD4B9D.4F9F@calweb.com>
Source record: 92180
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb,rec.radio.amateur.equipment

Gene wrote:
>
> snipped

I believe the original quest was to retrieve goodies from the board at the expense of the board. No need spending 10 minutes taking a crummy 15 cent part off a board if the board is tosser when the good stuff has been scraped off these high tech transportation and storage boards....But as noted, these old boards are great training grounds for developing the skills in doing surgical removal...each technique noted, sans the blowtorch and my American beauty 250 watt scalpal can be learned to such a degree as to be useful in repair and replacement of boards that cannot be sacrificed to the IC god....

just a couple of thought..
Bob, kE6F

# 1409. Jennings Vacc Relays Sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33DD497E.4D7E@calweb.com>
Source record: 92181

Thanks to those who responded to my post, The Jennings Vacuum relays have been sold at the posted price.

73

Bob, KE6F

## 1410. Posting Parts for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33DD4DB5.1738@calweb.com>
Source record: 92182

Given that parts are a major problem facing we mates who like to roll
our own gear, I wonder if the posting of parts and associated assemblies
should be posted to this newsgroup rather than to the broader based
rec.radio.swap or audio marketplace.? As I have noted this past year,
I am cleaning out may cubic feet of my excess toys, mostly radios, test
equipment and audio related things. I am now beginning the painful
process of thinning out all the parts piles I have been accumulating
these past three decades for so many beengunnas that at age 55 I have
face the reality of not being able to get around to all of 'em even with
my reasonably good health...
I have posted a couple of items recently on the home brew newsgroup
with a relatively low bow upon entry and would just as soon bypass the
genuflect ions and just get the stuff posted. I will abide by a
majority view on this question......

Thanks for the read es 73

Bob, KE6F

# 1411. Re: 900 MHz Cordless exciter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: Chris Nicholson <csnichol@delcoelect.com>
Message-ID: <33DC94D2.1B61@delcoelect.com>
Source record: 92183

Don Phelps wrote:
>
> I am looking for more details on operating in the 902-928MHz amateur
> band (I'm Advanced Class) with a Uniden 900MHz EXP95 Cordless telephone
> es FM. Base transmit 926-27.95 MHz, Handset 902.05-904
> Base rated 9V, handset labeded 4V Sealed Lead-Acid 500 mAH.
>
>snip

Don, I run a FM repeater on 921.1125 Mhz (I'm a no code tech.).
I have modified several commercial 800 Mhz. radios to operate in the 900
ham band. The Repeater antenna is the comet FP-19. This is about the
only antenna I could find for less than $1000. Height is about 250'
power 10w range about 17-20 mile radius. I know this info doesn't help
much with your situation but i thought you might like to know what else
is happening on the band. 73 Chris N9LLO

## 1412. Don't U pay 4 sex site passwords

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: 9876555554453@compuserve.com
Message-ID: <5rh5a0$c9a@news1-alterdial.uu.net>
Source record: 92252

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
and at the same time get UNLIMITED FREE ACCESS to
over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL below.
http://www.2bornot2b.com/password

# 1413. WW II Microphone, No. 4A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: in717@cleveland.Freenet.Edu
Message-ID: <5rha1r$30q@alexander.INS.CWRU.Edu>
Source record: 92253

Hi,
I've got a WW II microphone, No. 4A, for sale. 5 foot cord, push
to talk switch, chest support, Bakelite Case and Connector, 4 pin
Jack, Key-Up Slide Lock for hands free operation, exc. like new.

Price $10.00 + $3.00 S&H

E-mail: in717@cleveland.freenet.edu

Thanks for your time.
--

# 1414. Re: ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33dc2fd8.9887159@news.pipeline.com>
Source record: 92254

"MICHAEL SMITH" <mjs@now-online.com> wrote:

>ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
>NICE.. E-MAIL WITH INFO... THANKS MIKE....
>--
>mjs@now-online.com
invert and transform.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)

# 1415. Re: Glowbugs (tubes)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33dc2eff.9670644@news.pipeline.com>
Source record: 92255

N8KFE@ix.netcom.com wrote:

>Bill wrote:
>>
>> I am playing around with an "on-line tube manual" project. Is there any
>> interest among home brewers in such a thing. We have a chip directory
>> and all sorts of info on-line for solid state parts, but no tube manual.
>>
>> Bill KU8H
>
>
>Bill
>Sounds like a great idea. Tube manuals are getting hard to come by these
>days.
>
>Greg N8KFE

I already have several manuals, but I have seen several requests for tube
data, so I second the approval; It DOES sound like a great idea.

Lou Hinshaw
WB0NRU Tulsa OK.
l
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)

## 1416. Trimcaps wanted: WHO ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33dc8e5e.0@lightning.ica.net>
Source record: 92256

Last week someone posted a want for 6 pF trimpcaps
Can you email me please: hduff@ica.net

Thanks.

# 1417. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: jkk@galactose.mc.duke.edu
Message-ID: <5ri2nn$mcg$1@news.duke.edu>
Source record: 92257
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Ed Mathes, RPA-C (emathes@servtech.com) wrote:
: Peter Gottlieb wrote:
: > Paul DiSciascio <thenut@netaxs.com> wrote in article
: > > I am looking for some schematics for a transmitter that will transmit
: > > voice or even just CW on 170.245 MHz.
: >
: > That's an odd frequency to transmit on.

: I believe it's on of the itinerate business freqs.
: In my neck of the woods...McDonalds uses it for their drive-thru
: headsets...

There must be a new award: "Worked All Drive-Throughs."

I'm still working on my 5-band Taco Bell award. ;-)

--------------------------------------------
Ken Kuzenski AC4RD kuzen001@acpub.duke.edu
jkk@galactose.mc.duke.edu Fidonet: 1:3641/1.1
--------------------------------------------
All standard disclaimers apply.
Close cover before striking.
Your mileage may vary.

# 1418. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-28 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <33dcbc82.2074052@news.mindspring.com>
Source record: 92258
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Paul DiSciascio <thenut@netaxs.com> wrote:

>I am looking for some schematics for a transmitter that will transmit
>voice or even just CW on 170.245 MHz. If someone could draw some up and
>email them to thenut@netaxs.com I would really appreciate it.
>
>Thanks in advance,
>N3SML

I might be dense but ... 170.245 is NOT a ham band. I don't even know
what service band that is.
AF4DT
Founder
U.S. Amateur Radio Assoc.
USARA@mindspring.com

# 1419. NE602's at Allied Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33DE6433.3940@flash.net>
Source record: 92110
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

For those who use them, Allied Electronics has a plethora of NE602's.

Allied Electronics 800-433-5700

73, Tim

Content-Disposition: inline; filename="ENJOY.HTM"
Content-Base: "file:///C|/NETSCAPE/ENJOY.HTM"

KA8DDZ

Enjoy Amateur Radio more, build your next
radio©

QRP & Homebrew!

# 1420. Re: Trimcaps for my ICOM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33DE5AAD.7E92@erols.com>
Source record: 92111

Hugh Duff wrote:
>
> I need a source of small 4.0 X 4.5mm ceramic trimcaps in 6, 10 and 20
> pF values to replace in my IC-471A.
> Anyone ?
>
> Thanks, VA3TO
Have you tried ICOM? I ordered a kit of trimmers for my IC-761 about a
year ago.

# 1421. Re: DC Rx post-mixer diplexer frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <33dd8033.4631429@news.sci.fi>
Source record: 92112

Leon Heller <leon@lfheller.demon.co.uk> wrote:

>In a DC Rx with a diode DBM, what frequency should the diplexer be
>designed for? I was thinking of about 9 KHz, as this is about three
>times the audio image frequency, but Rick Campbell's Mini R2 seems to
>use about 6.6 KHz, working back from the component values.

In I/Q type receivers (such as the R2) you want to have identical phase and amplitude response in both the I and Q channels, in order to be effectively be able to cancel the unwanted sideband in SSB reception. If you have the filter corner frequency close to the wanted audio passband, you will also have phase variations that extend down to the audio passband. Due to component tolerances, you have slightly different corner frequency and slightly different phase response that also affects frequencies in the audio passband, giving different phase response in the I and Q channels. Moving the corner frequency well above the audio passband will affect the absolute phase response in the audio passband very little and also the differential phase response is small (in the audio passband) for reasonable component tolerances.

In the R2 design with passive RLC diplexers, you have to find matched pairs of components for the I and Q channels. Capacitors are easy, since you have to match the capacitance. But the inductors used have quite large (DC) resistance, so you have to find inductor pairs with both matching inductance _and_ resistance. Moving the corner frequency well above the audio passband, it should be sufficient only to match the resistance of these (lossy) inductors.

Increasing the corner frequency will also increase the total signal amplitude in the preamplifiers. In addition, with a corner frequency of, say, 10 kHz and a slope of -6 or -12 dB/octave, you can still expect to find very strong signals at 100 kHz (e.g. the broadcasting band starting immediately after the 40 m band) so you have to pay attention of large signal high frequency response of the preamp. It is no use of using 741 type op-amps with fT around 1 MHz, since at 100 kHz, the _open_ loop gain is only 20 dB and if you try to get 10-20 dB _closed_ loop gain out of it, the margin between open loop and closed loop gain is very small or nonexistent, so you can not expect the feedback to keep the distortion under control. Also you have to watch for slew rate limitations of the preamp. So it appears that you have to use a high speed, low noise op-amp (which is a rare and expensive combination) or you have to resort to different amplifier topology using discrete transistors.

Paul OH3LWR

## 1422. UHF Unterlage 5 Who got this one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: Marco Bokma <mbokma@caiw.nl>
Message-ID: <5rtmao$kkk$1@newsserv2.caiw.nl>
Source record: 92113

Hello All and thanks for reading this message,
I am looking for the description of the 23 cm Transverter which
have been published in the UHF Unterlage part 5. It exist out of 3 PCB's
and I am looking for the copies of the building instructions. Or English or
the German one.

Thanks for any help on this one!

Regards, Marco - PE1OBU

# 1423. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: James O'Brien <littlejimmyinthewoodpile@radia1.com>
Message-ID: <33DD711F.7D2F@radia1.com>
Source record: 92184
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

CrACKeD wrote:
>
> SCO <sco@sco-inc.com> wrote:
> : Paul DiSciascio <thenut@netaxs.com> wrote:
>
> : >I am looking for some schematics for a transmitter that will transmit
> : >voice or even just CW on 170.245 MHz. If someone could draw some up and
> : >email them to thenut@netaxs.com I would really appreciate it.
> : >
> : >Thanks in advance,
> : >N3SML
>
> : I might be dense but ... 170.245 is NOT a ham band. I don't even know
> : what service band that is.
> : AF4DT
> : Founder
> : U.S. Amateur Radio Assoc.
> : USARA@mindspring.com
>
> I don't have a bandplan sitting in front of me right now, but 170.245
> sounds like a wireless microphone frequency. Transmitting there isn't
> going to hurt anybody.
>
> CrACKeD <CrACKeD@primenet.com>

Get back in the closet.

## 1424. Learn about Amateur (Ham) TV at this WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: wb6izg@qsl.net
Message-ID: <33e06f0e.3006015@news.adnc.com>
Source record: 92185
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

If your have ever thought about getting into Amateur Television or just wonder what it is all about then you need to check out my ATV web site at:

http://www.qsl.net/wb6izg

ATV is the least understood of all Ham activities and all it requires is a no-code Ham license. It is also not as expensive as you might think. Check it out.

73,

Bruce Forsberg WB6IZG

# 1425. Re: ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5rjrae$2r8$1@nr1.toronto.istar.net>
Source record: 92186

In article <01bc99e0$8097fe60$075bcecf@mjs>,
"MICHAEL SMITH" <mjs@now-online.com> wrote:
#ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
#NICE.. E-MAIL WITH INFO... THANKS MIKE....
If it is for a Commodore 64, I don't thing the 9VAC is needed(my Vic20 worked just fine off 12Vdc)
,but if it is,I'd build a 60 Hz sinewave oscillator,and feed it into an amplifier,then into a transformer.

Gary Tait, VE3VBF

# 1426. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <33DDB73D.4D45@hp.com>
Source record: 92187
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

N8XYN wrote:
>
> Building a 100 ft tower isnt something I want to tackle! The stress at
> the lower levels of such a structure are HUGH! Buy a nice used tower.

Won't the stress at the lower level of the nice used tower be just
as HUGE ? Wherever the tower comes from, it needs to be properly
designed, constructed, and in good condition.

I like Walt's suggestion of a brick-built folly. It may be the only
way to get planning permission for a hundred footer in Britain. How
about getting a factory with a decent chimney? Stone-built would have
*class*.Just get to one ahead of Fred Dibnah....

Would any antenna to be mounted on an authentic Victorian folly or
chimney have to be made out of brass to be in-keeping with the period?

Cheers,
David GM4ZNX

## 1427. Polland & Austrian People with Contacts There

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: PCC International <PCCI@ozarkad.com>
Message-ID: <5rkirn$deh$893@news.internetmci.com>
Source record: 92188

We're expanding our Business in E & W Europe, (Polland & Austria) + ASIA & So. America. Please E mail Us if your can Help.

mailto:pcci@ozarkad.com

# 1428. New List: FS & WTB / TRADE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33dddc34.1137826@news1.mnsinc.com>
Source record: 92189
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

LET'S SWAP boatanchors and/or parts!!

I am a ham hobbyist, NOT a dealer. I do this for fun,
not an investment!

I have a few things to sell/trade these days:

(Add shipping costs to all prices)

Vibroplex Presentation Bug - mint - $135.00

Eldico TR-75 transmitter. Classic 75m CW novice rig
with 6AG7-1625 line-up. Plug-in coils for 75m as supplied.
Originally used link coupling. Modified to pi-network, but
easily restored if you prefer. WIth manual, and in near-mint
condition, with covers. $95.00 plus shipping

B & K Model 701 Balun for 15 meters. 75 ohms to 100 ohms balanced.
Coaxial I/O to balanced I/O. Excellent $20.00

QTY 2 - mobile Approx 1945-era Motorola "Police Cruiser"
radio receivers; antiques, with 12K7 tubes and such.
No speakers. No manual or information. Great piece of radio
history! $20.00 each

James Millen Co. Model 90810 Transmitter - a CLASSIC!
This is a SERIOUS collectors' MUSEUM PIECE!!
11m, 10m, 6m, 2m bands with 3E29 final. EXCELLENT condition.
What a beauty. Copper plated chassis, Many refinements.
Inquire!

Hy-Gain mobile antenna / resonator for 80 meters. $10.00

Two BAKELITE clock radios as follows:

G.E. Model 535 (Uses the 12BA6, 35W4 tubes etc.)
Appearance good - untested - $15.00

G.E. Musaphonic, model 590 - with phono input etc.
Superheterodyne, uses 12AU6, 12AV6 tubes etc.
Appearance good - untested - $15.00

Tubes:
6GF7A - NIB
12AT7 Westinghouse NIB
12AY7 G.E. NIB
12AU7A by IEC NIB (I have two)

6GH8A Magnavox NIB
12AX7 RCA used (in box)
12AU7A Dumont - used (in box)
12AT7 Sylvania NIB
12AX7A RCA NIB (I have a few of these)
12AT7 RCA NIB (I have a few of these)
7025 RCA exc. used (in box) (I have 2)
12AT7WC ruggedized for JAN by Philips/ECG NIB
42KN6 Sweep tube, RCA used (in box)

Cornell Dubilier 2uF 3000V DC Oil-filled capacitor.
Other oil-filled HV capacitors available, inquire.

Lenox AM/FM radio digital clock radio (new)

A very LARGE 120V isolation transformer - about 1.5 kva
with taps, fuse panel etc. You figure out connections!
47 lbs shipping $50.00

MEMORY! Add 4 MB RAM to your IBM PS/2 computer!
4 MB 72-pin SIMM for IBM Proprietary MB - $15.00

Toshiba 4X CD-ROM drive XM5302B, untested - looks fine
With cable - $25.00

TEAC 4X CD-ROM drive CD-55A, untested - looks fine
With cable - $25.00

U.S Robotics WINMODEM 14.4 kB Internal modem with all docs,
diskette AND CD-ROM! For Windows 3.1 or WIN 95 only.
New, VERY nice - $20.00

Printer A-B Switch - New, with standard 37-pin Centronics Connectors.
Nice beige metal mini-cabinet. $7.00 each (have two)

16-bit sound card for ISA buss (PC compatible) computer
systems. Has IDE CD-ROM ports & cables. Mike input and
speaker outputs. Tested: Excellent. $15.00

Integrated Circuits:
339 14-pin QUAD Comparator
D8202A 40-pin
D8212 24-pin (I have 2)
P8155 24-pin
P8085AH (two)
MM53214GQK/N (20-A4592-026) 40 pin
30293E-026 (20-A4592-026) 40 pin
SY6545-1 40-pin
R6551P
D-2732A-2 EPROM (I have 1)
D-2732A-3 EPROM (I have 4)
27C64-G-15 EPROM (I have 3)
27C64-30 EPROM (I have 3)

D2764A-3
SRM2064C15 Dynamic RAM (I have 7)

I also have several linear and TTL/CMOS smaller
14 and 16-pin DIP chips. Inquire.

Bass Guitar - by Washburn - copy of Fender Jazz Bass. VERY nice.
Sunburst color, two pick-ups. MINT condition. Worth about $220.00

Acoustic guitar, Spanish - superior quality. Emperador
Model TC-80 made in Korea. With carrying case Truly a beautiful
instrument, and has to be worth at least $100-120

WHAT DO YOU HAVE??
MAKE ME AN OFFER!!

E-mail me please at:
bry@mnsinc.com
==========
I need:

Radiotron Handbook, 3rd of 4th Edition OK.

DRake TR6 or other 6 meter gear.
R390, R390-A receiver or similar.
R-1155 receiver.
T-1154 transmitter.
AR-88 receiver or similar.
R-109 receiver from Britain post-WW2 era.
AN-GRC-109 transmitter.

949 Tube socket Adapter kit for I-177B tube tester

ANY BOOKS from 1930-1970 about ham radio construction.

Tube manuals, etc.

* EARLY "Radio" magazines from California 1930s.

* OLD 73 magazines from the first few years.

* OLD Lafayette Catalogs

(These three above (*) are for a friend G3UUR)

QTY of TWO or FOUR: 6-pin sockets for 1625 tubes
QTY of TWO or FOUR: 5-pin sockets for 807 tubes
QTY of TWO or FOUR: 4-pin Bayonet sockets
807 tubes
811A tubes
828 tubes
572B or similar tubes

1 watt and 2 watt resistors

FT-243 (or other holders) crystals for 1800-2000, 3500 - 3750 kHz,
3880, 3885 & 7000 - 7150 kHz, 7290, 7295 & 8400 kHz

PL-259 / SO-239 connectors

Capacitors: MICA, MYLAR, Electrolytic etc.

Variable caps & trimmers

Any useful AF/RF tubes...

Audio transformers.
Driver/Interstage transformers, Single-ended
and P-P Output transformers

6BR5 (same as EM80)
1614
7984
6GK6
6973
6146A
6146B (need several)
5R4GY
6DE7
6CL6
811A

Any old sweep tube linear amp. - dead or alive.

FT243 crystals for 8400 kHz

SO-239 and PL-259 connectors

Viking Valiant
Ranger II

Any good straight key.

I would like to swap for any of the above items.

WHAT DO YOU HAVE??
MAKE ME AN OFFER!!

E-mail me please at:
bry@mnsinc.com

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
(301) 258-8801
http://www.mnsinc.com/bry

# 1429. For Sale: Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: FXZV53A@prodigy.com
Message-ID: <5rl4ul$1n7a$1@newsxfs02-int.news.prodigy.com>
Source record: 92190

I have a large number of tubes available. If you are interested, please
e-mail me at: "thehossman@hotmail.com"

Qty Boxed $$ Qty Min 44 Qty 8-Pin, etc.
44
1 1G3/1B3 $4 1 2AD6 $3 5 1G3GT/1B3GT $3
1 2AS2 $4 1 2D21 $3
2 3A3/3B2 $4 1 3HQ5 $3 1 1K3 $3
1 5U4BG $4 1 4DT6A $3 1 5Y3GT $3
1 5Y3GT $4 1 4HM6 $3 2 6AS7G $3
1 6AG5 $4 2 4JC6 $3 1 6BK4 $3
1 6AH6 $4 1 4JD6 $3 2 6BQ6/6CU6 $3

2 6AK5 $4 1 4KT6 $3
1 6AK6 $4 1 5AQ5 $3 3 6D6 $3
2 6AN5 $4 1 6AF4 $3 2 6V6 $3
1 6AU4GTA $4 1 6AH6 $3 1 6Z10 $3
1 6AU6GTA $4 1 6AL5 $3 1 12AY3 $3
1 6AV6 $4 1 6AN5 $3 1 12D4 $3
1 6AX8 $4 4 6AQ5 $3 1 12DQ6B $3
1 6AY3 $4 1 6AS5 $3 4 12SN7GT $3
2 6BA6 $4 1 6AW8 $3 1 12SQ7 $3
2 6BC5 $4 1 6BA6 $3 1 12V6GT $3
2 6BF5 $4 1 6BH6 $3 1 17BE3 $3
2 6BH6 $4 2 6BQ7 $3 1 17BF11 $3
2 6BK7B $4 1 6BZ6 $3 2 17JZ8 $3
1 6BN6 $4 1 6C4 $3 1 21JZ6 $3
1 6BQ7 $4 1 6CG7 $3 1 25L6GT $3
3 6CB6A/6CF6 $4 1 6CL8 $3 1 38HE7 $3
2 6CQ8 $3 2 50L6
$3
4 6CL6 $4 1 6CZ5 $3 1 OD3 $3
2 6CL8A $4 1 6DE6 $3 1 6528 $3
2 6CW4 $4 1 6EA5 $3 1 75 $5
1 6CZ5 $4 2 6EB8 $3

1 6D4 $4 1 6ER5 $3

2 6EA5 $4 1 6GH8 $3 Qty
Metal
8 6EB8 $4 1 6GM6 $3 1 6AC7 $3
1 6EH7 $4 1 6HB7 $3 3 6AG7 $3
1 6FQ7 $4 1 6J6 $3 1 6C5 $3
1 6FV8 $4 2 6KE8 $3 1 6J5 $3
1 6GF7A $4 1 6T8 $3 1 6L7 $3

1 6GH8A $4 2 6X4 $3

1 6GM6 $4 3 8FQ7/8CG7 $3

3 6J4 $4
1 6J6 $4 1 8JV8 $3

3 6K7 $4 1 10LZ8 $3

1 6KE8 $4 1 12FX5 $3

3 6SJ7 $4 3 OA5 $3

1 6W4GT $4 2 OB2 $3

1 7F8 $4 2 5654 $3

1 8EM5 $4 1 5696 $3

1 12AL5 $4 1 5726 $3

1 12BH7A $4 2 5749 $3

1 12DT5 $4 1 5750 $3

1 35L6GT $4 3 5814 $3

2 OB2WA $4 1 6136 $3

1 OC2 $4 1 6189 $3

1 OG3 $4 1 6197 $3

2 5651WA $4 1 6201 $3

1 5749 $4 1 747 $3

4 5763 $4

1 6112 $4

1 6977 $4

1 S-5018 $4 (silicon rectifier)

# 1430. Trimcaps for my ICOM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33de2a89.0@lightning.ica.net>
Source record: 92191

I need a source of small 4.0 X 4.5mm ceramic trimcaps in 6, 10 and 20
pF values to replace in my IC-471A.
Anyone ?

Thanks, VA3TO

# 1431. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: Curtis Wheeler <cwheeler@ccnet.com>
Message-ID: <33DE1B85.579C@ccnet.com>
Source record: 92192
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

SCO wrote:
>
> Paul DiSciascio <thenut@netaxs.com> wrote:
>
> >I am looking for some schematics for a transmitter that will transmit
> >voice or even just CW on 170.245 MHz. If someone could draw some up and
> >email them to thenut@netaxs.com I would really appreciate it.

> I might be dense but ... 170.245 is NOT a ham band. I don't even know
> what service band that is.

The primary service is government. 170.245 is a specific freq allocated
on a secondary basis for wireless microphones.

--

Curtis

## 1432. Recording & Playback

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: "Kevin E. Stroud" <kestrou@trigard.com>
Message-ID: <01bc9393$05a55c50$14000001@kevin>
Source record: 92193

Greetings all,

I hope somebody gets this (my ISP's usenet server doesn't have *any* messages from this group - is it active?). I'm new to Ham (OK, the truth is, I'm not really a Hammer), but what I would like to do is, I believe, related to Ham.

I would like to "record" the output of a handheld RC control device and then play it back and watch the little car do the same thing it just did (assuming the same starting position). Sounds easy, huh? I've looked at some Yaesu transceivers, but I'm not sure I can record the signal using them. I'm at the high end of HF - 27.095 MHz - but I'm not sure how "wide" my signal is (will I need to record using a DAT tape?).

Thoughts? Suggestions? Anybody done this before (I'm sure this isn't an original idea - too many hammers out there!). Any and all responses appreciated!!!

Kevin E. Stroud
kestrou@trigard.com
217/442-9224 - days
217/446-5760 - evenings/weekends

# 1433. Cellsite Transceiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <01bc9c54$78141820$a2d8afce@node2>
Source record: 92194

Hi,

Timeline has offered surplus Cellsite Transceivers for a while now,
and I took the plunge and ordered one. It is a nice unit, with 2 receiver
front ends that have a voting circuit to select the receiver and antenna
with the best signal. The exciter outputs 1.5W, annd the unit has
10 dipswitches to select the operating frequency pair, with provisions
for external contol.

The unit requires a frequency standard of 18.990 MHz, which I have
obtained the Mini Circuits POS25 VCO and installed in the unit using
12VDC from one of the units internal 7812 regulators and providing the
tunign voltage from a homebrew powersupply using an adjustable
regulator circuitcontrolled by a 10 turn pot with locking/counting vernier
dial.

Although the units were advertised with service manual, operating
instructions
schematics, etc...; all I received with it was 4 photocopied schematics
with
a good sampling of handwritten notes in Japanease. Many of these notes
and other references in the literature indicated a difference of opinion in
the
values of the input voltage, pin numbering sequence, output labeling,
etc.....

I am hoping to first get this up and running, then look into computer
control and
frequency agility experimentation. Has anyone reading this NG already
tackled
this project. If so, I would be interested in hearing about the results.

Thanks for reading,

--
David Little KD4NUE
dalite01@sprynet.com
Brunswick, Georgia 31523 USA

If CON is the opposite of PRO then it
stands to reason that CONGRESS is
the Opposite of PROGRESS - Go Figure

--
David Little KD4NUE
dalite01@sprynet.com
Brunswick, Georgia 31523 USA

If CON is the opposite of PRO then it
stands to reason that CONGRESS is
the Opposite of PROGRESS - Go Figure

# 1434. Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: n4nr@vulcan.com
Message-ID: <8DCA388.0017008A3D.uuout@vulcan.com>
Source record: 92195
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

Hi all,

I have an Astron 30A 12vdc power supply (RS35A may be the model number, I forget) that has developed a nasty habit.

Twice in the past week, during periods when the commercial AC power was going off and back on due to local thunderstorms, the power supply has malfunctioned. It had a small load (approx 1 amp) on it when this happened. I discovered about 2 hours after the storm that the supply had apparantly quit. Upon checking, I discovered that the heat sink was **VERY** Hot, and the supply appeared to be laboring under a high current load. However, after disconnecting each load, leaving the supply running, I discovered that the supply's output voltage was 0.76 volts with no load attached. It still appeared to be under a load based upon it's transformer hum.

Turning the supply's AC power off and back on corrected the problem, and all appeared normal. However, it got back into the same condx again a few days later after a storm. I have not been able to duplicate this state by quickly removing and applying ac power.

Anybody had a similar experience and have an idea as to the failure mechanisim?

Thanks,

Dennis
n4nr@vulcan.com

# 1435. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: Harry Lythall <rharris@arcturus.net>
Message-ID: <01bc9c5d$a2537000$b00764c3@acz732k>
Source record: 92196
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In the UK that part of the band is in the transmit section of the PMR band, with the RX section around 166MHz. I also know that the British military use AM on about 170.0125MHz.

Most VHF xtal-controlled rigs for the 2-meter band should be re-tuneable up there, possibly needing the odd capacitor/coil reduction if it cannot be tuned exactly. Replacing ferrite slugs with brass will often do the trick too.

I have some 2-meter stuff on my homepage, but it is somewhat limited (ZN414 receiver and a simple FM transmitter) for your application.

Regards Harry SM0VPO

http://user.tninet.se/~acz732k
http://hem2.passagen.se/sm0vpo

Paul DiSciascio <thenut@netaxs.com> wrote in article
<33D92F1A.3CC1C80D@netaxs.com>...
> I am looking for some schematics for a transmitter that will transmit
> voice or even just CW on 170.245 MHz. If someone could draw some up and
> email them to thenut@netaxs.com I would really appreciate it.
>
> Thanks in advance,
> N3SML
>

# 1436. Re: Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: Stan Aughenbaugh II <Stan.Aughenbaugh@MCI$.COM>
Message-ID: <5rlkta$igp$1@news.internetmci.com>
Source record: 92197
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

N4NR wrote:
> Hi all,
> I have an Astron 30A 12vdc power supply (RS35A may be the model number,
> I forget) that has developed a nasty habit.
> Twice in the past week, during periods when the commercial AC power was
> going off and back on due to local thunderstorms, the power supply has
> malfunctioned. It had a small load (approx 1 amp) on it when this
> happened. I discovered about 2 hours after the storm that the supply
> had apparantly quit. Upon checking, I discovered that the heat sink was
> **VERY** Hot, and the supply appeared to be laboring under a high
> current load. However, after disconnecting each load, leaving the supply
> running, I discovered that the supply's output voltage was 0.76 volts
> with no load attached. It still appeared to be under a load based upon
> it's transformer hum.
> Turning the supply's AC power off and back on corrected the problem, and
> all appeared normal. However, it got back into the same condx again a
> few days later after a storm. I have not been able to duplicate this
> state by quickly removing and applying ac power.
> Anybody had a similar experience and have an idea as to the failure
> mechanisim?
> Thanks,
> Dennis
> n4nr@vulcan.com
Dennis,
I als have an Astron power supply (don't remember the model...around 35
amp continuous, metered) and I had a similar problem (3/4 volt and
delivering current) The first few times it happened, I was able to reset
the problem by turning it off and back on, then one day that didn't work
anymore. I was lucky, it was under warrenty, and I sent it back for
repair. If memory serves, there is a crowbar circuit in there for load
protection. Supposed to protect the equipment from an overvoltage
condition by sensing and then shorting the supply. I think the crowbar a
SCR and another transistor were replaced. I have no idea whether both
were bad or perhaps they just replace both as a matter of policy.
My chief remberance of the incident tho' was how well they (and HRO)
treated me. And I had the supply back within a week and a half.
I would certainly buy another Astron supply, if only for the service.
Thinking back on the schematic, I seem to remember also that there
wasn't a lot of electronics to look at, and I would have probably
attacked it myself were it not for the warranty.
HTH.
73,
Stan kf0nc

To email me directly, take the '$' out of the address
"90% of all statistics are made up"

## 1437. Alpha 70 transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970729213001.RAA26074@ladder02.news.aol.com>
Source record: 92198

Have new (Definitely old stock) power transformer for Alpha 70 amplifier
120/240 volt primary
secondary's
5 volt/30 amp
2200/3500 Volt DC HV winding good for an amp ICAS
66 volt tapped at 22 volts winding for bias and relays.

100 bucks plus UPS. (About 25 pounds.)
guaranteed 1 year
W4ZCB

# 1438. $5000 Credit Card, Low APR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: kefera@sekmet.com
Message-ID: <5rllps$f48@frog.inetworld.net>
Source record: 92199

Because of our arrangement with OFFSHORE BANKS-

Now you can get your own UNSECURED MAJOR CREDIT CARD at
interest rates as low as 6.95%, GUARANTEED!

*Accepted at millions of locations world-wide, this is
a MAJOR Bank Credit Card you are very familiar with!
*No Credit Check!
*No Social Security Number needed for approval!
*Even Bakruptcy-No Problem!
*$5,000 Credit Limit, minimum!
*Unsecured Line of Credit of$15,000.!
*BUSINESS paying $4800.00 monthly, with FREE WEB PAGE!
* Could earn up to $460,000 yr!

I am also available to answer all your questions!

For more info,send an email to my autoresponder,
Cashforyou@unitedmall.com

Dr. David Alan

# 1439. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: Demolition Man <demoman@rollanet.nospam.org>
Message-ID: <33DE5236.40CB@rollanet.nospam.org>
Source record: 92200
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

John Kuzenski wrote:
>
> Ed Mathes, RPA-C (emathes@servtech.com) wrote:
> : Peter Gottlieb wrote:
> : > Paul DiSciascio <thenut@netaxs.com> wrote in article
> : > > I am looking for some schematics for a transmitter that will transmit
> : > > voice or even just CW on 170.245 MHz.
> : >
> : > That's an odd frequency to transmit on.
>
> : I believe it's on of the itinerate business freqs.
> : In my neck of the woods...McDonalds uses it for their drive-thru
> : headsets...
>
> There must be a new award: "Worked All Drive-Throughs."
>
> I'm still working on my 5-band Taco Bell award. ;-)
>
>
>
> _____
> Ken Kuzenski AC4RD kuzen001@acpub.duke.edu
> jkk@galactose.mc.duke.edu Fidonet: 1:3641/1.1
> _____
> All standard disclaimers apply.
> Close cover before striking.
> Your mileage may vary.

most studio grade wireless mic systems are using it.
they get 4 "channelized freqs" and the above freq is one of them
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

# 1440. GO GET SEX FREE WITH password xxx0

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: 9877654453@compuserve.com
Message-ID: <5rlqqm$ic7@news1-alterdial.uu.net>
Source record: 92201

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
and at the same time get UNLIMITED FREE ACCESS to
over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL below.
http://www.2bornot2b.com/password

# 1441. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: WireHead Prime <wiredone@raccoon.com>
Message-ID: <33DDDF11.25CD@raccoon.com>
Source record: 92202
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Walt Davidson wrote:
>
> On Sun, 27 Jul 1997 23:00:52 -0700, "Ed Mathes, RPA-C"
> <emathes@servtech.com> wrote:
>
> >> Paul DiSciascio <thenut@netaxs.com> wrote in article
> >> <33D92F1A.3CC1C80D@netaxs.com>...
> >> > I am looking for some schematics for a transmitter that will transmit
> >> > voice or even just CW on 170.245 MHz.
> >>
> >> That's an odd frequency to transmit on.
> >
> >I believe it's on of the itinerate business freqs.
> >
> >In my neck of the woods...McDonalds uses it for their drive-thru
> >headsets...
>
> You can place orders in McDonalds drive-thru using CW????

Well, Mikkie D's does seem to be hiring more senior citizens in the last
few years. ;-D

WireHead Prime

# 1442. Re: Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.97Jul29193836@colossus.stdavids.picker.com>
Source record: 92203
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

It was probably in overvoltage shutdown which probably turns on an SCR across the output when an overvoltage 'event' is sensed.

It could be that the sensitivity of the overvoltage circuit is set too close to the output voltage or that there is a genuine problem with the supply putting out excessive voltage when driven under extreme or changing line conditions.

--- sam : Sci.Electronics.Repair FAQ: http://www.paranoia.com/~filipg/REPAIR/
Coming soon to a computer screen near you: http://www.repairfaq.org/
Preview of V3.00 (ASCII): http://www.pacwest.net/byron13/sammenu.htm

In article <8DCA388.0017008A3D.uuout@vulcan.com> n4nr@vulcan.com (N4NR) writes:

I have an Astron 30A 12vdc power supply (RS35A may be the model number, I forget) that has developed a nasty habit.

Twice in the past week, during periods when the commercial AC power was going off and back on due to local thunderstorms, the power supply has malfunctioned. It had a small load (approx 1 amp) on it when this happened. I discovered about 2 hours after the storm that the supply had apparantly quit. Upon checking, I discovered that the heat sink was **VERY** Hot, and the supply appeared to be laboring under a high current load. However, after disconnecting each load, leaving the supply running, I discovered that the supply's output voltage was 0.76 volts with no load attached. It still appeared to be under a load based upon it's transformer hum.

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Anybody had a similar experience and have an idea as to the failure mechanisim?

Thanks,

Dennis
n4nr@vulcan.com

# 1443. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: rbaker@worldchat.com
Message-ID: <07-29-1997.7889@worldchat.com>
Source record: 92204
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Buddy thats Commercial radio Frequencies.. And if you tarnsmit there its a quick trip to the slammer. You can't transmit anywhere you please ,better find out what it is all about before hand.

VE3CZN

# 1444. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: rbaker@worldchat.com
Message-ID: <07-29-1997.7894@worldchat.com>
Source record: 92205
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

It is in the upper portion of the commercial FM Band 148-174mhz.

Rae VE3CZN

## 1445. Ten-Tec kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: "Ed Mathes, RPA-C" <emathes@servtech.com>
Message-ID: <33DEC099.3C0E@servtech.com>
Source record: 92206

I am contemplating the purchase of Ten-Tec's 6-meter FM kit. Anyone
build it yet? Problems? What did you find challenging?

I have built another companies 6-meter FM kit and was less than
satisfied with the (lack of) result....
--
Edward J. Mathes, RPA-C ANTI-SPAM: Remove the 'x' in
xemathes@servtech.com
Internal Medicine PLEASE help SLOW the SPAM
emathes@servtech.com
---
Opinions above are mine and mine alone.
Opinions above are NOT medical advice.
If you don't like these opinions, make up some of your own.
---
"Politics should be limited in its scope to war, protection of property,
and the occasional precautionary beheading of a member of the ruling
class."
-P.J. O'Rourke
---

# 1446. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: rbaker@worldchat.com
Message-ID: <07-29-1997.7890@worldchat.com>
Source record: 92207
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

[No readable article body recovered]

# 1447. Re: ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-29 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33DE5E00.21F5@flash.net>
Source record: 92208

MICHAEL SMITH wrote:
>
> ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
> NICE.. E-MAIL WITH INFO... THANKS MIKE....
> --
> mjs@now-online.com

Hmmm 9v AC? By any chance are you looking to run a video game in the car or boat? I agree with the gentlemen who suggested buying a DC to 120vac converter and then plug in a wall transformer.

But tell us more, perhaps your problem could be solved another way. For example if the equipment your trying to use is electronic in nature, it's a safe bet it has a rectifier and regulator inside. With 9VAC it's probably a 5v regulator if thats the case you may be able to directly supply 12VDC to the unit without any problems at all!

Need more details though. Tim, ka8ddz

## 1448. New Technical Bookstore

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: chris@itutech.com
Message-ID: <EE3n79.7ox@iglou.com>
Source record: 92114
Cross-posted to: alt.comp.hardware.homebuilt,comp.robotics.misc,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.design,sci.electronics.misc

Hello!

We've recently created a Technical Bookstore that focuses on titles relating to all areas of electronics -- including robotics, microcontrollers, radio and more. We are trying to find books that are outstanding in their field, not listing every title available.

We are looking for recommendations for additions to our bookstore. If you have any suggestions please e-mail them to books@itutech.com and we will review your suggestions.

Please see our bookstore at http://www.itutech.com/techbooks.htm

Thanks!

Chris
---
Chris Sakkas (chris@itutech.com) ftp://itutech.com
ITU Technologies (sales@itutech.com) http://www.itutech.com
See our web page for PIC development tools and Caller ID->RS-232 products!
VISA/MasterCard/AE accepted Phone:(513)661-7523 FAX:(513)661-7534
Toll Free Order Line: 1-888-4-ITU-TECH

# 1449. Re: Radio Receiver Building for Dummies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33dd3399.19468550@news.online.no>
Source record: 92115

On Mon, 28 Jul 1997 12:41:39 -0700, Don Huff <don_huff@HP.com> wrote:

>Tom Bruhns wrote:
>>
>> Don Huff (don_huff@HP.com) wrote:
>>
>> : One way to do it is to simply buy a PC board for the "R2" phasing

>>
>> Finally, I know Don has started some experiments with using DDS chips
>> for the local oscillator for a DC receiver. It seems like they'd
>> offer a way for "digital" type people to generate a decent LO, and
>> know what frequency it's on just from the digital info sent to it.
>> Perhaps Don can offer comments if he's had time to get anything going.
>> (Hope I'm not getting you in trouble here, Don!)
>>
>> --
>> Cheers,
>> Tom
>> tomb@lsid.hp.com
>
>
>Hi Tom,
>
>
> You devil, you. (No, just kidding).
> Regarding DDS. Yes, I have a DDS VFO running for my R2 receiver (will
>work of course for
>any receiver, DC or superhet). In on-the-air use, I cannot tell any
>difference between using it
>and using an analog VFO. For those of you who do not know what DDS
>stands for, it
>means Direct Digital Synthesis. You can now buy a chip, such as the
>AD9850 from Analog Devices,
>which is smaller than your small fingernail, SMT, and can generate any
>frequency in the HF
>range (125 MHz crystal clock is required to run it). A VFO can fit in a
>shielded enclosure
>which is a one inch cube. This eliminates analog VFO building (no tuned
>circuits, no drift
>problems, no limited tuning range/bandspreading, no mechanical
>reduction drives and double-bearing capacitors). I am currently working
>(subject to summertime interrupt projects like painting my 1200 feet of
>3-rail fence) on a rotary-encoder to vary the frequency instead of using
>a

>computer (ugh) like I am now. This is one of the bases for my comment
>that
>it has never been easier to homebrew a receiver than it is now, and it
>is
>getting easier all the time.
>
>
> 73,
> Don, W6JL

sounds interesting. you may discard the old VFO, pre-mixer,
synthesizer, counter and replace it by a simple device, but how to
display the frequency......?
output frequency in the range 10-40MHz...

Perhaps I should keep the old noisy counter in my FT-902?

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1450. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc9c86$42838ec0$cc0d2399@peter->
Source record: 92116
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Walt Davidson <walt@dial.pipex.com> wrote in article
<33e402e4.9763615@news.dial.pipex.com>...
> >In my neck of the woods...McDonalds uses it for their drive-thru
> >headsets...
>
> You can place orders in McDonalds drive-thru using CW????
>

So that's why so many people want to keep the CW requirement!!

# 1451. Protect your child from viewing xxx sex.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: pete6444929@aol.com
Message-ID: <5rm6s3$mrh@news1-alterdial.uu.net>
Source record: 92117

http://www.2bornot2b.com/password

Protect Your Children From Viewing ADULT XXX Material
and at the same time get UNLIMITED FREE ACCESS to
over 1200 of the Hottest Adult Sites on the Web.

Also get FREE UNLIMITED Live Video Sex and FREE XXX
rated chat room access.

Stop paying to get into Adult Sites. This secret password gets
you into them for FREE!!!

I posted all the info at the URL below.
http://www.2bornot2b.com/password

# 1452. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc9c86$954662e0$cc0d2399@peter->
Source record: 92118
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

James O'Brien <littlejimmyinthewoodpile@radia1.com> wrote in article
<33DD711F.7D2F@radia1.com>...
>
> Get back in the closet.
>

And the relevance of this is ?

## 1453. Hammond Transformers, Tubes, Sockets, Svetlana Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5rm0q5$e59@news.teleplex.net>
Source record: 92119

Check out www.stf-electronics.com

for discount prices on Hammond transformers and Chassis, Svetlana tubes,
tube sockets and many vacuum tube builders supplies.

Before you purchase a Svetlana Power tube , email or fax us for a LOW
quote.

Pat Bunn
STF Electronics

# 1454. Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Stanley Koontz <stush@toolcity.net>
Message-ID: <5rmi5k$qhn@news.toolcity.net>
Source record: 92120
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

I need to build a tone decoder system. The system is based of a 2+2 System.

The range is 600 to 1500 Hz I was thinking of using 2 NE567's.
If anyone has a better idea please let me know. Web page reference
welcome.

My design seems like the best but it never hurts to get input..

---
---
Remember: Duct tape is like the force: it has a dark side and a light side,
and it holds the universe together.

Stanley Koontz BS, EMT-P
stush@toolcity.net
http://www.toolcity.net/~stush
---
---

# 1455. Re: DC Rx post-mixer diplexer frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5rmiqr$1kk$1@nadine.teleport.com>
Source record: 92121

In article <rWRODFAZ5z2zEwQA@lfheller.demon.co.uk>,
Leon Heller <leon@lfheller.demon.co.uk> wrote:
>In a DC Rx with a diode DBM, what frequency should the diplexer be
>designed for? I was thinking of about 9 KHz, as this is about three
>times the audio image frequency, but Rick Campbell's Mini R2 seems to
>use about 6.6 KHz, working back from the component values.

There have been several good responses to your question, but I'll add my two-bits worth. Although I've been told that the mixer needs to be terminated only at audio and perhaps at the LO carrier frequency, there are a lot of other frequencies which can come out of the mixer and disturb the audio amplifier. It's not difficult to make a simple diplexer which has a constant impedance at all frequencies but a single-pole lowpass rolloff. For example, a parallel RL in series with a parallel RC. Connect the mixer to one end of the parallel RL, and the audio amplifier to the junction of the two parallel circuits. Ground the other end of the parallel RC. If SQRT(L/C)=R=50, the mixer will see 50 ohms at all frequencies (until, of course, parasitics become noticeable).

Typically, additional audio filtering follows the audio preamp, so the main goal of the diplexer frequency rolloff, in my opinion, is to provide attenuation beyond where the preamp and following filters can handle large signals. But I don't see why not make it break just above the range of audio you're interested in, except that the component values get quite large. Rick's choice of 6.6 kHz seems to be a reasonable compromise.

Roy Lewallen, W7EL

# 1456. Re: Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: jef812@ix.netcom.com
Message-ID: <5rmlnb$n76@sjx-ixn3.ix.netcom.com>
Source record: 92122
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

In <8DCA388.0017008A3D.uuout@vulcan.com> n4nr@vulcan.com (N4NR) writes:

>
>Hi all,
>
>I have an Astron 30A 12vdc power supply (RS35A may be the model
number,
>I forget) that has developed a nasty habit.
>
>Twice in the past week, during periods when the commercial AC power
was
>going off and back on due to local thunderstorms, the power supply has
>malfunctioned. It had a small load (approx 1 amp) on it when this
>happened. I discovered about 2 hours after the storm that the supply
>had apparantly quit. Upon checking, I discovered that the heat sink
was
>**VERY** Hot, and the supply appeared to be laboring under a high
>current load. However, after disconnecting each load, leaving the
supply
>running, I discovered that the supply's output voltage was 0.76 volts
>with no load attached. It still appeared to be under a load based upon
>it's transformer hum.
>
>Turning the supply's AC power off and back on corrected the problem,
and
>all appeared normal. However, it got back into the same condx again a
>few days later after a storm. I have not been able to duplicate this
>state by quickly removing and applying ac power.
>
>Anybody had a similar experience and have an idea as to the failure
>mechanisim?
>
>Thanks,
>
>Dennis
>n4nr@vulcan.com

Hi Dennis, I am very familiar with the Astron RS-35A power supply, that one has the large heatsink on the back with 4 2N3771 power transistors. What seems to be happening is the power supply has inside of it what is known as an "SCR crowbar". The crowbar circuit is tripped by an overvoltage condition, which fires a very large SCR that shorts the power supply's output. Instead of burning up, the power supply goes into current foldback and limiting, which kills the output and makes it

run very hot. The crowbar circuit should be on a smaller circuit board and attached to the supply's output terminals. Unless a failure on the crowbar may be tripping it prematurely, check for an adjustment pot on the board that sets the crowbar's trip voltage, you can put a DC voltmeter on the supply and adjust the supply's main output voltage (on the main regulator board with the LM723) until the crowbar trips about 16 volts. Other than that, you may have a problem with the crowbar, causing it to trip prematurely. I can help you troubleshoot the supply, please drop me some E-mail and I will help you. Hope this helps and good luck!:)

Joe at jef812@ix.netcom.com

P.S.>That Astron RS-35A is one hell of a good power supply, I used one to repair mobile stereo amplifiers, and it didn't even budge under the load!:)

# 1457. Re: DC Rx post-mixer diplexer frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <7zD2rCAUpw3zEwoZ@lfheller.demon.co.uk>
Source record: 92123

In article <5rmiqr$1kk$1@nadine.teleport.com>, Roy Lewallen
<w7el@teleport.com> writes
>In article <rWRODFAZ5z2zEwQA@lfheller.demon.co.uk>,
> Leon Heller <leon@lfheller.demon.co.uk> wrote:
>>In a DC Rx with a diode DBM, what frequency should the diplexer be
>>designed for? I was thinking of about 9 KHz, as this is about three
>>times the audio image frequency, but Rick Campbell's Mini R2 seems to
>>use about 6.6 KHz, working back from the component values.
>
>There have been several good responses to your question, but I'll add my
>two-bits worth. Although I've been told that the mixer needs to be
>terminated only at audio and perhaps at the LO carrier frequency, there are
>a lot of other frequencies which can come out of the mixer and disturb the
>audio amplifier. It's not difficult to make a simple diplexer which has a
>constant impedance at all frequencies but a single-pole lowpass rolloff.
>For example, a parallel RL in series with a parallel RC. Connect the mixer
>to one end of the parallel RL, and the audio amplifier to the junction of
>the two parallel circuits. Ground the other end of the parallel RC. If
>SQRT(L/C)=R=50, the mixer will see 50 ohms at all frequencies (until, of
>course, parasitics become noticeable).
>
>Typically, additional audio filtering follows the audio preamp, so the main
>goal of the diplexer frequency rolloff, in my opinion, is to provide
>attenuation beyond where the preamp and following filters can handle large
>signals. But I don't see why not make it break just above the range of
>audio you're interested in, except that the component values get quite
>large. Rick's choice of 6.6 kHz seems to be a reasonable compromise.

Thanks for all the helpful suggestions.

I recently came across this circuit with a web search, which might be of
interest:

```
__C - L__
R - R
|
C L
____|_____
```

where XC = XL = R = 50, with Q = 1.

It's described as "a constant Z broadband bi-directional termination - a
simple alternative to the diplexer". I didn't note the URL, but it
should be easy to find it.

It looks like a useful technique for a conventional Rx. I might try this for, say, 6 KHz, for my DC Rx.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 1458. Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Stanley Koontz <stush@toolcity.net>
Message-ID: <5rn6eg$1qc@thorgal.et.tudelft.nl>
Source record: 92124
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

I need to build a tone decoder system. The system is based of a 2+2 System.

The range is 600 to 1500 Hz I was thinking of using 2 NE567's.
If anyone has a better idea please let me know. Web page reference
welcome.

My design seems like the best but it never hurts to get input..

---
---
Remember: Duct tape is like the force: it has a dark side and a light side,
and it holds the universe together.

Stanley Koontz BS, EMT-P
stush@toolcity.net
http://www.toolcity.net/~stush
---
---

# 1459. Re: MRF477 transistors wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: SEAN FOLEY <bigfoot@xsite.net>
Message-ID: <01bc9cd5$546c92e0$6cfe7ece@bigfoot.realworld.com>
Source record: 92125

call 1-800-RF PARTS. ASK FOR CHIP. THEY HAVE THEM IN STOCK. THEY MAY BE PRICEY, BUT THEY ARE MOTOROLAS. IF BUYING FROM SOMEONE ELSE, MAKE SURE THAT IT IS A MOTO, AS THEIR ARE SOME OTHER COUNTERFEITS ROAMING AROUND. THEY AREN'T AS POWERFUL OR RUGGED. SEAN

# 1460. Re: homebrew transceivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33df31c0.0@lightning.ica.net>
Source record: 92126

"Christopher S. Bradford" <csb@together.net> wrote:

>I've found many sources for homebrew transceivers, but I'm looking for
>recommendations... from personal experiences, what works and what
>doesn't? Can I throw together a 80-10m hf cw station for under $50?

No. There are several monoband transceiver kits in this price range
but I haven't seen anything 10 to 80 meter for <$50.
Have you checked out the Dave Benson (NN1G) kits ?
www.fix.net/~jparker/sml.html
He has a couple of CW kits as well as an 80m/20m SSB kit.
I built the 20m SSB rig and recommend it !

Also, Dans Small Parts carries several QRP kits (URL not handy at this
moment). Dan also carries a good line of QRP stuff.

Alternately, you may want to ask around for a used Heathkit HW-8 or
HW-9. Now these are multiband QRP CW rigs. My HW-8 covers
80/40/20/15m. I was able to find one that needed a bit of repair for
$50.

>Can these homebrew projects utilize linear amps so that I can put out
>100 watts or more? Is it worth it all to build my own transciever?

Sure, you can build an amplifier. Do yourself a favour and pick up
the ARRL QRP handbooks (the old and new one) and look into the RSGB
library.

>(I'd like to build one with a digital display and I've seen many kits
>and schematics with parts lists)

Both Dave Benson and Dan's have rigs with this option.

Cheers, Hugh VA3TO

# 1461. Re: Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: tech <tech@dp.net>
Message-ID: <Pine.BSI.3.95.970730094733.21645D-100000@home.dp.net>
Source record: 92127
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

On 30 Jul 1997, Joseph E. Fealkovich wrote:

> In <8DCA388.0017008A3D.uuout@vulcan.com> n4nr@vulcan.com (N4NR) writes:
>
> >
> >Hi all,
> >
> >I have an Astron 30A 12vdc power supply (RS35A may be the model
> number,
> >I forget) that has developed a nasty habit.
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> >going off and back on due to local thunderstorms, the power supply has
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> >
> >Turning the supply's AC power off and back on corrected the problem,
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> >all appeared normal. However, it got back into the same condx again a
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> >
> >Anybody had a similar experience and have an idea as to the failure
> >mechanisim?
> >
> >Thanks,
> >
> >Dennis
> >n4nr@vulcan.com
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> one has the large heatsink on the back with 4 2N3771 power transistors.
> What seems to be happening is the power supply has inside of it what is
> known as an "SCR crowbar". The crowbar circuit is tripped by an

> overvoltage condition, which fires a very large SCR that shorts the
> power supply's output. Instead of burning up, the power supply goes
> into current foldback and limiting, which kills the output and makes it
> run very hot. The crowbar circuit should be on a smaller circuit board
> and attached to the supply's output terminals. Unless a failure on the
> crowbar may be tripping it prematurely, check for an adjustment pot on
> the board that sets the crowbar's trip voltage, you can put a DC
> voltmeter on the supply and adjust the supply's main output voltage (on
> the main regulator board with the LM723) until the crowbar trips about
> 16 volts. Other than that, you may have a problem with the crowbar,
> causing it to trip prematurely. I can help you troubleshoot the supply,
> please drop me some E-mail and I will help you. Hope this helps and
> good luck!:)
>
> Joe at jef812@ix.netcom.com
>
> P.S.>That Astron RS-35A is one hell of a good power supply, I used one
> to repair mobile stereo amplifiers, and it didn't even budge under the
> load!:)
>
>

I'm NOT sure if the RS 35 is anything like the 20 Amp supply or not circuit wise as I've never looked at a schematic or inside of an RS 35, but when the power flickered, I lost two Astron 20's by way of the Bridge Recifier blowing. I know this may not have anything to do with the other, but two in one week after a couple of storms seems kind of odd for the same problem. AND, they were the ONLY thing that went out when the power flickered.

Just a tip to keep in mind for future reference......

# 1462. Simulation & Synthesis Capability for Ham Organizations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <33DF5394.1AD4@webblabs.com>
Source record: 92128
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,alt.ham-radio,alt.ham-radio.am,alt.ham-radio.amtor,alt.ham-radio.atv,alt.ham-radio.digital-voice,alt.ham-radio.eme,alt.ham-radio.exotic-modes,alt.ham-radio.fax,alt.ham-radio.fm,alt.ham-radio.hf,alt.ham-radio.marketplace

Many amateur radio operators have contacted us in recent months regarding availability of affordable electronic analysis and synthesis tools. We have now released Version 2 of the Professional Partnership (PP) Program. For the nominal one-time $975 charge, the PP program may be distributed throughout a club, organization or company. Of special significance is the profound level of Wireless/RF/Microwave capability included:

Nodal Circuit Analysis with True Two-Node Port Definition
Unconstrained Noise Analysis
Transmission Structure Synthesis & Analysis
Over 40 Single & Coupled Topologies
Strip (Planar) Structures
Wire Lines
Coaxial Arrangements
Waveguide (Non-TEM) Topologies
Passive Filter Synthesis
Lowpass
Highpass
Bandpass
Prototypes
Practical Reactively-Coupled Realizations
System & Receiver Design Support
Link, Terminal & Radar Analysis
System Architecture Characterization
Spurious Analysis
Transmit & Receive
Coincident & Tuned
Preselector & Output Filtering
Phase Noise Analysis
Time Domain Effects
Frequency Domain Effects

600+ Page User's Manual with Examples & References

Acquire a single PP Program package for your club, company or organization and you will be furnishing all of this needed capability to every designer, not just one! Our competitors are furious with us for having created the uniquely progressive opportunity. It seems they're still using dongles to hinder access to their own products.

Please contact me for additional information, or see:

http://www.webblabs.com/pp.htm

Kathy Goerg
Professional Partnership Program Coordinator

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI 53005
TEL 414.367.6825
FAX 414.367.6824

# 1463. Re: Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Hans Attersjo <hattersj@nospam.eso.org>
Message-ID: <33DF69D5.7151@nospam.eso.org>
Source record: 92129
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

Stanley Koontz wrote:
>
> I need to build a tone decoder system. The system is based of a 2+2 System.
>
> The range is 600 to 1500 Hz I was thinking of using 2 NE567's.

2567 is a dual 567. It is normally prefixed with two letters like XR or
NE depending on the manufacturer.

--

Hans Attersjo
ESO, la Silla
Chile
Remove the nospam from my email address.

# 1464. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: "Richard L. Tannehill, P.E." <rickw7rt@ibag.com>
Message-ID: <33DF6808.19A1@ibag.com>
Source record: 92130
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Rae Baker wrote:
>
> Buddy thats Commercial radio Frequencies.. And if you tarnsmit there
> its a quick trip to the slammer. You can't transmit anywhere you please
> ,better find out what it is all about before hand.
>
> VE3CZN

The 170.245 MHz frequency is governed under FCC Part 90, 90.265.a/b. It is usable by eigibles (Sec.a; Power, Petroleum, Forest Products, Special Industrial, Business and Railroad Radio services) for low-power, wireless microphone operation subject to the following:
1. The emission bandwidth shall not exceed 54 KHz
2. Output Power shall not exceed 50 mw
3. Stability shall be +/- 32.5 KHz of assigned freq.
4. Unprotected from interference from other licensed operations in the band. If Government or non-Government users are interferred with, operations must cease. Also, applications are subject to Government (Federal; other than FCC) coordination.

Summary, if you're not one of the listed elgibles, its not legal. However, given the Friendly Candy Company's record of enforcement in the amateur bands, it's likely you could put up a KW wireless mic and never receive a notice of violation. Only public safety frequency interference is still treated as a serious matter at the Commission nowdays.

Hope This clarifies.

Regards,
Rick Tannehill, P.E.
Ariz. Dept. of Public Safety

## 1465. Surplus CRT source

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Michael Tracy <mtracy@arrl.org>
Message-ID: <33DF96EB.6A96@arrl.org>
Source record: 92131

Anyone know of good sources for inexpensive surplus CRTs? Although I've seen huge old scopes for cheap at some hamfests, I rather not buy a whole scope for just the tube.

73, Michael Tracy, KC1SX (email mtracy@arrl.org)

# 1466. Motorola Pager Modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: seven@datasync.com
Message-ID: <5rnr4b$gql@osh7.datasync.com>
Source record: 92132

Hi Folks,

I have acquired several old Motorola Spirit pagers model #
A03JVC2468AC which are set for 152MHz. They have several crystals
and five tunable coils and one tunable cap. What I am wondering is if
they can be reset for 155MHz as I want to use them as single channel
scanners.
Do I need to recrystal them or will they tune using the coils or do I
have to break out the soldering iron for more extensive mods?

Thanks

KC5WCP

# 1467. WTD; ICOM AMPLIFIED MIKE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: doug johnson <iix@pop.interaccess.com>
Message-ID: <33DF709D.2E7@pop.interaccess.com>
Source record: 92133

LOOKING FOR AMPLIFIED HAND MIKE USED ON ICOM 251,451, ECT RADIOS
IIX@INTERACCESS.COM

# 1468. FS: Icom IC-3AT and 4AT $75 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: ghopper_@_eskimo.com
Message-ID: <ghopper_-3007971041340001@ghopper.ndip.eskimo.net>
Source record: 92134
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.scanner,rec.ham-radio.swap,misc.survivalism,rec.radio.amateur.homebrew

For sale:

Icom IC-3AT and IC-4AT
The scouts didn't want 'em so, their loss is your gain.

Includes radio, antenna, battery and manual. Each unit $75.00 plus shipping.
Radios are in good condition, batteries are not.
E-mail me for more details.

G. Hopper
KB7WSD
ghopper@eskimo.com

--
G.F. Hopper
ghopper@eskimo.com KB7WSD
Remove the anti-spam _ to reply

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
This E-Mail address is NOT-FORSALE or use for JUNK-EMail without the
EXPRESSED WRITTEN PERMISSION of the owner of the above E-Mail Address.
*****************************WARNING*********************************
By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine. By Sec.227(b)
(1)(C), it is unlawful to send any unsolicited advertisement to
such equipment, punishable by action to recover actual monetary
loss, or $500, whichever is greater, for EACH violation.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

# 1469. QRP Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: wpeloqui@ismi.net
Message-ID: <33df8428.14618278@news.execpc.com>
Source record: 92135

Hi,

I am currently looking for a QRP tranceiver kit. I have seen a number of them on the net, Wilderness Radio, TenTec, Oak Hills Research. Does anyone have any experience they could share with me? I do not have access to much in the way of test equipment. I have not built anything since high school electronics, and that was an AM tube radio. I would like 40m or possibly 6m.

Thanks in advance for your advice.

Willie N8MDY
Willie Peloquin
Senior Software Engineer
http://www.ismi.net/~wpeloqui

# 1470. Re: QRP Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <33DF8E21.13F8@apollo.wes.army.mil>
Source record: 92136

Willie,
I'm in the same shape! I'm gonna go Ten-Tec.

Butch KF5DE

# 1471. Re: Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: derekt@col.hp.com
Message-ID: <5ro75d$i7m$1@nonews.col.hp.com>
Source record: 92137
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

Astron has an option you can get that automatically resets the
crowbar circuit when the overvoltage condition goes away. You can
get it directly from Astron and install it yourself.
Had this problem with Astron supplies at a repeater site. Every
time a thunderstom glitched the power it required a trip to the site
to cylce power and get the supply back up. As far as I know, this has
not been needed since the option was installed.

N4NR (n4nr@vulcan.com) wrote:
: Hi all,

: I have an Astron 30A 12vdc power supply (RS35A may be the model number,
: I forget) that has developed a nasty habit.

: Twice in the past week, during periods when the commercial AC power was
: going off and back on due to local thunderstorms, the power supply has
: malfunctioned. It had a small load (approx 1 amp) on it when this
: happened. I discovered about 2 hours after the storm that the supply
: had apparantly quit. Upon checking, I discovered that the heat sink was
: **VERY** Hot, and the supply appeared to be laboring under a high
: current load. However, after disconnecting each load, leaving the supply
: running, I discovered that the supply's output voltage was 0.76 volts
: with no load attached. It still appeared to be under a load based upon
: it's transformer hum.

: Turning the supply's AC power off and back on corrected the problem, and
: all appeared normal. However, it got back into the same condx again a
: few days later after a storm. I have not been able to duplicate this
: state by quickly removing and applying ac power.

: Anybody had a similar experience and have an idea as to the failure
: mechanisim?

: Thanks,

: Dennis
: n4nr@vulcan.com

# 1472. Re: Learn about Amateur (Ham) TV at this WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: bb099@cleveland.Freenet.Edu
Message-ID: <5rodk6$pvr@alexander.INS.CWRU.Edu>
Source record: 92138
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In a previous article, wb6izg@qsl.net (Bruce W. Forsberg) says:

>If your have ever thought about getting into Amateur Television or just wonder
>what it is all about then you need to check out my ATV web site at:
>
>http://www.qsl.net/wb6izg
>
>ATV is the least understood of all Ham activities and all it requires is a
>no-code Ham license. It is also not as expensive as you might think. Check it
>out.
>
>73,

Go for it, but just don't mention HF privleges ;-)

73's
--
```
_______________________________________________________________________
/ \
| "Death before disco !" bb099@cleveland.freenet.edu "Fuzzy Navels suck !" |
\_______________________________________________________________________/
```

# 1473. HEATH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: David Saunders <saunders@connect.net>
Message-ID: <33DFBFD9.3422@connect.net>
Source record: 92139

Sir;

I have a Heathkit HR 10B I brought 20 years ago it still works fine.
You are right some are junk.

KA5HIL

# 1474. Novice Home Page Updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33dfa243.0@cheese.pcug.org.au>
Source record: 92140

A number of improvements have recently been made to "Novice Notes Online" - Australia's leading internet site to beginners to amateur radio. These include a new feature on setting up a shack, a link to the Amateur Radio Balloon Experiment and more.

Much of the material on Novice Notes Online is relevant to people outside Australia. Topics covered in detail include operating, homebrewing, VHF, packet radio, portable operating, DX and more.

Closely associated with Novice Notes Online is the Australian QRP Home Page. This includes information about QRP in Australia. As well, there are operating hints, thoughts on what QRP rig to build/buy and contest information.

Both of these pages can be accessed through the URL below.

73, Peter VK1PK

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

# 1475. Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Stanley Koontz <stush@toolcity.net>
Message-ID: <5rorfq$g7@news.toolcity.net>
Source record: 92141
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

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The range is 600 to 1500 Hz I was thinking of using 2 NE567's.
If anyone has a better idea please let me know. Web page reference
welcome.

My design seems like the best but it never hurts to get input..

---
---
Remember: Duct tape is like the force: it has a dark side and a light side,
and it holds the universe together.

Stanley Koontz BS, EMT-P
stush@toolcity.net
http://www.toolcity.net/~stush
---
---

## 1476. Microstrip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-30 00:00:00 UTC
From: Carlo Botto <IK1INW@amsat.org>
Message-ID: <01bc9c2a$26e606e0$609b1fc3@textrade>
Source record: 92142

Hello friends:

I am looking on any kind of infos regarding microstrips.

I am also looking for any information about available software to calculate them

Thanks for helping.

Best 73 de Carlo.

e-mail: IK1INW@amsat.org

# 1477. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5rqtt6$aqt@sf18.dseg.ti.com>
Source record: 92060
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <wa2iseEE6321.ABB@netcom.com>, wa2ise@netcom.com says...
>
>Seems a quick and easy way to do a QRP CW transmitter would be to
>select one of those TTL oscillator modules that oscillate on a ham band
>frequency, perferrably in a CW subband. Saw some surplus "AS-IS"
>soundblaster PC cards with 28.322MHz, seen a few other ham freqs
>elsewhere too.

This is an old trick. There was a magazine article many years ago,
perhaps in "73" magazine, that told how to use the 28.322 modules.
They called them "Fireballs", and there used to be a "Fireballers"
net on that frequency.

73 de K5DH

## 1478. F.S. - Tubes, books, radios...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970731050001.BAA13436@ladder02.news.aol.com>
Source record: 92061

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco plus radio related publications. Schematics for many older radios and TV's - just $3 delivered. Tube Manuals, Tube Substitution books, Service Manuals, radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #711-T.

# 1479. WTB Drake R-4B Receiver Filter Capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: movius <movius@ibm.net>
Message-ID: <33E1548E.6200@ibm.net>
Source record: 92062

Looking for a Filter Capacitor for the Drake R-4B Receiver. The Drake
Schematic ID is C-90. The cornell Dublier(CDE) P/N is UPN10576.
This Cap is 1 5/16 diam and 3 inches high. It is a 4 section, Metal
can, vertically mounted with 4 tabs thru bakelite on the bottom to
solder to.
The Capacitance rating is: 3 sections at 100 MFD @ 200 volts
and 1 section at 20 MFD @ 200 volts
If you have a Cap like this or can tell us where to purchase one in
order to revive some older Ham equipment it would be appreciated.
Please send information, costs etc to:
Ken Wood (K6IIS) at:
K6IIS@IBM.NET

## 1480. 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: fireman@netrover.com
Message-ID: <19970731203149256@trois38.netrover.com>
Source record: 92063
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I'm new to this ham stuff. I don't even have my license yet. All I do presently is listen to the local repeaters with my portable and study to pass my exam in september.

I need a vertical antenna from which I can get good performance. I know that quads or yagis offer a lot of gain but I have no rotor and I don't plan on getting one in the near future.

Now, according to the latest posts in the various ham NG, a J-pole is a lousy antenna. I had planned to build one sometimes this month. Now I'm not just sure I should. I heard about dipoles doing a better job. Is this true and where, on the Internet, can I get plans to do this ? Is there other omnidirectionnal antennas that can be built on a thight budget ?

73

Jean-Pierre Magnan
Future VE2 or VA2

## 1481. Linear Amps Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: James Patterson <PattersJ@ecid.cig.mot.com>
Message-ID: <33E08400.F26E2198@ecid.cig.mot.com>
Source record: 92064

Does anyone have a design that they could send me to build a linear amplifier rated at >300W?

I dont mide what type it is (Solid State / Valve) if all of the parts are easily bought in the UK. I need the amp to be able to used from 160m to 10m.

Can anyone out there help me?

Thanks

James Patterson

# 1482. Re: Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33e0895f.915764@news.pipeline.com>
Source record: 92065
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

n4nr@vulcan.com (N4NR) wrote:

>Hi all,
>
>I have an Astron 30A 12vdc power supply (RS35A may be the model number,
>I forget) that has developed a nasty habit.
>
>Twice in the past week, during periods when the commercial AC power was
>going off and back on due to local thunderstorms, the power supply has
>malfunctioned. It had a small load (approx 1 amp) on it when this
>happened. I discovered about 2 hours after the storm that the supply
>had apparantly quit. Upon checking, I discovered that the heat sink was
>**VERY** Hot, and the supply appeared to be laboring under a high
>current load. However, after disconnecting each load, leaving the supply
>running, I discovered that the supply's output voltage was 0.76 volts
>with no load attached. It still appeared to be under a load based upon
>it's transformer hum.
>
>Turning the supply's AC power off and back on corrected the problem, and
>all appeared normal. However, it got back into the same condx again a
>few days later after a storm. I have not been able to duplicate this
>state by quickly removing and applying ac power.
>
>Anybody had a similar experience and have an idea as to the failure
>mechanisim?
>
>Thanks,
>
>Dennis
>n4nr@vulcan.com
On a 7-amp machine, I had a similar prob once.
I believe (speculate) that it was caused by a
voltage spike charging the filter cap(s) above
some critical point referent the regulators.

At any rate, I replaced the 27K bleeder resistor
on the caps with a 10 K and the problem went away.

Good luck.
Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.

(Typical of the Breed)

# 1483. Re: homebrew transceivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <33E14C0D.192B@pop.removethistomailme.net>
Source record: 92066

Hugh Duff wrote:
>
> "Christopher S. Bradford" <csb@together.net> wrote:
>
> >I've found many sources for homebrew transceivers, but I'm looking for
> >recommendations... from personal experiences, what works and what
> >doesn't? Can I throw together a 80-10m hf cw station for under $50?

Yes.

> No. There are several monoband transceiver kits in this price range
> but I haven't seen anything 10 to 80 meter for <$50.

He didn't say anything about kits, at least not in so many words.

It should certainly be possible for someone equipped with less than $350
worth of tools and test equipment to build an 80-10 CW transceiver for
under $50. The result wouldn't be feature-laden, or cosmetically
pretty, or be able to offer leading-edge "turnkey" performance in all
respects, but it could certainly work well with enough creative
scrounging. An interesting challenge, and not one that deserves an
answer like "No."

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 1484. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: geomac@hop-uky.campus.mci.net
Message-ID: <geomac-3107972312130001@s01-pm38.snaustel.campus.mci.net>
Source record: 92067
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <01bc9c86$42838ec0$cc0d2399@peter->, "Peter Gottlieb"
<peter_gottlieb@msn.com> wrote:

> Walt Davidson <walt@dial.pipex.com> wrote in article
> <33e402e4.9763615@news.dial.pipex.com>...
> > >In my neck of the woods...McDonalds uses it for their drive-thru
> > >headsets...
> >
> > You can place orders in McDonalds drive-thru using CW????
> >
>
>
> So that's why so many people want to keep the CW requirement!!

Maybe that's why they get the orders wrong sometimes.

George
WA3DNC

# 1485. Re: ?? 12V DC TO 9V AC ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: jdport <jdport@concentric.net>
Message-ID: <33E17330.5E99@concentric.net>
Source record: 92068

As noted by others, if you're looking for power for a C64 or Vic 20, don't waste your money, 12 volts DC will run a Vic direct and with a simple 5 volt regulator, all DC, the C64 will run nicely... many of us have been doing so for years. See the info on Commodores on my web page: http://www.arc.unm.edu/~jdport

MICHAEL SMITH wrote:
>
> ANYONE KNOW HOW TO CONVERT 12V DC TO 9V AC 60HZ??? ANY HELP WOULD BE
> NICE.. E-MAIL WITH INFO... THANKS MIKE....
> --
> mjs@now-online.com

--
Anti-SpamBots 'R Us: to respond merely delete the "_" from my email address

# 1486. Re: IN1671 data please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5rqjd1$fgr$3@nadine.teleport.com>
Source record: 92069

In article <UlLKkJAPsF4zEwkY@two-way.demon.co.uk>,
philip de cadenet <phil@two-way.demon.co.uk> wrote:
>I've been given a fairly chunky diode made by Int Rectifier, a IN1671
>and would appreciate some basic data, it's not in my Towers book.
>Is there a contact number for IR in the UK.

According to an old Motorola reference, it's a general-purpose silicon
rectifier. 100 volts peak reverse working voltage, Io 240 amps, Ir 50 mA.
That's all it shows.

Roy Lewallen, W7EL

# 1487. Re: Linear Amps Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <Dex$K3Ak0O4zEwUI@two-way.demon.co.uk>
Source record: 92070

In article <33E08400.F26E2198@ecid.cig.mot.com>, James Patterson
<PattersJ@ecid.cig.mot.com> writes
>Does anyone have a design that they could send me to build a linear
>amplifier rated at >300W?
>
>I dont mide what type it is (Solid State / Valve) if all of the parts
>are easily bought in the UK. I need the amp to be able to used from 160m
>to 10m.
>
>Can anyone out there help me?
>
>Thanks
>
>James Patterson
Hi James,
Mobile or base?

Phil G4ZOW/M

## 1488. Vox Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: Carlos Gil Nieto <karlos@arrakis.es>
Message-ID: <01bc9dd0$5b0146e0$0100007f@karlos>
Source record: 92071

I need schematics for a Vox PTT Control Circuit
--
Carlos Gil Nieto. EA1II
e-Mail: karlos@arrakis.es

# 1489. QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseEE6321.ABB@netcom.com>
Source record: 92143
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Seems a quick and easy way to do a QRP CW transmitter would be to select one of those TTL oscillator modules that oscillate on a ham band frequency, perferrably in a CW subband. Saw some surplus "AS-IS" soundblaster PC cards with 28.322MHz, seen a few other ham freqs elsewhere too.

Mount the oscillator module at the feedpoint of a dipole or vertical, and run a +5 volt switched (by morse code key) from the ham shack. You'll need a seperate recieve antenna. Or just use a Radio Shark shortwave receiver with BFO and a long-wire antenna. It would be like the old days of the All-code novice license, with xtal locked xmit frequencies.

Yeah, it's full of harmonics, but at these QRP levels, that shouldn't much matter. But if you do RFI your neighbor during his favorite TV show, just wait untill that show is over.

# 1490. Re: NE602's at Allied Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: "Christopher S. Bradford" <csb@together.net>
Message-ID: <33E03C24.3B82@together.net>
Source record: 92144

ka8ddz wrote:
>
> For those who use them, Allied Electronics has a plethora of NE602's.
>
> Allied Electronics 800-433-5700
>
> 73, Tim
>

GRRRREEEEEEEEEEEAAAAAAAATT!!!!!

But are they free?
> ---
>
> KA8DDZ
> Enjoy Amateur Radio more, build your next radio
> QRP & Homebrew!

# 1491. Re: Power Supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <9P4s5MALID4zEwil@ifwtech.demon.co.uk>
Source record: 92145
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew

Derek Toeppen wrote:
> Astron has an option you can get that automatically resets the
>crowbar circuit when the overvoltage condition goes away. You can
>get it directly from Astron and install it yourself.

That sounds like a very good idea! The standard option, where the crowbar forces the supply into a fold-back condition, is really intended for bench use. It allows you to experiment by varying the voltage, and the crowbar prevents you from accidentally appplying too much.

The situation with repeaters and remote sites is different. There the output voltage is fixed and the crowbar is intended to protect against an overvoltage caused by a failure in the power supply itself (especially due to a mains surge). For that purpose you need a very simple trip circuit that reliably removes power from the downstream equipment and preferably disconnects the mains too. Protection must NOT reply on any kind of normal circuit operation from the power supply, because it must be assumed to have failed.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
www.ifwtech.demon.co.uk/g3sek

# 1492. IN1671 data please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <UILKkJAPsF4zEwkY@two-way.demon.co.uk>
Source record: 92146

I've been given a fairly chunky diode made by Int Rectifier, a IN1671
and would appreciate some basic data, it's not in my Towers book.
Is there a contact number for IR in the UK.

Thanks for all help.

Phil G4ZOW.

# 1493. ****PLEASE HELP WITH RADIO INSTALATION****

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: eugened@aol.com
Message-ID: <19970731000400.UAA08220@ladder01.news.aol.com>
Source record: 92147
Body handling: HTML body converted to readable text

Hello,

A while back I got my first CB, a Cobra 18RV. I did not have an antenna, so I simply put up an old mini-TV Dipole antenna in my attic, I ran the wire down, and simply connected it to the antenna conector. I didn't ground the radio, I didn't even have anything leading out of the outside part of the antenna connector on my CB. I found performance to be OK, not horrible, but yet not quite good. I got up to 5 miles range. Then the mic went out on the radio. I found out that a new mic from Radio Shack is $14.95, but I paid $15 for the CB, so I thought it would be cheaper to just get a new CB. So I did. I found a brand new, in the box, Cobra 19 Ultra for sale at a flea market for $25, so I bought it. The unit was brand new. I got the whole thing together, but I already had taken down my mini-TV dipole in the attic. So now I went searching for a base CB antenna. I got one for $7 at a flea market, and I also got a SWR/Power meter too. The antenna is about 9 feet high, and came with a small mag mount base thing, which obviosly didn't belong on this antenna. I got the proper adapters from Radio Shack, and put it in the highest point in my attic. I used a cable TV wire by changing the plugs on each end to run it down. Now, when I key the radio (remember, this is the Cobra 19, not the 18RV) I see the radio's build it S-RF/Power meter go all the way max to the red part. From my expirience, this means that the antenna is performing well. My base power supply is a old train set power supply, which has a variable meter that goes from like 3 volts all the way up to about 14 volts. I run it at 14 volts, and the radio's meter seems to be showing that the power supply is fine. I also have an external SWR/Power meter, but I don't know how to use it. I didn't get the instructions with it. It's a Radio Shack Micronta meter, with a switch that switches between "ref" and "fwd", and a small whole in the middle which reads "FS ANT", and also a tuning dial that reads "CAL". I have found that my range has decreased alot, I now get about 2 miles. Could this be because I'm using a Cobra 19, and not the 18? The Cobra 18RV is almost twice as big as the 19, but the 18RV has three weather channels, and the 19 doesn't. Could it be simply because the 19 is phisicly smaller in size? The 18RV is an older model, I would guess 1990 or 1991. The 19 is brand new. Both radios perform excellent when mobile with a mag mount, I sometimes get up to 20 miles. Please help me with this installation. What am I doing wrong? Should I install the SWR meter and see what happens? I know that a 1:1 match is perfect, and if the second number is high then it's a bad antenna match. But I do not know how to work the SWR meter. I also tried adding ground. There is a small screw on the back of the 19 where you can hook up a wire to ground, and I tried it by putting the other end of the wire around a metal nail and putting it into the

lower part of an electrical outlet which is ground, but I did not see a diffrence. Please tell me what I am doing wrong. My operating location is also somewhat low, surrounded by some hills, but nothing major. Please advise me.

Thanks alot,
EugeneD@aol.com

# 1494. Re: IN1671 data please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970731181800.OAA01261@ladder01.news.aol.com>
Source record: 92148

>
>I've been given a fairly chunky diode made by Int Rectifier, a IN1671
>and would appreciate some basic data, it's not in my Towers book.

1N1671....Obsolescent, 100 volt PRV, 240 amperes, (Infinite heat sink), 50
mA reverse leakage max...Silicon of course.

W4ZCB

## 1495. Re: Linear Amps Design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970731181301.OAA00991@ladder01.news.aol.com>
Source record: 92149

>
>Does anyone have a design that they could send me to build a linear
>amplifier rated at >300W?

Pat Hawker has had a dozen of them in back issues of RadCom.

W4ZCB

# 1496. FS: Tube Equipment/ NOS-Oil Caps/ Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <33E0FA44.4B88@ix.netcom.com>
Source record: 92150
Cross-posted to: alt.music-lover.audiophile.hardware,alt.marketplace.funky-stuff.forsale,rec.music.makers.marketplace,alt.guitar.amps,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

7/31/1997

For Sale: Tube Equipment/ Oil Caps/ Tubes

Sherwood S-3000-III FM-stereo capable Tuner
-excellent working condition; in good alignment; very sensitive;
accurate tracking
-no MPX-operating mono/ proprietary jack easily modded into universal
MPX out
-original Sherwood branded tubes
-the tuner sounds wonderfull!!
Sherwood S-1000-III mono Integrated amp
-excellent working condition
-2 x 7868-good (Bogen) included/ 2 x 6eu7 / 1 x 6k11
-has 2 mic inputs AND 4/8/16 ohm taps and 70v

Both with metal cabinets in very good cosmetic condition (few face
scratches on tuner)
$80.00 each or $150.00 for both + shipping

NOS Oil Caps

11 Westcap 1uf 400v code 2150005685 2 x lot 1522/ 6 x lot 2058/ 3 x
lot 6146
8 Sangamo 1uf 300v code cpv 09a1kd105j

$65.00 for all. I would prefer to sell all, hence discount.
$45 for 10
$25 for 5.

Tubes; will not separate

NOS-

RCA- 6am4 / 3hm5(ha5)marked Holland / 6md8 /5u5 /6mk8 / 8ba11 / 6hb7 /
6mq8 / 6cg8a / 3dt6/ 6gm6 / 8bm11 / 6ja6 / 6bh8 / 5aq5 / 3au6 / 6mu8 /
6aq5a / 2cy5 / 3x-5cL8a/
12hg7 / 6n7a /6jc6a
Zalytron- 2as2 / 3ha5 / 2x 4bz6 6ea8 / 6ba11 / 6hg8 / 17jn6
Raytheon- 12cn5/ 2x-6ak5 / 2x 10gk6
GE- 3a3c(aw3/b2) / 13z10 / 6gm6
Westinghouse- 2x-6k6gt
Sylvania- 2cy5 / 10gk6
Realistic- 6bn6
Clarostat -60-92-a

Zenith - 13z10
Hytron -1269
Tung Sol 6eu8
Mullard- 15cw5/PL84

Used-

RCA- 2x-6fq7(cg7) / 6hq5 / 4x 6bq6gtb / 6cu6 / 6gm6 / 12d4 / 17jn6 /
8am8 / 12L6gt / 6ea8 / 6dr7 / 6cj3(ch3)
GE- 6cj3 / 6dw4b / 6bk4 / 6eL4a
Tung Sol- 6bj6 / 6bq6gtb(cu6)
Sylvania- 6le8 / 6ea3
Connectron 5u8 / 6gy6
Raytheon- 2x-22bw3
Magnavox 6hq5 / 6dt6a
Zalytron- 17jn6

$65.00 for all + shippping

All prices + shipping

Please reply to:

rl1856@ix.netcom.com

Thank you,

Ross Lipman

--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

# 1497. 1 KW linear from QEX article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: paul@pachena.ca
Message-ID: <870383142.8638@dejanews.com>
Source record: 92151

Hello all,
Has anybody built the 1 kW linear described in QEX July 1990. I
only know of the article and haven't been able to find a copy of it.
I would appreciate a fax copy or snail mail copy of it. Also any
feedback on construction/performance etc. fax in Vancouver is
604-291-1567.
Thanks all.
Paul Wende
VE7KHz

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 1498. Re: Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: "John McDougall"
Message-ID: <5rqvl1$bm0@kannews.ca.newbridge.com>
Source record: 92152
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

Stanley Koontz wrote:
>
> I need to build a tone decoder system. The system is based of a 2+2 System.
>
> The range is 600 to 1500 Hz I was thinking of using 2 NE567's.
> If anyone has a better idea please let me know. Web page reference
> welcome.
>
> My design seems like the best but it never hurts to get input..
>
Depending on the tones you want to decode, if you are decoding DTMF
tones (phone tones), you can use a Mitel MT8870. This device has the
filters inside, and outputs a 4 bit result.

## 1499. PIC Microcontroller site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: Andy <andy@microcosm.net>
Message-ID: <5rr1qh$q4d@paperboy.world-net.net>
Source record: 92153

I made a new site which let's users add link to PIC Microcontroller sites.
It's at:
http://www.microcosm.net/pic
/

If anyone has any info about using the PIC in frequency counters, I would
be interested as well.

-Andy

# 1500. List Of Stamp Applications [970801]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: cjNOSPAM@hth.com
Message-ID: <33e0fcae.26305993@news.buller.se>
Source record: 92154
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Hi,

Here is the latest index of L.O.S.A. It includes almost 100 ideas
of what you can use your BASIC Stamp's for (many with code). You
can download the complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 Whats is L.O.S.A all about ?
---

I started to compile L.O.S.A because I know there are lots of great
ideas and many problems that are solved with the BASIC Stamp and the
main purpose of this list is to get an idea of what other people are
using their BASIC Stamps for and maybe get some inspiration or hints.

1.1 How can I contribute to this list ?
---

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
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> = Indicates a new or updated application since last time.

# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
# 004 Scrolling LED Sign
# 005 Tone Decoder
# 006 Pager
# 007 HexWalker Mobile Robot
# 008 Robo Bug

# 009 EXPBOT Robot controlled by Stamp
# 010 Andrews Ever Evolving Lego Robot
# 011 Factory Monitoring System
# 012 Wave to the Cats/Desk Temperature
# 013 Gamer's Die Roller
# 014 Stamp II Serial I/O
# 015 Voice and CW Fox Hunt Transmitter IDer
# 016 Lift (elevator) Controller
# 017 Paging with the Stamp
# 018 Switching Sytem
# 019 Door Entry Card Reader
# 020 Telephone Card Reader
# 021 DTMF Decoder
# 022 Ion chamber radiation monitor
# 023 Barn Monitor
# 024 Dallas one-wire interface
# 025 Sculpture control
# 026 Commercial clothes dryer controler
# 027 Morse Code Keyer
# 028 Traffic Light Controller
# 029 Automotive Lamp Control
# 030 Single Switch Scanning Device for Disabled
# 031 Bell timer for school bell control
# 032 RIMS controller for beer making
# 033 Stamp 1 and ISD 25XX Sound Chip Application
# 034 Camera Wireless Controller
# 035 Simple Battery Check using the BS2-IC
# 036 Photocell MIDI Controller
>
# 037 DCF-Clock
# 038 Radio-controlled Digital Clock
# 039 Weather Station I
# 040 Private Aid To Navigation
# 041 Stamp II in Space
# 042 MAT32 long integer math routines
# 043 Distinctive Ring Detector
# 044 Extended Stamp Memory
# 045 Debate Stoplite
# 046 Digital nametag
# 047 ST506 Disk Seeking Demo Controller
# 048 Robot: Multi-Stamps Communicate via Shared Memory
# 049 NiMH Battery Charger/Conditioner
# 050 555 Timer as A/D Converter
# 051 Bits of Light
# 052 Process Control
# 053 Near Space Capsule
# 054 PIC Debugger
# 055 DS1820 Temp Sensor
# 056 Air muscle hexapod robot
# 057 Lights
# 058 Caller-ID Interface

# 059 Wind speed and wind direction measurement device
# 060 Calibrated Dust Feeder for Air Cleaner Tests
# 061 Use of a Serial EEPROM as a Lookup Table
# 062 Displaying Quantities on a 200 mV Panel Meter
# 063 Programmable Proportional Air Valve
# 064 Basic Stamp machine control application
# 065 Compass Interface for Navigation
# 066 Truck + ? identification
# 067 Meteoreological Station
# 068 Stamp Controls Electronic Tester for flex circuits
# 069 Game Timer
>#  070 Photoghrapic light meter
# 071 Data System Remote Control on unmanned aircraft
# 072 Speaking Instructor
# 073 Small Moblie Robot
# 074 R/C helicopter altitude control unit
# 075 Automobile Rally Odometer Interface to Laptop
# 076 LCD drivers
# 077 Stamp I / PC Interface Demo
# 078 Stamp Photo Meter
# 079 Stiquito(TM) 97 HexaPod Robot
# 080 XRaCS DTMF Radio X10 Control with Voice Response
# 081 Interfacing the Basic Stamp 2 with I2C Devices
# 082 Weather Station
# 083 Maxxum 7000 Remote Release Widget
# 084 Xs And Os games for college project
# 085 Stamp II Mouse Emulator (Version 6)
# 086 Basic Alarm System
# 087 Interfacing with a Printer
>#  088 Dinosaur Quiz Game
>#  089 Chemical Injection System
>#  090 RS-232 connections between Stamp and host
>#  091 Video Character Overlay Generator Controller
>#  092 Suction tube depth measurement display

Regards,

/Christer

[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]

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* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

# 1501. Re: QRP Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33E0856D.3DD@erols.com>
Source record: 92155

Willie Peloquin wrote:
>
> Hi,
>
> I am currently looking for a QRP tranceiver kit. I have seen a number
> of them on the net, Wilderness Radio, TenTec, Oak Hills Research. Does
> anyone have any experience they could share with me? I do not have
> access to much in the way of test equipment. I have not built anything
> since high school electronics, and that was an AM tube radio. I would
> like 40m or possibly 6m.
>
> Thanks in advance for your advice.
>
> Willie N8MDY
> Willie Peloquin
> Senior Software Engineer
> http://www.ismi.net/~wpeloqui

Check out http://www.xmetric.com/sseng/ S&S Engineering has a nice
line of systhesized QRP kits. I have built two and find them very stable
and reliable.

# 1502. Re: Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: Hans Attersjo <hattersj@nospam.eso.org>
Message-ID: <5rph6o$d3u@thorgal.et.tudelft.nl>
Source record: 92156
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

Stanley Koontz wrote:
>
> I need to build a tone decoder system. The system is based of a 2+2 System.
>
> The range is 600 to 1500 Hz I was thinking of using 2 NE567's.

2567 is a dual 567. It is normally prefixed with two letters like XR or
NE depending on the manufacturer.

--

Hans Attersjo
ESO, la Silla
Chile
Remove the nospam from my email address.

# 1503. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33E118F9.2A7F@ix.netcom.com>
Source record: 92157
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Robert Casey wrote:
>
> Seems a quick and easy way to do a QRP CW transmitter would be to
> select one of those TTL oscillator modules that oscillate on a ham band
> frequency, perferrably in a CW subband. Saw some surplus "AS-IS"
> soundblaster PC cards with 28.322MHz, seen a few other ham freqs
> elsewhere too.
>
> Mount the oscillator module at the feedpoint of a dipole or vertical,
> and run a +5 volt switched (by morse code key) from the ham shack.
> You'll need a seperate recieve antenna. Or just use a Radio Shark
> shortwave receiver with BFO and a long-wire antenna. It would be like the
> old days of the All-code novice license, with xtal locked xmit frequencies.
>
> Yeah, it's full of harmonics, but at these QRP levels, that shouldn't
> much matter. But if you do RFI your neighbor during his favorite TV show,
> just wait untill that show is over.

I suspect that these modules output square waves, which means that it's more than "full of harmonics", it _is_ harmonics. I'm no expert, but it seems to me that the FCC regulations regarding spectral purity of amateur transmitters come into play here, even at QRP levels.

Besides, it's not generally good relations with the general public to be QRMing all across the many bands. I suspect that a simple bandpass filter on the output would solve all of that, and save you from a punch in the nose from your neighbor.

--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html

# 1504. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: Jeremi Lee <jemlee@taurus.oac.uci.edu>
Message-ID: <Pine.GSO.3.96.970731162208.29550C-100000@taurus.oac.uci.edu>
Source record: 92158
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

To be exact at that frequency you will need complicated digital PLL
tuning!

Jeremi Lee

On 27 Jul 1997, Peter Gottlieb wrote:

> Paul DiSciascio <thenut@netaxs.com> wrote in article
> <33D92F1A.3CC1C80D@netaxs.com>...
> > I am looking for some schematics for a transmitter that will transmit
> > voice or even just CW on 170.245 MHz.
>
>
> That's an odd frequency to transmit on.
>
>
>

## 1505. Electronic parts,tech support, and service

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-07-31 00:00:00 UTC
From: centralr@ccia.com
Message-ID: <5rqmko$a3s$3@207.18.94.110>
Source record: 92159
Cross-posted to:
rec.antiques.radio+phono,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Are you in need of outdated hard to find parts, tubes, schematics, even new parts we are the company for you we have been in buissness since 1951 and still have a large stock of new parts and schematics. we have been selling SAMS since the beginning and have them still fresh in the package, Picture tubes, Yokes, Coils (tv & Radio), Tubes, even the old equipment for you avid collectors

We will even provide tech support email us at centralr@ccia.com

We also service just about anything made

Come visit our web page http://www.ccia.com/~centralr/ and see all we have to offer.
http://www.ccia.com/~centralr/

# 1506. www.potg.com = Unique, FREE comedy radio show on the web

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970801061700.CAA29456@ladder02.news.aol.com>
Source record: 92072

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.

Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."

Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.
The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 1507. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: 708042@ican.net
Message-ID: <MPG.e4b90ca101a9c5e989683@news.ican.net>
Source record: 92073
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
In article <geomac-3107972312130001@s01-pm38.snaustel.campus.mci.net>,
geomac@hop-uky.campus.mci.net says...
> In article <01bc9c86$42838ec0$cc0d2399@peter->, "Peter Gottlieb"
> <peter_gottlieb@msn.com> wrote:
>
> > Walt Davidson <walt@dial.pipex.com> wrote in article
> > <33e402e4.9763615@news.dial.pipex.com>...
> > > >In my neck of the woods...McDonalds uses it for their drive-thru
> > > >headsets...
> > >
> > > You can place orders in McDonalds drive-thru using CW????
> > >
> >
> >
> > So that's why so many people want to keep the CW requirement!!
>
> Maybe that's why they get the orders wrong sometimes.
>
> George
> WA3DNC
>

NO, they get the orders wrong because they use High Speed CW! After
all McDonalds IS a FAST FOOD chain...

--
Doug Smith 708042@NO_SPAM.ican.net
CQ DX DE VE3IYB 144.200MHz USB
Looking for 6M QRP gear
az183@freenet.toronto.on.ca
mgb@jerrys.rogerswave.ca
```

## 1508. Some advice please....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: 629371@worldnet.att.net
Message-ID: <33E1DE84.2833@worldnet.att.net>
Source record: 92074

I've got a non-ham friend who's dad died a few weeks ago. In cleaning out the shack, we've managed to get rid of most of the gear, but there are boxes and boxes of misc. parts, such as packages of resistors, capacitors (sp?), coils, mini motors, roller inductor tuners, etc...that we have no idea of their value or what to do with them. Almost 6 cartons worth, and most of the stuff is new, still in their packages...

To my friend, it's junk...to me, I know all these components must be worth a couple hundred (or more) dollars, but I don't have any idea how to price them and get rid of them. There's no hamfest coming up...

Any money we get will go to his widow. We can't just throw/give them away, without explaining to the probate court why we junked good equipment/parts...I'm stuck.

Any help/advice is appreciated.

John

# 1509. Re: Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: joewest@sr.hp.com
Message-ID: <5rs1j3$qjg@thorgal.et.tudelft.nl>
Source record: 92075
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

Stanley Koontz (stush@toolcity.net) wrote:
: I need to build a tone decoder system. The system is based of a 2+2 System.

: The range is 600 to 1500 Hz I was thinking of using 2 NE567's.
: If anyone has a better idea please let me know. Web page reference
: welcome.

: My design seems like the best but it never hurts to get input..

Long ago and far away I worked on a DTMF (= "touch-tone") decoder using
NE567s. It turned out to be quite an education.

The problem was not the NE5676s, although there were some issues getting
the PLLs set up appropriately. Rather, the problems were with rejecting
noise inputs that included normal voice conversation.

By the time I made it work with adaquate rejection of false inputs, I
found I had to normalize the input (run it through an AGC circuit, which
has its own set of issues to do properly), then
band-split it into the DTMF high and low group frequencies, then put
schmitt-limiters between the filters and the tone-detectors (to keep
the detectors from seeing low-level inputs) and then put a timer on the
decoded output to make sure it was present for a required minimum amount
of time.

About the time I got that far, a commercial DTMF decoder became available
in IC form, and that is what we wound up using instead.

The last time I looked (8 years ago or so), a company called Teltone, located
in Belview, WA, had a competant IC available for $10 or so. All you had to
add was a color-burst crystal ($1?), power, and appropriate
input and output connections. Output was TTL levels, BCD plus strobe.

I realize that is not as much fun as rolling your own, but it seems
quicker and cheaper.

Good luck,

Joe

## 1510. Kenwood TL 922 amp help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: frankf1056@aol.com
Message-ID: <19970801144000.KAA15167@ladder02.news.aol.com>
Source record: 92076

anyone familiar even with these amps please write i have some internal problems i need to get straitened out
Frank kb0zfn

# 1511. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970801160900.MAA19988@ladder02.news.aol.com>
Source record: 92077

In article <33E118F9.2A7F@ix.netcom.com>, KD1YV <jimkd1yv@ix.netcom.com>
writes:

>
>I suspect that these modules output square waves, which means that it's
more
>than "full
>of harmonics", it _is_ harmonics. I'm no expert, but it seems to me that
the
>FCC
>regulations regarding spectral purity of amateur transmitters come into
play
>here, even
>at QRP levels.
>
>Besides, it's not generally good relations with the general public to be
>QRMing all
>across the many bands. I suspect that a simple bandpass filter on the
output
>would
>solve all of that, and save you from

Actually I seem to recall a project published some time back using
such oscillators as the basis for a simple rig. I also note that using
low pass filters, it's possible to filter even the output of a square wave
oscillator, btw, I don't think these were square wave oscillators.
Some shaping in the circuitry keying the rig, and you've probably got
a rig worth trying to play with. OK, the crystal control is a pain, but
if it works, haven't you had some fun?
-art clemons-

# 1512. Re: Kenwood TL 922 amp help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <33E21B7C.448B@onramp.net>
Source record: 92078

FrankF1056 wrote:
>
> anyone familiar even with these amps please write i have some internal
> problems i need to get straitened out
> Frank kb0zfn

Like what???

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 1513. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: Jim Phillips <phillips@spacestar.net>
Message-ID: <33E2221F.4F07@spacestar.net>
Source record: 92079
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Now Jeremi has a sense of humor !

A single frequency transmitter with a PLL..... :-)))

and Paul probably doesn't have a clue about crystals and multipliers.
:-(

I would recommend the Amateur Radio Handbook produced by the ARRL except
he would probably end up building a PLL based transmitter.... :-&

PAUL <-- get yourself a 9.458 crystal, then build an oscillator
followed by one doubler and two tripler amplifiers. Viola! you are
transmitting on 170.244 MHZ. A simple tweak of the oscillator tuning
capicator later and you are on 170.245 - sans modulation - cept maybe
some HUMMMMM if you don't have a stable power source..... :-)

Jim :-b

kb6okh

Jeremi Lee wrote:
>
> To be exact at that frequency you will need complicated digital PLL
> tuning!
>
> Jeremi Lee
>
> On 27 Jul 1997, Peter Gottlieb wrote:
>
> > Paul DiSciascio <thenut@netaxs.com> wrote in article
> > <33D92F1A.3CC1C80D@netaxs.com>...
> > > I am looking for some schematics for a transmitter that will transmit
> > > voice or even just CW on 170.245 MHz.
> >

# 1514. quick and easy panels update

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <33E24318.723F@aade.com>
Source record: 92080

I've posted an update for my
"quick and easy front panels" application
note on my web page http://www.aade.com/sexypnls.html

This clarifys a couple of things people asked about
and adds instructions on how to remove the panel
in case you screw up or change your mind.
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

# 1515. Re: Kenwood TL 922 amp help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: Robert Lay <w9dmk@crosslink.net>
Message-ID: <01bc9eb3$0327b600$8741f6ce@w9dmk>
Source record: 92081

FrankF1056 <frankf1056@aol.com> wrote in article
<19970801144000.KAA15167@ladder02.news.aol.com>...
> anyone familiar even with these amps please write i have some internal
> problems i need to get straitened out
> Frank kb0zfn
>

I have repaired several TL-922's for friends who have had arcovers and blew
out tubes, zener diodes, etc.

E-mail me direct for discussion of your problems.

Also see Rich Measures' Web Site.

73
Bob

# 1516. HB Masthead Preamp and others

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: Harry Lythall <rharris@arcturus.net>
Message-ID: <01bc9ea3$3cf55460$240264c3@acz732k>
Source record: 92082

HB Masthead Preamp and others

I have now added a homebrew masthead preamp circuit
idea to the homepages. More circuits will be added in
the necy couple of days.

Best regards Harry

http://user.tninet.se/~acz732k
http://hem2.passagen.se/sm0vpo

# 1517. Re: ceramic resonators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <33E16378.5BC2@powerup.com.au>
Source record: 92083

When these resonators first came out (?1970-ish) the two legged
devices were said to be for emitter load by-pass at 455KHz.

They narrowed up the pass-band and assisted the other tuned
circuits. The stated emiter load they were intended for was
3K3 R.

I used a few in my old FRG-7 but whether they made any difference
was hard to tell!

Cheers
Fred McKenzie wrote:
>
> In article <5r5qe7$m0v$1@rosenews.rose.hp.com>, tonyz@rose.hp.com (Tony
> Zugec) wrote:
> > How are they used? Mine are 455kc
> > with 2 leads coming out.
> > Normal ceramic filters usually have 3 leads

**********
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
**********

## 1518. Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: dwentz@accessus.net
Message-ID: <5rtk31$h59$1@news.accessus.net>
Source record: 92084

Check out my web page of links and such.
Lots of links to QRP, Parts, Kits, plus other ham stuff.

http://users.accessus.net/~dwentz/kb9jja/jja_ham-links.html

73's de kb9jja

# 1519. 50.400 AM Sat,Sun

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33E25AB4.2781@pactitle.com>
Source record: 92085

Hello all,

Once again I'll be out Calling CQ on 50.400 AM

Sat and Sun..10:00-20:00pdt (17:00-03:00)z

I'll call CQ on the hour and on the half.

Last time I had a tree trimmer running his grinder all weekend.
Had too much QRM and s9 of ac type noise.

There were a few opening though.

Lets hope for a good "open" weekend.

If you want more details on the 50.400 AM test Check out my home page.
http://www.geocities.com/Hollywood/5860/50am.html

Also I'm running a Swan 250/60 watts/Vertical ar-6/

There is a lot of info there.

Thanks everyone!

Dave Booth kc6wfs dm04rk
http://www.geocities.com/Hollywood/5860

--

```
,----------------------.
/ If you understand it, \
/ then it's obsolete! /
\ _______,--------------'
_ |/
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(__)\ _
\ \ .' `.
\ \ / \
\ '" \
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'-| )__| :. \
| | | | \ '.
c__; c__; '-..'>.__
```

Dave Booth KC6WFS

# 1520. FS: Icom IC-2AT $75

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: ghopper_@_eskimo.com
Message-ID: <ghopper_-0108971544360001@ghopper.ndip.eskimo.net>
Source record: 92086
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,alt.radio.scanner,rec.radio.scanner,rec.ham-radio.swap,rec.radio.amateur.homebrew

Icom IC-2AT $75. Includes radio, battery, antenna, and manual. Battery
is tired, radio is in great condition.

This one does not have CTCSS (few did) but it can be added.

Package is $75 plus shipping. E-mail for more details

G Hopper
KB7WSD

ghopper@eskimo.com

--
G.F. Hopper
ghopper@eskimo.com KB7WSD
Remove the anti-spam _ to reply

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
This E-Mail address is NOT-FORSALE or use for JUNK-EMail without the
EXPRESSED WRITTEN PERMISSION of the owner of the above E-Mail Address.
**********WARNING**********
By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine. By Sec.227(b)
(1)(C), it is unlawful to send any unsolicited advertisement to
such equipment, punishable by action to recover actual monetary
loss, or $500, whichever is greater, for EACH violation.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

## 1521. Icom 2710 Mods...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-01 00:00:00 UTC
From: "Stephen T. Portell" <portell@azstarnet.com>
Message-ID: <33E2A162.6D4A@azstarnet.com>
Source record: 92087
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Anyone know a good place to find mods for the new IC2710?

--
Stephen T. Portell
University of Arizona
homepage.............. http://www.azstarnet.com/~portell/portell.htm
Amateur Radio Call.... KA8UKB

# 1522. Re: Microstrip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <33E2FE28.3536@berlin.snafu.de>
Source record: 92088

Carlo Botto wrote:

> I am also looking for any information about available
> software to calculate them

Try the program APLAC from Nokia Phones & Helsinki Univ.
I forgot the primary ftp server, but it was on
nic.funet.fi (or is it now ftp.funet.fi).
It is a serious program for MSWIN or Linux. You'll
need a box of paper or so to print the documentation.

vy 73, Gerhard

--
Gerhard Hoffmann

on the air: DK4XP
in the air: D-8551, D-ESKA

## 1523. How to get to Jade Products Webpage??? Do they exist?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: nospam-herndon@texas.net
Message-ID: <5ruc0l$c8f$1@news3.texas.net>
Source record: 92089

I find several hits on web searchers to Jade Products. However, when I try to follow them up, I get "No DNS entry" reports for both of them. Anyone know a current good web address? I'm looking for a special lead-acid battery charger kit or IC for it. They carry it, I think.

Rick Herndon
K5FNI
Note note below for reply
--
**Note: Return mail requires omitting all before "H" in address.**

## 1524. esay money

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: adrianos@infosel.net.mx
Message-ID: <33e27f78.12242081@news.infosel.com.mx>
Source record: 92090

```
----------
| From: Robert <rw79@centuryinter.net>
| Newsgroups: microsoft.public.access.3rdpartyusrgrp
| Subject: making money
| Date: Lunes 26 de Mayo de 1997 1:47 AM
|

Interrest by making $50,000 ?

HERE"S A FUN WAY TO MAKE SOME EXTRA CASH!!!! WHO KNOWS YOU MAY EVEN
GET RICH!!!!!!!!!!!!!!!!!!!!!!!!!!!!You gotta be crazy! How on earth
do you think you can buy 50 grand for lousy 5 buck? Well, that's what
I was wondering, too until I came across this letter.First of all,
IT'S PERFECTLY LEGAL!(Call 1-800-725-2161) if you have any questions
about the following opportunity to make $50,000.00 and that probably
WITHIN LESS THAN TWO MONTHS!Well, here it goes:A little while back, I
was browsing these newsgroups, just like you are now, and came across
an article similar to this that said you could make thousands of
dollars within weeks with only an
initial investment of $5.00! So I thought, "yeah, right, this must be
a
joke," but like most of us I was curious, so I kept reading. Anyway,
it said
that you $1.00 toeach ofthe 5 names and addresses stated in the
article.
You then place your own name and address in the bottom of the list at
#5, and
post the article in at least 200 newsgroups. (There are thousands) No
catch,
that was it.I knew that that was the opportunity I had waited for a
long
time.I thought it was about time that the money of the world gets into
the right hands! OURS, right? I never had a doubt that this thing
will
actually work and even if it didn't, what were 5 stamps and $5.00 for
a
try? As I mention before, like most of us I was a little skeptical and
a little worried about the legal aspects of it all. So I checked it
out
with the US Post Office (1-800-725-2161) and they confirmed that it is
indeed
legal! Now, that's how your story WILL sound like, too if you
participate:Well GUESS WHAT!!... within 7 days, I started getting
money in
the mail! Iwas shocked! I still figure it would end soon, and didn't
```

give
it another thought. But the money kept coming in. In my first week,
I
made about $20.00 to $30.00 dollars. By the end of the second week I
had
made a totalof over $1,000.00!!!!! In the third week I had over
$10,000.00
and it's still growing. This is now my fourth week and I have made a
total
of just $42,000.00 and it's still coming in....Let me tell you how
this works
and most importantly, why it works...also,make sure you print a copy
of this
article NOW, so you can get the information off of it as you need it.
The
process is very simple and consist of 3 easy steps:STEP1: Get 5
separate
pieces of paper and write the following on each piece of paper "PLEASE
PUT ME
ON YOUR MAILING LIST." Now get 5 $1.00 bills and place ONE inside each
of the 5 pieces of paper so the bill will not be seen through the
envelope to
prevent thievery. Next, place one paper ineach ofthe 5 envelopes and
seal
them. You should now have 5 sealed envelopes,each with a piece of
paper
stating the above phrase and a $1.00 bill.What you are doing is
creating a
service by this. This is perfectly legal! Mail the 5 envelopes to the
following addresses:

#1 J. A. Gang
970 Paces Circle #300
Apopka, FL
32703

#2 T.J. Kashin
2009 Hollyhock St
Pekin, IL 61554

#3 Fred Dufour
1596 39avenue
Montreal, QC
H1A4A2, Canada

#4 Robert Wisowaty
1341 Kane st.
La Crosse, WI 54603

#5 Adrian Silva
Tepozteco 102A
Cuernavaca MOR 62150

Mexico

STEP 2: Now take the #1 name off the list that you see above, move the other names up(2 becomes 1, 3 becomes 2, ect...) and YOUR NAME as number 5 on the list.STEP 3: Change anything you need to but try to keep this article as close to the original as possible.
Now, post your article to at least 200 newsgroups. (I think there is close to 18,000 groups) All you need is 200, but remember, the more you
post, the more money you make!Don't know HOW to post in the newsgroups?
Well do exactly the following:**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!!BUT YOU HAVE TO POST A MINIMUM OF 200****If these instructions are too complex to follow, try Forte's "Free Agent." It is freeware for non-commercial use.To download it, simply use a search utility and type "Forte Free Agent". You should be able to find it.**That's it! You will begin receiving money from around the world within days! You may eventully want to rent a P.O. box due to the large amount of mail you receive. If you wish to say anonymous,you can invent a name to use as long
as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**Now the Why part:This entire principle works because it is in a
format of an upside down tree with thousands of branches. Everyone below you
will see to it that the tree continues because they want to get money. Those
below THEM will continue because THEY want to get the cash ect.Out of 200
postings, say I receive only 5 replies ( a very low example). So then I made
$5.00 with my name at #5 on the letter. Now, each ofthe 5 persons who just
sent me $1.00 make the minimum 200 postings, each with myname at #4 and only
5 persons responds to each of the original 5, that is another $25.00 for me,
now those 25 each make 200 minimum post with myname at #3 and only 5 reply each, I will bring in an additional $125.00!Now,those 125 persons
turn around and post the minimun 200 with my name at#2 and only 5 replies
each, I will make an additional $626.00! Ok, now here is the fun part, each
of the 625 persons post a minimum of 200 letters with my name at #1 and they
each receive 5 replies, that just made me $3,125.00!!! With a original
investment of only $5.00! AMAZING! And as I said 5 resonses is actually VERY

LOW! Average is probable 20 to 30! So lets put those figures at just 15
responses per person. Here is what you will make:at #5 $15.00 at #4 $225.00 at
#3 $3,375.00 at #2 $50,625.00 at #1 $759,375.00. When your name is no longer on
the list, you just take the latest posting in the newsgroups, and send out
another $5.00 to the names on the list, putting your name at number 5 and
start posting again. The thing to remember is that thousands of people all
over the world are joining the internet and reading these articles everyday,
JUST LIKE YOU are now!!And this will go on and on and on...get the picture?
Well, there's 5,000,000,000 people in the world and most of them will
eventully end up being hooked into the internet. So there are virtually
unlimited resources. Of course this will work the best at the very
beginning so the faster you post, the better for YOU!So can you afford $5.00
and see if it really works?? I think so! People have said, "what if the plan
is played out and no one sends you the money? So what! What are the chances
of that happening when there are tons of newusers and new honest works?? I
think so... People have said, "what if the plan is played out and no one
sends you the money? So what! What are the chances of that happening when
there are tons of new honest users and new honest people who are joining the
internet and newsgroups everyday and are willing to give it a try? Estimates
are at 20,000 to 30,000 new users everyday, with thousands of those joining
the actual internet. remember, play FAIRLY and HONESTLY and this will work.
You just have to be honest.Make sure you print this article out RIGHT NOW,
also. Try to keep a list of everyone that you sends you money and always
keep an eye on the news groups to make sure everyone is playing fairly.Remember
, HONESTY IS THE BEST POLICY. You don't need to cheat the basic idea
to make the money!!GOOD LUCK to all and pleas play fairly and reap the
huge rewards from this,which is tons of extra CASH. **By the way, if you try to

deceive people by posting the messages with your name in the list and not
sending the money to the rest of the people already on the list, you will not
get as much. Someone I talked to knew someone who did that and he only made
about $150.00, and that's after seven or eight weeks! Then he sent the 5
$1.00 bills, people added him to their list, and inn 4-5 weeks he had over
$10k. This is the fairest and most honest way I have ever seen to share the
wealth of the world without costing anything but our time!!! You also may
want to buy mailing ande-mail list for future dollars.Please remember to
declare your extra income. Thanks once again......

# 1525. New ham seeks setup examples

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: cooper1@dnvr.uswest.net
Message-ID: <870501313.8993@dejanews.com>
Source record: 92091

From KC0BMC
I need to see radio setups of actual systems to get
an idea of how the hardware is interconnected. My primary
interest is 2-meter/70cm homebase with a TNC packet
interface to a computer. Also, how to lightning protect an
antenna. I've surfed the internet for hours for this info
preferably in picture/drawing form, but came up empty handed.
Presently I've got a the following on loan: 0.5 watt Kenwood 2 meter HT,
a Kantronics KPC-3, a small "brick" RF inline amplifier, and
an old Drake receiver. I have plans to make a 2 meter
antenna.
thanks in advance, Mike

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 1526. Someone to point me in the direction...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: Cliff and Tricia Nail <kb5rtk@rt66.com>
Message-ID: <5rumre$nj$1@mack.rt66.com>
Source record: 92092
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hello fellow hams,

I am interested in finding a way to make my kenwood tm251-a (9600 baud) radio and my aea pk96 tnc into a home brew personal paging system.

I am looking for some hams currently doing this, or who know were to point me in the direction so I can locate software and any additonal hardware to make this happen.

Also if anyone knows which part of 97 fcc rules that pertain to using a tnc to paging and any addtional regulations that come with this mode of operation your help would be most appriciated.

Thank you!!!!!
Cliff
(email: kb5rtk@rt66.com)

# 1527. Re: UHF Unterlage 5 Who got this one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33e2f129.1040938@news.online.no>
Source record: 92093

On Tue, 29 Jul 1997 21:22:57 +0200, "Marco Bokma" <mbokma@caiw.nl>
wrote:

>Hello All and thanks for reading this message,
>I am looking for the description of the 23 cm Transverter which
>have been published in the UHF Unterlage part 5. It exist out of 3 PCB's
>and I am looking for the copies of the building instructions. Or English or
>the German one.
>
>Thanks for any help on this one!
>
>Regards, Marco - PE1OBU
>
>
>
>
>
"UHF unterlage V" is now a quite old book. Mine is dated 1989 (zweite
Auflage). I believe you will find better designs in English
publications.
We particularly like the English Butler oscillator circuits, everybody
I can think of in Scandinavia now use them, but we don't like the SMD
versions.
We have now only two designs to choose between:
The English circuits, and
LA6LCA circuits

hi
73 de jan-martin
QTH DS80b

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1528. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: Hal Rosser <hmrosser@csranet.com>
Message-ID: <33E34CCF.66A4@csranet.com>
Source record: 92094
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hello Jean-Pierre
If you want a good and cheap 2 meter antenna, try a dipole.
run coax to a high place and solder 19" of wire to the center
conductor and another 19" of wire to the braid. and hang it so
that it is in a vertical orientation. a piece of fishing line
or nylon string will hold it up fine. good luck and see you on the
air soon i hope. 73 de hal.. w4pmj

Jean-Pierre Magnan wrote:
>
> I'm new to this ham stuff. I don't even have my license yet. All I do
> presently is listen to the local repeaters with my portable and study to
> pass my exam in september.
>
> I need a vertical antenna from which I can get good performance. I know
> that quads or yagis offer a lot of gain but I have no rotor and I don't
> plan on getting one in the near future.
>
> Now, according to the latest posts in the various ham NG, a J-pole is a
> lousy antenna. I had planned to build one sometimes this month. Now I'm
> not just sure I should. I heard about dipoles doing a better job. Is
> this true and where, on the Internet, can I get plans to do this ? Is
> there other omnidirectionnal antennas that can be built on a thight
> budget ?
>
> 73
>
> Jean-Pierre Magnan
> Future VE2 or VA2

# 1529. Re: New ham seeks setup examples

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33E33A97.1DCB@ix.netcom.com>
Source record: 92095

cooper1@dnvr.uswest.net wrote:
>
> From KC0BMC
> I need to see radio setups of actual systems to get
> an idea of how the hardware is interconnected. My primary
> interest is 2-meter/70cm homebase with a TNC packet
> interface to a computer. Also, how to lightning protect an
> antenna. I've surfed the internet for hours for this info
> preferably in picture/drawing form, but came up empty handed.
> Presently I've got a the following on loan: 0.5 watt Kenwood 2 meter HT,
> a Kantronics KPC-3, a small "brick" RF inline amplifier, and
> an old Drake receiver. I have plans to make a 2 meter
> antenna.
> thanks in advance, Mike
---
Hi Mike -- go to the Master Index URL below and choose your subject --
Antenna Projects, Lightning Protect, Packet Radio
---
Good Luck
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

## 1530. F.S. - Tubes and much misc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970802150000.LAA15429@ladder01.news.aol.com>
Source record: 92096

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #711-T.

# 1531. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: "Adam B. Kanis" <adam-kanis@uiowa.edu>
Message-ID: <33E34B81.9A67FC80@uiowa.edu>
Source record: 92097
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jean-Pierre,

A j-pole might be lossy or lousy (depending on your view), but they potentially could be all you need. If you want to be hitting local repeaters, you could use most anything (even the rubber-duck from a handheld!). Actually, i find my j-pole to be quite good. I work 3 different repeaters > 20 miles away, and 3 different packet nodes 25+ miles away, and my jpole is up only 20-25 feet (at least one of those packet stations also has a jpole on their roof, not tower). BTW-This is Iowa, so the terrain is rolling, definately not mountainous.

Aother good point about the j-pole is its relative ease of mounting (or dangling from a tree limb as in my case). You may find that location of the antenna may be more important than which antenna for a particular QTH/Repeater need. Hey, you're going to be a ham, experiment! Build your jpole (its cheap), and use it. Later on build (or buy) another type of antenna, and see which one works better for your uses. You could always use one as a transportable to drag with you to an away operating site (a 300-twin lead j-pole that rolls up is good for this, as is the rugged copper-pipe jpole). You may also find that in the near future you may want a packet station also, then you will want to have 2 antennae anyway.

Good luck in getting your ham ticket. Let us know how it all goes.

73,
--adam, n2brt
adam-kanis@uiowa.edu
> Now, according to the latest posts in the various ham NG, a J-pole is a
> lousy antenna. I had planned to build one sometimes this month. Now I'm
> not just sure I should.

>
> 73
>
> Jean-Pierre Magnan
> Future VE2 or VA2

## 1532. Re: Someone to point me in the direction...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: billk@inland.net
Message-ID: <33e34805.48360308@news.inland.net>
Source record: 92098
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

On Sat, 2 Aug 1997 01:15:52 -0600, "Cliff and Tricia Nail"
<kb5rtk@rt66.com> wrote:

>Hello fellow hams,
>
>I am interested in finding a way to make my kenwood tm251-a (9600 baud)
>radio and my aea pk96 tnc into a home brew personal paging system.
>
>I am looking for some hams currently doing this, or who know were to point
>me in the direction so I can locate software and any additonal hardware to
>make this happen.
>
>Also if anyone knows which part of 97 fcc rules that pertain to using a tnc
>to paging and any addtional regulations that come with this mode of
>operation your help would be most appriciated.
>
>Thank you!!!!!
>Cliff
>(email: kb5rtk@rt66.com)
>
>
>
cliff,
ive done what you want to do. i dont know if the pk96 will do
amateur paging. i dont believe so. to do the amateur paging, your
tnc must have the paging command set, and kantronics is the only
manufacturer that i know of that has this option. and at this time i
believe its only in the kantronics kpc-96/12 as you must use only
the 9600 baud port. (rules out the kpc-3)
you may have to trade your pk-96 for a kantronics kpc-96/12
tnc. for more info check out www.kantronics.com
but basically here is what i did. i saw the kantronics demo
booth at dayton in 1996 and they had amateur paging set up using 2
meters. i was intrigued with the idea because i have a deaf daughter
and i thought this might be a good idea for just having a way of
calling her or sending messages to her by using the vibration mode of
the pager.... so heres what i did....i got a hold of an motorola
alpha-numeric pager..then i found a paging dealer who would trade me
the 900 meg board already installed in the pager for a commercial 150
mhz (vhf) board. then i sent to kantronics for the 144.090 xtal (about
20 bucks shipped) and had the paging guy install the xtal and tune up
and tweak the pager. you can find him, and maybe even a pager, by
checking out the newsgroup tnn.comm.pager his name is brian skube

and his business is located in lake elsinore, california.
for software i simply used the kantronics pacterm program.
although procomm or any terminal program will do. getting the system
to work flawlessly with no paging errors requires setting up the radio
and tnc with a service monitor and setting the deviation properly.
that is basically all there is to it.
Bill Kearns WB6JAR
billk@inland.net
909-678-6228

# 1533. Re: 6 Meter Beacon

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33e29ce7.0@lightning.ica.net>
Source record: 92099

Hello Ed, what issue of CQ VHF had the 6 meter beacon TX ?

Thanks, Hugh

"Ed Mathes, RPA-C" <emathes@servtech.com> wrote:

>I am in the process of building the 6-meter beacon featured in CQ-VHF
>magazine.

>I am having problems finding a source for the toroids and final
>transister (2N2335). MOST places want a minimum order. These parts
>total less than a few dollars....anyone have them lying around the junk
>box?

## 1534. 6 meter beacon TX plans ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33e29c94.0@lightning.ica.net>
Source record: 92100

I thought I read somewhere recently about plans for a 6 meter beacon
transmitter (CQ VHF ???) Does anyone recall seeing such an article
in recent months or years ? If so, where and in what issue ?

Thanks, Hugh VA3TO

# 1535. Re: 170.245 MHz transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: "Charles K. Fogle" <cfogle@sccoast.net>
Message-ID: <33E36903.4035@sccoast.net>
Source record: 92101
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

The RS wireless mike kit can be modified to transmit on 170.245.
Instructions on how to do this can be found in the book NOW HEAR THIS
by Winston Arrington and CRB use to carry it. The schematics Mr.
Arrinton discusses in detail are the same basic circuit of the RS kit.
BTW - The book gives schematics to modify a xmitter from 30-300mhz.
Charlie

# 1536. Re: HP 1720A scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19970802193901.PAA00921@ladder01.news.aol.com>
Source record: 92102

Hi Eric and all

I have repaired a couple of HP1715A scopes (I think its the 200 MHz version of the family). The crimp connections of the connectors to the various circuit boards were done miserably on both scopes. The wire was loose in the crimp. I went in and soldered each crimp. The scopes work well once this was done. They seem to be available working for about $400 (about half that of the equivalent Tek scope). I paid $50 for mine when it had no sweep but bright spot on CRT. They are nice scopes when they work. ha.

Jim Cooper NE6O
CooperJim@aol.com

# 1537. CW (Morse Code) triumphs again!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33e1d995.2933983@news1.mnsinc.com>
Source record: 92103
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Forwarded message:

From: "Benny Owens K5KV" <k5kv@cyberview.net>
To: "CW - Reflector" <cw@qsl.net>
Subject: [CW] NAVY-MARINE CORPS MARS CW IS BACK!!!!
Date sent: Sun, 27 Jul 1997 01:09:12 -0500

HELLO AND THANKS FOR READING

TONIGHT WAS A NIGHT WORTH WAITING FOR.

IN A RECENT CHIEF NAVY-MARINE CORPS BROADCAST, THE CHIEF NAVY-MARINE
CORPS
MARS ANNOUNCED THAT DOD HAS AUTHORIZED CW NETS AGAIN. IN SHORT ORDER,
WE
HAVE FOUR NETS WORKING AGAIN IN LA. WHILE I CAN NOT GIVE OUT THE
EXACT
DETAILS, THOSE IN SOUTH CENTRAL STATES WILL HEAR ONE AT 2100 CDT JUST
A FEW
KHZ ABOVE THE 80M HAM BAND. AFTER A WEEK OUT OF TOWN, IT WAS VERY
NICE TO
HEAR A MESSAGE PASSED BY CW FROM AN ANOTHER MARS STATION TO A
NAVY-MARINE
CORPS STATION FOR RELAY ON THE DIGITAL NETWORK.

NO I AM NOT JUST HUNG UP ON CW FOR THE H__L OF IT. I WAS NECOS OF A
NAVY-MARINE CORPS VOICE (SSB) NET EARLIER THIS EVENING AND COULD NOT
HEAR MANY OF THE STATIONS ON THE NET. WITH SIMILAR CONDITIONS (LOCAL
THUNDERSTORMS) I WAS ABLE TO COPY A MULTI ADR MESSAGE SENT THREE HOURS
LATER VIA CW. IT IS REALLY TRUE THAT CW CAN GET THROUGH BETTER THAN
SSB.

YES I KNOW THAT NOT ALL HAMS CAN READ CW THROUGH THE NOISE, BUT THOSE
WHO CAN FIND IT EASIER THAN SSB. WE HAD THE MESSAGES PASSED WITH SOME
CHAT
TIME AFTER THE NET. I HAVE SEEN VOICE NETS TAKE LONGER TO HANDLE LESS
TRAFFIC. MAYBE THE WISDOM OF USING A SYSTEM THAT WORKS MAKES SENSE
AFTER
ALL.

CW WAS NEVER DEAD AT K5KV AND IS REVIVED AT NNN0LGN.

73

BENNY

<
>
< * * * * * * * * * * * * * * * * * THE CW REFLECTOR * * * * * * * * * * *
* *
> __Subscribe To: Majordomo@qsl.net with Body: subscribe cw <email

# 1538. Info repeater 600 & 1600 KHz filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: Kees Baaij <cbaay@casema.net>
Message-ID: <01bc9f8a$7f9b03e0$ad68b7c2@486>
Source record: 92104

I'm looking for all info about home building a couple of cavity filters for making a repeater in both the VHF (600 KHz shift) and UHF (1.6 Mhz shift).

I prefer to operate te repeater with only one antenna on both bands.

Who can help me. All info is welcome.

73 de Kees Baaij, PA3HAN

# 1539. Re: Microstrip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: Joseph M Zawodny <zawodny@exis.net>
Message-ID: <33E3D770.6AF4@exis.net>
Source record: 92105

Carlo Botto wrote:
>
> Hello friends:
>
> I am looking on any kind of infos regarding microstrips.
>
> I am also looking for any information about available software to calculate
> them
>
> Thanks for helping.
>
> Best 73 de Carlo.
>
> e-mail: IK1INW@amsat.org

Try
http://users.aol.com/maxfro/private/mstrip.html
Have fun
KO4LW

--

Joseph M. Zawodny http://wwwp.exis.net/~zawodny
zawodny@exis.net

# 1540. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: altavoz <altavo19@mail.idt.net>
Message-ID: <33E3FBA5.61CD@mail.idt.net>
Source record: 92106
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

altavoz: Congrats on passing the test ( premature ) .
Ham radio swap meet , buy Ringo Ranger II ( $35 ) . It has the
highest gain of any $35 ant . Don't tilt it , you lose gain .
Then build a J pole and compare ( snicker snicker) .
Everyone talks about matching to 50 ohm coax , no one talks
gain pattern . J pole is bad pattern.
_____thread below_____

fireman@netrover.com (Jean-Pierre Magnan)
Organization:
Netrover
Newsgroups:
rec.radio.amateur.antenna, rec.radio.amateur.homebrew

I'm new to this ham stuff. I don't even have my license yet. All I do presently is listen to the local repeaters with my portable and study to pass my exam in september.

I need a vertical antenna from which I can get good performance. I know that quads or yagis offer a lot of gain but I have no rotor and I don't plan on getting one in the near future.

Now, according to the latest posts in the various ham NG, a J-pole is a lousy antenna. I had planned to build one sometimes this month. Now I'm not just sure I should. I heard about dipoles doing a better job. Is this true and where, on the Internet, can I get plans to do this ? Is there other omnidirectionnal antennas that can be built on a thight budget ?

73

Jean-Pierre Magnan
Future VE2 or VA2

# 1541. Invitation to visit our Web Sites

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: KB8TNQ <kb8tnq@voyager.net>
Message-ID: <33E3BEF9.FC788CBD@voyager.net>
Source record: 92107
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc,rec.radio.amatuer.space

```
This is a multi-part message in MIME format.
--------------1CE7A64663A96647F833D68B
Content-Type: text/plain; charset=us-ascii
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Greetings:

Please accept this invitation to visit our Web Sites. Both are
constantly growing, and that is where
you come in. We need your input.

The first, http://www.kb8uyz.com/kb8tnq is the KB8TNQ Ultimate Amateur

Radio Page! and is
a great source for the Ham and even those interested in getting into the

hobby. With a plethora of
links and a "Site O' the Week"...(one selected by yours truly)
we hope you'll find this Site user friendly.

The second, found at http://www.kb8uyz.com/cmarc is the Central
Michigan Amateur Radio
Club Web Site. While this Site is primarily a "Club" Site, we do have a

"Trader's Page", which was
recently started. All postings to this page are FREE, so if you have
unwanted Ham gear, feel free to
check it out and help us get the word out.

Thanks for your time and we'll look forward to seeing you soon.

7-3,
Jim KB8TNQ

--------------1CE7A64663A96647F833D68B
Content-Type: text/x-vcard; charset=us-ascii; name="vcard.vcf"
Content-Transfer-Encoding: 7bit
Content-Description: Card for KB8TNQ
Content-Disposition: attachment; filename="vcard.vcf"

begin: vcard
fn: KB8TNQ
n: ;KB8TNQ
email;internet: kb8tnq@voyager.net
```

```
title: Amateur Radio Operator
note: Batteries not included, see dealer for details, the views expressed are not
necessarily those of anyone important, if you build it-he will come!
x-mozilla-cpt: ;0
x-mozilla-html: FALSE
end: vcard

--------------1CE7A64663A96647F833D68B--
```

# 1542. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-02 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33E3702A.1653@flash.net>
Source record: 92108
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jean-Pierre Magnan wrote:
>
> I'm new to this ham stuff. I don't even have my license yet. All I do
> presently is listen to the local repeaters with my portable and study to
> pass my exam in september.
>
> I need a vertical antenna from which I can get good performance. I know
> that quads or yagis offer a lot of gain but I have no rotor and I don't
> plan on getting one in the near future.
>
> Now, according to the latest posts in the various ham NG, a J-pole is a
> lousy antenna. I had planned to build one sometimes this month. Now I'm
> not just sure I should. I heard about dipoles doing a better job. Is
> this true and where, on the Internet, can I get plans to do this ? Is
> there other omnidirectionnal antennas that can be built on a thight
> budget ?
>
> 73
>
> Jean-Pierre Magnan
> Future VE2 or VA2

Interesting, Im not sure who said a J pole was a lousy antenna, I guess if they were comparing it to a 10 element yagi and the comparison was gain and directivity perhaps a J pole could be considered lousy. You can make a ground plane in 15 minutes. Buy a female coax connector and solder four 20" wires to the flat base portion sticking straight our or bent down slightly, then solder one vertical 19.5" wire to the center. Voila, a 2m ground plane.

I dont have my antenna book handy but I belive a J pole has a small amount of gain over a 1/4 wave ground plane as described above. I used a J pole for many contacts to the RS-10 satellite, didn't seem to lousy to me. Your not going to see much difference if your monitoring local repeater activity. Jean, I strongly suggest you buy the ARRL antenna book, (a good investment in your ham education) after reading it a few times you'll see there is not much magic in antennas and you can build them out of just about anything.

Good luck, Tim, ka8ddz

# 1543. Re: Some advice please....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <33e28e22.8881550@news.doit.wisc.edu>
Source record: 92010

629371@worldnet.att.net wrote:

>I've got a non-ham friend who's dad died a few weeks ago. In cleaning
>out the shack, we've managed to get rid of most of the gear, but there
>are boxes and boxes of misc. parts, such as packages of resistors,
>capacitors (sp?), coils, mini motors, roller inductor tuners, etc...that
>we have no idea of their value or what to do with them. Almost 6
>cartons worth, and most of the stuff is new, still in their packages...
>
>To my friend, it's junk...to me, I know all these components must be
>worth a couple hundred (or more) dollars, but I don't have any idea how
>to price them and get rid of them. There's no hamfest coming up...
>
>Any money we get will go to his widow. We can't just throw/give them
>away, without explaining to the probate court why we junked good
>equipment/parts...I'm stuck.
>
>Any help/advice is appreciated.

You've already given us a pretty good idea of what's available. Why
not add your approximate location and someone in your area may be
interested. If you want to appeal to the larger newsgroup mail-order
audience you will have to give more specific details.

Jim
---
Melissa Kepner Jim Adney
Laura Kepner-Adney
mgkepner@facstaff.wisc.edu
Madison, Wisconsin
---

# 1544. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970803013108.652A-100000@Stratus.CAM.ORG>
Source record: 92011

There might have been articles in other places, but I know there was an article in 73 about using one of those TTL oscillators. I wish I could remember the issue; if I recall correctly, there were some other QRP articles in the same issue.

If the oscillators are TTL, then they have to be square wave out. Otherwise, the TTL that they feed would require some sort of interface circuit to turn the signal into TTL.

I can't recall what kind of filtering the article used, but that might be because there was none. I think this was meant as a QQRP rig, and the author used a pot in series with the 5volt line to reduce power. That might explain something; if the voltage went low enough, the oscillator may be putting out less of a square wave.

But there have been other articles using TTL in transmitters, so there are circuits out there that could be copied. I remember one article in Ham Radio about 1975 or so, and it showed how to build an SSB transmitter out of TTL. It was sort of cheating, since the author linearized the gates to handle the actual signals. He didn't even bother using a balanced modulator, instead depended on the crystal filter to take out the carrier.

From the articles I've seen, a common scheme is to have an oscillator based on some TTL gates, and feeding something like a 74244 (did I get the number right? I'm thinking of an 8-bit buffer), with all the sections in parallel. Some of the articles have even added a simple direct conversion receiver.

I agree with the comment about harmonics. I admit I haven't checked the regulations in a long time, but I thought they did not specify certain levels, but how much reduced the harmonics are. If so, the harmonic suppresion has to be as good on a QRP transmitter as on a full legal limit rig.

The idea of putting the transmitter right at the antenna does create possibilities. I remember seeing old Electronic Illustrated articles describing "DX" transmitters for unlicensed use on the CB band. You'd build a 100mW input transmitter, place it right at the antenna (which was restriced in size by law), avoiding feedline losses. You'd put up as big a receiving antenna as you could afford or have space for. The same idea is done down at the 180KHz license free band, according to articles I've seen. There are a lot of effective small receiving antennas nowadays, so the idea of using separate antennas is a possibility.

One thing I've thought of, after looking over loop antennas for transmitting, was the idea of building a tube transmitter where the tuned circuit in the plate was the loop antenna. You'd have to put the transmitter at the antenna, and devise some method of remotely tuning it (something already being done with transmitting loops). No feedline loss. Sadly, I can't remember right now why I thought there was a good reason for trying this, but I had one when I thought of it.

Michael VE2BVW

On 1 Aug 1997, N8BLK wrote:

> In article <33E118F9.2A7F@ix.netcom.com>, KD1YV <jimkd1yv@ix.netcom.com>
> writes:
>
> >
> >I suspect that these modules output square waves, which means that it's
> more
> >than "full
> >of harmonics", it _is_ harmonics. I'm no expert, but it seems to me that
> the
> >FCC
> >regulations regarding spectral purity of amateur transmitters come into
> play
> >here, even
> >at QRP levels.
> >
> >Besides, it's not generally good relations with the general public to be
> >QRMing all
> >across the many bands. I suspect that a simple bandpass filter on the
> output
> >would
> >solve all of that, and save you from
>
> Actually I seem to recall a project published some time back using
> such oscillators as the basis for a simple rig. I also note that using
> low pass filters, it's possible to filter even the output of a square wave
> oscillator, btw, I don't think these were square wave oscillators.
> Some shaping in the circuitry keying the rig, and you've probably got
> a rig worth trying to play with. OK, the crystal control is a pain, but
> if it works, haven't you had some fun?
> -art clemons-
>
>

# 1545. EEPROM Programing for FTL-2007

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: pissaro@mail.telepac.PT
Message-ID: <3.0.32.19970803075141.00b477f0@mail.telepac.pt>
Source record: 92012

Hello all,

I got given a comercial vhf transceiver Yaesu type FTL-2007 with
some comercial channels programmed. Does anyone konows of a programm
to configurate a new EEPROM with amateur chanels.

73
Joao, ct1dbh
,,, SERVER JNOS em TCPIP
/'^'\
( o o ) 144.700 MHz (1200Bd), 433.875 MHz (9600 Bd)
-oOOO--(_)--OOOo----------

73 de QTH : Massama
Joao Pissarro LOC : IM58is
CT1DBH Packet : CT1DBH@CS1AAS.CTLX.PRT.EU
E-Mail : pissaro@mail.telepac.pt
.oooO Homepage: http://ct1dbh.ampr.org
( ) Oooo.
---\ (----( )----------
_) ) /
(_/

# 1546. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: 708042@ican.net
Message-ID: <MPG.e4e3b2c7cb49295989684@news.ican.net>
Source record: 92013

In article <Pine.GSO.3.94.970803013108.652A-100000@Stratus.CAM.ORG>,
blackm00@CAM.ORG says...

> I can't recall what kind of filtering the article used, but that might
> be because there was none. I think this was meant as a QQRP rig, and the
> author used a pot in series with the 5volt line to reduce power. That
> might explain something; if the voltage went low enough, the oscillator
> may be putting out less of a square wave.

The FIRE-BALL QRP Rig 50 milliwatts of pure power by Bill Brown WB8ELK
appeared in 73 November, 1990 pg. 18,21. Doing a quick scan of the
article nothing is mentioned about filtering.

--
Doug Smith 708042@NO_SPAM.ican.net
CQ DX DE VE3IYB 144.200MHz USB
Looking for 6M QRP gear
az183@freenet.toronto.on.ca
mgb@jerrys.rogerswave.ca

## 1547. single fem seeks male

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: helen@nowhere.za
Message-ID: <870606891.362323@angel.comcen.com.au>
Source record: 92014

hi guys check this out!!!
http://www.sexmansion.com
pics of me!
love,

cindy

## 1548. julie needs a man

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: cindy@manly.com
Message-ID: <870611648.414919@angel.comcen.com.au>
Source record: 92015

hi guys check this out!!!
http://www.sexmansion.com
pics of me!
love,

cindy

# 1549. PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: niel brieger <nbrieger@ix.netcom.com>
Message-ID: <33E49414.6D4C@ix.netcom.com>
Source record: 92016

I'm wondering what the best way to attach a PL259 to a coax cable is. I was told a soldering gun, but I'm having the darndest time getting this weller 140 watt soldering gun to heat the PL259 up enough to melt solder inside. It has a duty cycle of 20%, use it for 1 minute, let it cool for 4. If you try to go a bit past the 1 minute, the gun actually seems to start to cool on its own, because the tip gets "stuck" in the solder joint. On field day, we used a 100 watt weller soldering iron to attach some PL259's to cables with no problem whatsoever. So I'm wondering if I should be looking to purchase one of those.

Any tips or hints or what works best for you would be appreciated!

73,
Niel Brieger, KC5ZJR

# 1550. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <33E4AAE4.B8D@up.net>
Source record: 92017
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

This is a multi-part message in MIME format.

--------------70D92160A4
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Alan M Cameron wrote:
>
> On Thu, 24 Jul 1997 13:17:50 +0100, James Patterson
> <PattersJ@ecid.cig.mot.com> wrote:
>
> >Does anyone know how to build a tower?
> >I want to build a tower about 100' high.
> >Can anyone help with some ideas or designs?
>
> James, before starting to build the tower have you got the space?
> I think you need to give a few more details before any sensible
> answers are to be expected.
> Is the tower to be self supporting or guyed?
> Self supporting towers like electricity grid towers are major
> constructions and not to be taken lightly.
> Guyed are possible to construct but will require a large area
> of ground to place the guy anchors in.
>
> I have seen a 100 foot tower made of special triangular extruded
> aluminium built and erected. The sections are 10 feet long and bolted
> together with corss bracing like a lattice. Each 10 foot length is
> bolted to the next until 100 feet reached. You will also require a
> *gin* pole to enable you to pull the thing upright. That will have to
> be at least 60 feet in length. So you will need a 100 foot tower and a
> 60 foot tower. You will laso need a gin pole to erect the 60 foot gin
> pole vertically at the end of the 100 foot tower. That means you will
> need a gin pole for the gin pole erection. That secondary gin pole
> needs to be about 10 feet long.
>
> You will need guying at about 20 foot intervals up the tower and at
> least four front/back/left/right .
>
> I suggest you re-examine the need for a 100 feet tower. You did not
> say what the purpose was. Perhaps you do not need quite as high?
>
> Best of luck in the construction.
>
> Alan G3OGJ

> G3OGJ

--------------70D92160A4
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="TOWER.HUM"

ANTENNA RAISING INCIDENT

"I'm writing in response to your request for additional information for Block Number 3 of the Accident Reporting Form. I put "Poor Planning" as the cause of my accident. You said in your letter I should explain more fully, and I trust the following details will be sufficient."
"I am an amateur radio operator and on the day of the accident I was working alone on the top section of my 80 foot tower. When I had completed my work, I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and hardware. Rather than carry the now un-needed tools and materials down by hand, I decided to lower the items down in a small barrel by using a pulley, which fortunately was attached to the gin pole at the top of the tower."
"Securing the rope at ground level, I went to the top of the tower and loaded the tools and materials into the barrel. I went back to the ground and untied the rope, holding it tightly to insure a slow descent of the 300 lbs. of tools. You will note in Block Number 11 of the Accident Reporting Form, that I weigh only 155 pounds."
"Due to my surprise at being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming down....this explains my fractured skull and broken collarbone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley."
"Fortunately, by this time, I had regained my presence of mind and was able to hold onto the rope in spite of the pain. At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed approximately 20 lbs." " I refer you again to my weight in Block 11. As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40 ft. level, I met the barrel coming up...this accounts for the two fractured ankles and the lacerations on my legs and lower body."
"The encounter with the barrel slowed me enough to lessen my injuries when I fell on to the pile of tools, and fortunately, only 3 vertebras were cracked. I'm sorry to report, however, that as I lay there on the tools in pain, unable to stand, and

watching the emply barrel 80 feet above me, I again lost my
presence of mind. I let go of the rope."

(Digital Radio Nets/INTERNET)
--------------70D92160A4--

# 1551. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: nospam@worldnet.att.net
Message-ID: <33e4b01b.1439584@netnews.worldnet.att.net>
Source record: 92018

I have attached many PL259's to coax over the years and this is the process I have developed. First you need a proper soldering iron, a soldering gun won't work. (as you found out). The iron should be 100 to 150 watt with a large tip that will retain a lot of heat. I usually use a solder tip adapter attached to a hand held propane tank. This may sound like an overkill, but you want to get a lot of heat to the shell quickly so that you can apply the solder and remove the heat before the insulation cooks. Trim the outer coax insulation back a inch or so and tin the braid, then sweat (cool) the braid with a damp sponge or rag. Use a tubing cutter to cut the braid to length, then strip off the inner insulation to the proper length and tin the center conductor. Slip the connector shell on the cable and install the connector so that the braid is visable at the connector holes.
Using your hot, well tinned soldering iron, flow solder into the holes and sweat the connector as soon as possable trying to avoid damage to the coax.
Whenever you solder be sure that the metal is clean and free of grease or oil. Soldering is alloying of lead/tin to a base metal. If that base metal is not exposed, solder can't alloy to it and the result will be a poor joint. Heat for soldering is transfered via the solder on a well tinned iron. When you have the proper heat touch the solder to the iron / metal junction and the solder should flow and "wet" the metal without balling up and running off.
After the connector is totally cool I use flux remover to clean off any flux residues that may absorb moisture and corrode in the future.
Happy Soldering,
Buzz

> I was wondering what the best way to attach a PL259 to a coax cable is.
>I was told a soldering gun, but I'm having the darndest time getting
>this weller 140 watt soldering gun to heat the PL259 up enough to melt
>solder inside. It has a duty cycle of 20%, use it for 1 minute, let it
>cool for 4. If you try to go a bit past the 1 minute, the gun actually
>seems to start to cool on its own, because the tip gets "stuck" in the
>solder joint. On field day, we used a 100 watt weller soldering iron
>to attach some PL259's to cables with no problem whatsoever. So I'm
>wondering if I should be looking to purchase one of those.
>
>Any tips or hints or what works best for you would be appreciated!
>
>73,
>Niel Brieger, KC5ZJR

Attempting to thwart SPAM. Substitute buzzer for nospam in email address

# 1552. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: Geoff Blake <geoff@palaemon.demon.co.uk>
Message-ID: <EECp25.J8r@palaemon.demon.co.uk>
Source record: 92019
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

Hugh Davies (huge@axalotl_nospam.demon_nospam.co.uk) wrote:
: In article <33E4AAE4.B8D@up.net>, Roland Burgan <rburgan@up.net> writes:

: > ANTENNA RAISING INCIDENT

: Pity you couldn't attribute this correctly; it's originally by Gerard
: Hoffnung.

Speaking at the Oxford Union circa 1955 (IIRC)

(but it's only a paraphrase :-)

Geoff

--
--
Geoff Blake geoff@palaemon.demon.co.uk linux 2.0.29
Chelmsford g8gnz@g8gnz.ampr.org i586
Intel create faster processors - Microsoft create slower processes

# 1553. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <870635272snz@microvest.demon.co.uk>
Source record: 92020
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

In article <EECp25.J8r@palaemon.demon.co.uk>
geoff@palaemon.demon.co.uk "Geoff Blake" writes:

> Hugh Davies (huge@axalotl_nospam.demon_nospam.co.uk) wrote:
> : In article <33E4AAE4.B8D@up.net>, Roland Burgan <rburgan@up.net> writes:
>
> : > ANTENNA RAISING INCIDENT
>
> : Pity you couldn't attribute this correctly; it's originally by Gerard
> : Hoffnung.
>
>
> Speaking at the Oxford Union circa 1955 (IIRC)

December 4th, 1958.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

## 1554. opto isolator/couplers in VFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: ianls@patrol.i-way.co.uk
Message-ID: <33e4ee4a.6303417@news.i-way.co.uk>
Source record: 92021

Anyone tried using these devices to isolate VFOs from their loads? I saw a circuit in a professional radio/elecronics mag in the 1970 using one up to about 1 MHz. Surely this is easy-peasy now...up into the 10s or 100s of MHz? These devices don't seem to have listed their maximum operating freqs. Any ideas?
Thanks

## 1555. Power Supply Circuits...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: "Stephen T. Portell" <portell@azstarnet.com>
Message-ID: <33E4F683.50EC@azstarnet.com>
Source record: 92022

I'm interested in constructing my own 12VDC, 15amp power supply for my new IC2710 to use it in my shack. Anyone have any leads on decent circuit designs?

--
Stephen T. Portell
University of Arizona
office.....(520) 626-8084
home.....(520) 321-9587
homepage..... http://www.azstarnet.com/~portell/portell.htm
Amateur Radio Call.... KA8UKB

## 1556. Power Supply Circuits...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: "Stephen T. Portell" <portell@azstarnet.com>
Message-ID: <33E4F691.6222@azstarnet.com>
Source record: 92023

I'm interested in constructing my own 12VDC, 15amp power supply for my new IC2710 to use it in my shack. Anyone have any leads on decent circuit designs?

--
Stephen T. Portell
University of Arizona
homepage.............. http://www.azstarnet.com/~portell/portell.htm
Amateur Radio Call.... KA8UKB

# 1557. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: Ron Angstadt <ron1@enter.net>
Message-ID: <01bca055$b955bf00$12daaacc@eagle.talon.net>
Source record: 92024

Hi Neil
Before you go and buy another iron make sure the the nuts that hold the soldering gun tips are tight and real!! tight. Any resistance at this point will develop heat at the connections and not at the tip. After you do that it will still won't be real easy. I have used the gun but prefer a Weller temp controlled iron.

Ron

niel brieger <nbrieger@ix.netcom.com> wrote in article
<33E49414.6D4C@ix.netcom.com>...
> I'm wondering what the best way to attach a PL259 to a coax cable is.
> I was told a soldering gun, but I'm having the darndest time getting
> this weller 140 watt soldering gun to heat the PL259 up enough to melt
> solder inside. It has a duty cycle of 20%, use it for 1 minute, let it
> cool for 4. If you try to go a bit past the 1 minute, the gun actually
> seems to start to cool on its own, because the tip gets "stuck" in the
> solder joint. On field day, we used a 100 watt weller soldering iron
> to attach some PL259's to cables with no problem whatsoever. So I'm
> wondering if I should be looking to purchase one of those.
>
> Any tips or hints or what works best for you would be appreciated!
>
> 73,
> Niel Brieger, KC5ZJR
>

# 1558. [Q] Yaesu FT-290RII as IF (Mods needed?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: boomerjp@mailhost.ecn.uoknor.edu
Message-ID: <5s341j$ihc$1@artemis.backbone.ou.edu>
Source record: 92025

I plan on using my Yaesu FT-290RII as a 2m IF for a couple of trans-
verters. Now, the minimum power out is 2.5W from the radio, while
the transverters I'm looking at use 1mW drive (0 dBm).

According to my calculation, 20 log (1m/2.5) = -68 dB.

So, do I need a couple of attenuators in series (to reduce
loses and ringing) of 20, 20, 20, 8 dB respectively, or will
the transmitter choke on the attenuation?

My calculations for the attenuators are:
Pi attenuator: R1, R3 R2
8 dB 116.14 52.84
20 dB 61.11 247.5

The attenuator will be placed after the IF switch, so the receive
line won't be coming through it, of course!

Is there an easier (and better) way of knocking down the IF drive?
Maybe mod the radio for the low power setting? (Last resort)

BTW, the band is 902MHz. 1.2GHz will be later, and the Ten-tec 6m
transverter won't need this consideration.

Thanks!
John
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *
* Univ. of Oklahoma Amateur Radio Club: <http://www.ou.edu/ouarc> *

# 1559. Re: QRP Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: Mike Magnuson <et@micron.net>
Message-ID: <33E57CA8.7B@micron.net>
Source record: 92026

Willie Peloquin wrote:
>
> Hi,
>
> I am currently looking for a QRP tranceiver kit. I have seen a number
> of them on the net, Wilderness Radio, TenTec, Oak Hills Research. Does
> anyone have any experience they could share with me? I do not have
> access to much in the way of test equipment. I have not built anything
> since high school electronics, and that was an AM tube radio. I would
> like 40m or possibly 6m.
>
> Thanks in advance for your advice.
>
> Willie N8MDY
> Willie Peloquin
> Senior Software Engineer
> http://www.ismi.net/~wpeloqui

I have built the TenTec 6M FM Tranceiver, and have had very good luck with it. If you have a VOM, and basic construction tools (ie. soldering iron,screwdrivers, small diagonal cutters), you should have no problem building and aligning the tranceiver. I have also built the TenTec HF/VHF SWR/Watt meter. With this unit, it helps to have both HF and VHF transmiters with known output ratings for the adjustments.

Mike KC7NAX
Mike Magnuson
email et@micron.net
http://netnow.micron.net/~et

# 1560. Old freq counter - down but not out.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33E4CA1A.3D00@flash.net>
Source record: 92027

I've got an old freq counter I have used for years. I would appear that the 'brains' of the counter have failed. Everything else on the board is glue logic.

Anyone know of a replacement? The chip data is below, anyone recognize it.

PS S 02
SP8680B
8309A

Regards,

Tim, ka8ddz

# 1561. Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33E544A1.2957@flash.net>
Source record: 92028

Newbie builder wants to know:

In regards to the W1FB Universal DC reciever, of course there are several coil, cap combos for the tuned input, each to tune a different band. Typically using 100pf or so to tweak it in.

My question is, why not use one coil in the middle of the road and then a ganged 365pf cap to tune? I seemed to have success with this on 40/80 and even 160 when I lumped in another fixed cap. For someone wanting a multiband Rx this seemed to make the most sense.

Am I missing something? Do I loose somthing by doing this?

Tim, ka8ddz

# 1562. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-03 00:00:00 UTC
From: Martin Trump <Martin@wmeadow.demon.co.uk>
Message-ID: <uidjqSAs884zEwzx@wmeadow.demon.co.uk>
Source record: 92109
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

In article <33db925d.1308812@news.compuserve.com>, Alan M Cameron
<Alan_M_Cameron@compuserve.com> writes
>James, before starting to build the tower have you got the space?
>I think you need to give a few more details before any sensible
>answers are to be expected.
>Is the tower to be self supporting or guyed?

As one who in the dim and distant past built *much* bigger (450+ ft.)
steel structures may I comment?

Firstly a tower is self-supporting, a mast is guyed.

Secondly, you don't always need a gin pole for a mast. What was done was
to 'float' a relatively small pole (the stick) in the middle of the main
structure (remember the Skylon, Festival of Britain, 1951?). The stick
was supported by ropes from the tops of the (usually four) legs of the
main mast as-high-as-they-were to the base of the stick and the stick
was then guyed (four ropes) to the ground at its top. A block on the top
of the stick was then used to hoist and fit further leg-members to the
main mast. This required the four guys to the top of the stick being
winched in and out to tilt it. When the new main mast leg-members were
in place (plus any cross-bracings), the stick was then hoisted higher so
as to be supported again at its base by ropes from the now higher four
main mast legs - the guys at the top of the stick had to be loosened at
the same time.

It really requires at the least four (preferably more) winches, perhaps
eight people and, if I may say so, a lot of skill. Not really suitable
for an amateur project!

Regards,

--
Martin Trump

# 1563. Re: 6 meter beacon TX plans ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: boomerjp@mailhost.ecn.uoknor.edu
Message-ID: <5s3evg$mdo$1@artemis.backbone.ou.edu>
Source record: 92029

hduff@ica.net (Hugh Duff) writes:

>I thought I read somewhere recently about plans for a 6 meter beacon
>transmitter (CQ VHF ???) Does anyone recall seeing such an article
>in recent months or years ? If so, where and in what issue ?

>Thanks, Hugh VA3TO

It's in the March 1997 issue of CQ VHF, on pages 19 through 25.

It looks like a neat little project, and our University club may
be making one.

John
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *
* Univ. of Oklahoma Amateur Radio Club: <http://www.ou.edu/ouarc> *

# 1564. FS: Tubes and Electronic Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Kevin Harlan <sales@emodus.com>
Message-ID: <01bca095$4fc038a0$528a0118@cx75859-a.msnv1.occa.home.com>
Source record: 92030

ST Shape (shoulder) Tubes, UNTESTED,used,
pulled from old radios, priced accordingly

qty manufactuer tube type price each

1 Tung-Sol 24 $2.00
1 General Electric 24-A $2.00
1 Ken-Rad 24-A $2.00
1 National Union 24-A $2.00
1 Raytheon 24-A $2.00
1 Cunningham 26 $2.00
1 Raytheon 26 $2.00
2 RCA /Cunningham 26 $2.00
1 Sylvania 26 $2.00
1 Cunningham 27 $1.50
7 Gibraltar 27 $1.50
2 General Electric 27 $1.50
1 National Union 27 $1.50
3 Raytheon 27 $1.50
4 RCA 27 $1.50
1 Sylvania 27 $1.50
2 RCA 35 $2.00
1 RCA 36 $2.00
1 Raytheon 37 $2.00
1 RCA 37 $2.00
2 Sylvania 39/44 $1.00
2 Philco 41 $2.50
3 RCA 41 $2.50
1 Cunningham 42 $4.00
2 Raytheon 42 $4.00
1 RCA 43 $2.00
1 Delco 47 $4.00
1 Cunningham 57 $2.00
1 RCA 57 $2.00
1 National Union 75 $2.50
1 Cunningham 76 $3.00
1 Philco 76 $3.00
1 RCA 77 $1.50
1 National Union 85 $1.50

Shipping in USA: 1 - 6 tubes $4.00, 7 or more
shipping free.
**********
New RF Power Tubes, large quantities available,
Free shipping in USA:

CENTRON 572B/T160L new jobber boxed @ $94 each,
Chinese 572B @ $65 each
PENTA 3-500Z @ $105 each
EIMAC 3-500Z @ $160 each
Chinese 3-500C ( same as 3-500Z but has graphite plate) $120 each
**********
ANTIQUE GLOBE SHAPE TUBES, untested by us, used,
pulled from old radios, priced accordingly

(1) Cunningham C35 $2.50
(2) Cunningham C327 $5.00
(2) RCA UY227 $5.00
==========
Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

0A2 $0.75
6AH6 $0.50
6AL5 $0.50
6AN8A $0.75
6AU6A $0.50
6CL6 $0.75
6X4 $0.75
12AT7 $2.00
12AU7A $2.50
12AX7A $2.50
5651A $0.75
5963/12AU7A $2.50
6080 $2.50
6201/12AT7 $2.00
8068 $12.00
8136 $0.75
8532W $0.75

Shipping in the USA: 1 - 6 tubes $4.00, 6 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
**********
Used Test Equipment Shipping free in continental USA:
Hewlett Packard 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz, $475ea, working but may
need minor repairs and/or calibration.
Units reconditioned and calibrated $675 ea with 120 day
warranty. Free shipping in USA.
----------
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
TEST EQUIPMENT, RECONDITIONED, CALIBRATED, 120 DAY WARRANTY,

FREE SHIPPING IN USA.

Tektronix 455 , 50 MHz Dual trace oscilloscope, $395
Tektronix 465, 100 MHz dual trace oscilloscope, $550
TEKTRONIX 465M 100MHz Oscilloscopes, reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
Tektronix 475A, 250 MHz dual trace oscilloscope, $750
HP8405A, Vector Voltmeter, $325
Power Design 6050,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $225
Power Design 6050A,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $200

**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST EQUIPMENT,
please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

Please see our web site for the latest pricing and inventory:
http://www.emodus.com

# 1565. Re: [Q] Yaesu FT-290RII as IF (Mods needed?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Mike Willis <"m.j.willis "@rl.ac.uk>
Message-ID: <33E5870F.5674@rl.ac.uk>
Source record: 92031

John Patrick wrote:
>
> I plan on using my Yaesu FT-290RII as a 2m IF for a couple of trans-
> verters. Now, the minimum power out is 2.5W from the radio, while
> the transverters I'm looking at use 1mW drive (0 dBm).
>
You need about 33 dB of attenuation as you summised. Most microwave
transverters have to much receive gain. I suggest you put a 10 dB pad
in front of both receive and transmit to prevent you blowing up
the mixer in the event of a swiching failure - like forgetting to
PTT line.

There is a PCB sold by the UK microwave components service that does
what you want, including the switching and a 28V supply for the
microwave RF changover relay. This is designed for the FT290/IC202.

As you have an FT290II, you will find no switching voltage on the
connector. It is simple to add an RF choke from the +V TX line and
an isolation capacitor. It does not adversely affect the rig.

Don't try and use the low power setting.

Of course, if you just want to use the 290 for transverter driving,
you can bypass the final transmit amplifier and suffer a longer
battery life.

--
Mike

(Remove the space from the Email address to reply)

# 1566. Eddystone EC10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: N.S.Birchall@lboro.ac.uk
Message-ID: <N.S.Birchall-0408971321120001@mac-cdnsb.lut.ac.uk>
Source record: 92032

can anyone help ?

I've recently picked up an Eddystone EC10 receiver, (transistor model circa 1966) at a jumble sale.

Problem is - it's not very well. Could anybody let me know where I might find a circuit diagram / manual (or copies) for this receiver.

any help much appreciated

Steve

# 1567. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33e5d88d.4521614@news.atl.bellsouth.net>
Source record: 92033
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

On Sun, 27 Jul 1997 18:36:08 GMT, Alan_M_Cameron@compuserve.com (Alan M Cameron) wrote:
>I have seen a 100 foot tower made of special triangular extruded
>aluminium built and erected. The sections are 10 feet long and bolted
>together with corss bracing like a lattice. Each 10 foot length is
>bolted to the next until 100 feet reached. You will also require a
>*gin* pole to enable you to pull the thing upright. That will have to
>be at least 60 feet in length. So you will need a 100 foot tower and a
>60 foot tower. You will laso need a gin pole to erect the 60 foot gin
>pole vertically at the end of the 100 foot tower. That means you will
>need a gin pole for the gin pole erection. That secondary gin pole
>needs to be about 10 feet long.

This is not a good way to erect a tower more than 40 feet tall.
You *do not* want to tilt erect a tower that tall. The bending
moment on the tower will be *huge* and you'll likely bend the
tower if you don't break it. You want to stack the sections in place.
This only requires a 15 foot gin pole which is moved up section by
section as you hoist and install each section, IE the gin pole is
clamped to the standing section and used to hoist up the next
section. This method can be used to erect an arbitrarily tall tower.
It is the way a 1000 foot TV tower is erected, for example, and
is the way I erected my little bitty 70 foot tower.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 1568. Re: Microstrip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Bill VanRemmen <billy@frontiernet.net>
Message-ID: <5s4seg$e86$1@node17.cwnet.frontiernet.net>
Source record: 92034

Carlo Botto <IK1INW@amsat.org> wrote in article
<01bc9c2a$26e606e0$609b1fc3@textrade>...
> Hello friends:
>
> I am looking on any kind of infos regarding microstrips.
>
> I am also looking for any information about available software to
calculate
> them
>
> Thanks for helping.
>
> Best 73 de Carlo.
>
> e-mail: IK1INW@amsat.org
>

I wrote some simple (BASIC) software to calculate the width of a stripline.
It is available on my ham radio page at:

http://www.frontiernet.net/~billy/hamradio/

It's free. Help yourself.

73

Bill, KA2WFJ

## 1569. Kenwood ts440-oscilliscope hook-up

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: John Doe <NewName@netusa1.net>
Message-ID: <5s4rf4$9bq$1@news.netusa1.net>
Source record: 92035

I have an EICO oscilliscope and would like to monitor the output signal
from my Kenwood ts 440.
How do I make the connection???

Dave / N9VTF

# 1570. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Bill VanRemmen <billy@frontiernet.net>
Message-ID: <5s4sq5$e86$2@node17.cwnet.frontiernet.net>
Source record: 92036

niel brieger <nbrieger@ix.netcom.com> wrote in article
<33E49414.6D4C@ix.netcom.com>...
> I'm wondering what the best way to attach a PL259 to a coax cable is.
> I was told a soldering gun, but I'm having the darndest time getting
> this weller 140 watt soldering gun to heat the PL259 up enough to melt
> solder inside. It has a duty cycle of 20%, use it for 1 minute, let it
> cool for 4. If you try to go a bit past the 1 minute, the gun actually
> seems to start to cool on its own, because the tip gets "stuck" in the
> solder joint. On field day, we used a 100 watt weller soldering iron

Actually, this is GOOD. When the tip sticks to the joint, the temp is
*JUST* getting high enough to start making good solder joints. KEEP
HEATING. Don't stop! Eventually you will get the whole thing hot enough
to melt the solder properly. The reason the tip sticks is that once the
solder starts to become partially liquid, you get a better thermal
conduction path between the tip and the connector, and this "sucks" heat
out of the tip faster. Like I said, KEEP HEATING. The connector is
getting close to the right temperature.

73

Bill, KA2WFJ

# 1571. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: spammers@must.die.com
Message-ID: <wsandersEEEE2J.H7p@netcom.com>
Source record: 92037

Also, cheap-sh** PL259's like the ones Radio Shack sells seem to be plated with nickel or chrome, a material that does not take solder easily. The local HRO has a bin-full of PL259's that are made of a more silvery, satiny-looking material (they claim they're silver-plated) that are much much easier to solder than the chrome-looking ones. These units are also considerably lighter-weight than their Radio Shack counterparts (and thus would take less heat to raise to soldering temp).

The Radio Shack 259's were so crappy, they weren't even the right inner diameter to accept RG8 cable.

BTW every ARRL Handbook since time immemorial has a page or two of instructions for this.

-W

# 1572. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: spammers@must.die.com
Message-ID: <wsandersEEEEBq.HLK@netcom.com>
Source record: 92038
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Build a 1/4 wave with a SO239 and 8 feet of copper wire. Not very weatherproof (mine is inside, so I skipped the silicone seal it would take to weatherproof it). Mine cost $4.32. SWR 1.1:1.

Dimensions in many ARRL handbooks and other antenna books.

-w

# 1573. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970804170701.NAA29302@ladder02.news.aol.com>
Source record: 92039

>> I'm wondering what the best way to attach a PL259 to a coax cable is.
>> I was told a soldering gun, but I'm having the darndest time getting
>> this weller 140 watt soldering gun to heat the PL259 up enough to melt
>> solder inside. It has a duty cycle of 20%, use it for 1 minute, let it
>> cool for 4. If you try to go a bit past the 1 minute, the gun actually
>> seems to start to cool on its own, because the tip gets "stuck" in the
>> solder joint. On field day, we used a 100 watt weller soldering iron
>
>Actually, this is GOOD. When the tip sticks to the joint, the temp is
>*JUST* getting high enough to start making good solder joints. KEEP
>HEATING. Don't stop! Eventually you will get the whole thing hot enough
>to melt the solder properly. The reason the tip sticks is that once the
>solder starts to become partially liquid, you get a better thermal
>conduction path between the tip and the connector, and this "sucks" heat
>out of the tip faster. Like I said, KEEP HEATING. The connector is
>getting close to the right temperature.
>
>73
>
>Bill, KA2WFJ
>
I tin the braid after stripping the outside insulation off an before it
gets mangled. Then cut the braid to length using a small pipe
cutter.Drilling through the solder holes to expose the brass underneath
helps. Tin the solder holes befoe putting in the cable is good too.
Drilled the threads for RG 58 adapters out to install some double braided
coax.

# 1574. info on "VT 4 C tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33E6119E.59E2@pactitle.com>
Source record: 92040

Can anyone give me any info on some tubes.
They are made by GE VT-4-C 19a1 ("sc88"?)
They have a 4 prong base and is 6" high..
Any info would be great..

--

Dave Booth KC6WFS
Note the ***Spamsaver when replying..
booth@pactitle.com

# 1575. Re: 1 KW linear from QEX article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <ksFWGKAycc5zEw6n@two-way.demon.co.uk>
Source record: 92041

In article <870383142.8638@dejanews.com>, paul@pachena.ca writes
>Hello all,
>Has anybody built the 1 kW linear described in QEX July 1990. I
>only know of the article and haven't been able to find a copy of it.
>I would appreciate a fax copy or snail mail copy of it. Also any
>feedback on construction/performance etc. fax in Vancouver is
>604-291-1567.
>Thanks all.
>Paul Wende
>VE7KHz
>
>--------------------==== Posted via Deja News ====-----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet

Hi Paul,
I've not seen the QEX article but had you considered the 1KW kits advertised in QST by Lee Martin in Myrtle Beach, SC?
I've recently completed this 8 X 2SC2879 units and it works just fine, bangs the Bird slug hard on the end stop!

73

Phil G4ZOW/M

# 1576. Re: Old freq counter - down but not out.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <NJ53EHAGfc5zEwcm@lfheller.demon.co.uk>
Source record: 92042

In article <33E4CA1A.3D00@flash.net>, ka8ddz <hynde@flash.net> writes
>I've got an old freq counter I have used for years. I would appear that
>the 'brains' of the counter have failed. Everything else on the board is
>glue logic.
>
>Anyone know of a replacement? The chip data is below, anyone recognize
>it.
>
> PS S 02
> SP8680B
> 8309A

It's a Plessey (GEC-Plessey Semiconductors, now) device. I've got the
data in the '94 GPS Professional Products Handbook: it's a 575 MHz
1/10/11 ECL dual-modulus divider. Try a GPS distributor.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 1577. Re: IN1671 data please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <jc1XKGAxYc5zEw4m@two-way.demon.co.uk>
Source record: 92043

In article <19970731181800.OAA01261@ladder01.news.aol.com>, JohnsonHE
<johnsonhe@aol.com> writes
>>
>>I've been given a fairly chunky diode made by Int Rectifier, a IN1671
>>and would appreciate some basic data, it's not in my Towers book.
>
>1N1671....Obsolescent, 100 volt PRV, 240 amperes, (Infinite heat sink), 50
>mA reverse leakage max...Silicon of course.
>
>W4ZCB
Thanks to all replies, I was considering using these diodes for a
battery split charging system.

Phil G4ZOW/M

# 1578. Circuits on packet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Harry Lythall <rharris@arcturus.net>
Message-ID: <01bca0fc$ac8f3380$a90464c3@acz732k>
Source record: 92044

Circuits on packet

Hi all, Ron (G0TLA) has spent a couple of weeks here
in Sweden fixing up my own QRP PMS (Personal Messaging
system) on the packet radio. My site is a mirror of
Rons PMS from which you can download loads of circuits
for antennas, transmitters, receivers, etc. The packet
address of the two PMSs are:

G0TLA @ GB7NND.#23.GBR.EU
SM0VPO @ SL0ZS.KISTA.AB.SWE.EU

Again; NO fees, memberships, registration or any other
impediment is required. All files can be automatically
by ANY licenced radio amateur.

To access, send the following packet message:

---
To request DIR of files or directories

Command: SP REQDIR@G0TLA.GB7NND.#23.GBR.EU
Title : QRP @ [insert your own bbs here]
Message: /EX (or Ctrl+Z)

or

Command: QRP REQDIR@SM0VPO.SL0ZS.KISTA.AB.SWE.EU
Title : QRP @ [insert your own bbs here]
Message: /EX (or Ctrl+Z)

---
To request file (example QRP/ANTENNA/70CMJIM.GIF)

Command: SP 7PSERVE@G0TLA.GB7NND.#23.GBR.EU
Title : QRP/ANTENNA/70CMJIM.GIF @ [insert your own bbs here]
Message: /EX (or Ctrl+Z)

or

Command: SP 7PSERVE@SM0VPO.SL0ZS.KISTA.AB.SWE.EU
Title : QRP/ANTENNA/70CMJIM.GIF @ [insert your own bbs here]
Message: /EX (or Ctrl+Z)

---

You can also find loads of files and even pictures of
finished projects at:

http://user.tninet.se/~acz732k/
http://hem2.passagen.se/sm0vpo

Best regards Harry (SM0VPO) and Ron (G0TLA)

# 1579. ***NEW look for the POTG comedy radio web site: www.potg.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970804191900.PAA23751@ladder01.news.aol.com>
Source record: 92045

http://www.potg.com/

Attention all POTG listeners: We have a BRAND new look, and a BRAND new episode posted on the web site! Episode 6 was just posted on August 3rd, so your hungry ears have another 60 minutes of unbelievable comedy to munch on... completely free as always.

For those of you who have never heard of Planet of the Grapes, here is our old advertisement:

---
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.

Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."

Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.
The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!
---

## 1580. More building questions - xtal filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33E5FDCC.103@flash.net>
Source record: 92046

In several designs I see homebrew xtal filters in between each rock is a cap to ground. I've seen values all over the place. Can someone explain the purpose and how the value is calculated. I can not find any reference material.

Tim, ka8ddz

# 1581. Re: 6 meter beacon TX plans ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33e64c44.4091198@news.online.no>
Source record: 92047

On Sat, 02 Aug 1997 02:23:35 GMT, hduff@ica.net (Hugh Duff) wrote:

>I thought I read somewhere recently about plans for a 6 meter beacon
>transmitter (CQ VHF ???) Does anyone recall seeing such an article
>in recent months or years ? If so, where and in what issue ?
>
>Thanks, Hugh VA3TO
>
I have built 10-15 beacons for 2m. 70, 23, 13cm using callsign
generator based on 1/4 SGS TTL type EPROM 93427 and two CMOS ICs,
transmitted data like: LA3UHF LA3UHF LA3UHF in DS78F . Supply 12V 90mA
We are now planning a new programmable callsign logic, a prototype has
been built transmitting: LA3SHF LA3SHF LA3SHF in JO48AE, some more
mose text is possible
It would be interesting to know if it is some interest for some scale
of producing callsign logics? Power supply is 12V 5mA
>

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1582. Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Jason <kb5urq@earthlink.net>
Message-ID: <33E6A0F3.F2@earthlink.net>
Source record: 92048
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Being an employee at Radio Shack, I have the DX-390 shortwave receiver (20-214). I've listened to amateurs on all the bands (on SSB of course). I got good results with my telescoping antenna which comes with the unit. I also tried the portable shortwave antenna which cips over the included rod antenna. It is 23 feet long and gives noticeable improved reception.

I noticed that my 160 meter band was completely DEAD. Not having an HF rig of my own, I thought that maybe the band was dead. I took a chance and bought the antenna kit (#278-758). It comes with 70 feet multi-stranded copper wire for the outside antenna, and about 50 feet of insulated copper wire. It comes with ceramic insulators for neat installations and some nifty plastic "thingies" for holding the antenna in place in mid air.

After waiting a few weeks and getting rope (which was NOT included), I began construction. All went fairly well and I have the copper wire about 20 feet up in the air.

After putting on my "mono" 1/8" jack onto the feed line, I plugged her in. I was extremely surprised to see and hear a vast imrprovement on everything from my amateur band coverage to regular FM broadcast bands.

I found that after all there WERE people on 160 meters.

Some bad things about it was the poor quality of the feedline, which was tiny and must have had great loss in signal (although I honestly believe that for a shortwave receiver such as mine, the amount of signal that I'm loosing probably isn't hurting me all that much).

I would love to hear from others that have used this antenna and anyy suggestions for antennas like it or similar.

73
Jason

# 1583. 2-meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Jonathan Wilson <jw816@primenet.com>
Message-ID: <33E6A57D.630D@primenet.com>
Source record: 92049

I agree with KF6IIU suggesting you try a 2-meter ground plane built from wire and a SO-239 connector. I use many homemade ground planes from 108 to 700 mHz with good results.

At my workplace, (a TV studio) we've compared homebuilt vertical dipoles with homebuilt ground plane antennas, and the ground planes all seemed to work better. I'm sure our construction methods for the vertical dipoles were at fault. The ground planes were easier to build and install, so that's what we used.

If you wish to buy a groundplane kit, try the Antenna Specialists ASP-7A for 108-512 mHz. You cut the elements to length according to a chart supplied with the antenna. It works well. Price about $30 US.

For extra gain, try a 5/8 wave vertical. This has about 3 db gain over a groundplane. Length is about 45 inches at 146 mHz. This antenna has a coil and capacitor matching network in the base, and it's more difficult to build. If you want to buy one, MFJ makes a very low-cost 5/8 wave base station antenna. Lots of other companies make them, too.

I like the 5/8 wave antenna, and use one on my car with good results. If you listen to a particular repeater that's just a little noisy, the extra gain from a 5/8 wave antenna might be enough to make it full quieting.

There is a lot of loss in coax cable at 2 meters. RG-58 cable will waste a lot of signal, and should only be used for very short runs (a few meters). RG-8X is better than RG-58, and RG-8 works better still.

Good luck and welcome to ham radio!

Mike WA3RVS

# 1584. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33E6ACD6.D7ECEE6@direct.ca>
Source record: 92050
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Robert Casey wrote:

> Yeah, it's full of harmonics, but at these QRP levels, that
> shouldn't much matter. But if you do RFI your neighbor during
> his favorite TV show, just wait untill that show is over.

Aren't there regulations about spurious emissions? I use these
things as marker generators. Up to L band. To hook one to an antenna
without a filter is simply irresponsible...
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

## 1585. Help with Shure Mike

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: markem@primenet.com
Message-ID: <5s6d7t$em6@nntp02.primenet.com>
Source record: 92051
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Does anyone have the wiring diagram for a Shure 444D? I need to know how the element is wired thru the PTT switch and Hi/Lo switch.

Thanks... Mark AA7TA

# 1586. 900 MHz Beam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-04 00:00:00 UTC
From: Jason <kb5urq@earthlink.net>
Message-ID: <33E56E33.4DC7@earthlink.net>
Source record: 92052

Hello all...
Anyone know of some lans for a 900 MHz beam?

thanks for all replies in advance..

## 1587. Re: contact cleaner cleanup....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970805154701.LAA13074@ladder02.news.aol.com>
Source record: 91961

Sure. Made by Caig labs in CA

W4ZCB

# 1588. Educational Pricing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: Joseph W Walz <jwalz@unique-software.com>
Message-ID: <5s793q$lv8@wolf.tela.com>
Source record: 91962

Please forgive me for this e-mail, but I felt I just had to let more people know about this and get in on the ground floor!

Microsoft Educational Price Software

Students and Faculty Members Only (ID or Fee Statement Req)

Microsoft Office Pro 97 $179.95
Visual Basic 5.0 $99.00
Visual C++ $99.00
Visual Studio $229.00

Memory 16 MB 72-Pin $58
32 MB 72-Pin $139

Don't miss this opportunity, email me for more details. (webmaster@unique-software.com)

Thanks

# 1589. Re: More building questions - xtal filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970805203300.QAA27888@ladder01.news.aol.com>
Source record: 91963

>
>:In several designs I see homebrew xtal filters in between each rock is
>:a cap to ground. I've seen values all over the place. Can someone
>:explain the purpose and how the value is calculated. I can not find any
>:reference material.
>:

Well, it's a little more complicated than that, but basically, the value
of the capacitor between crystals in a ladder filter, determines the
bandwidth of the filter. Values like 80-100 pF wind up yielding low loss
2-3 KHz filters. Values like 300-500 pF yield rather hi loss narrow CW
filters. (For the same Q in the crystals)
I certainly would not call a Cohn filter as good as a Chebychev, but the
differences between Cohn, Cheby's, Butterworths and even equi phase
filters is only a matter of values. The topology remains the same.. A good
linear phase filter won't ring, even if it's 100 Hz wide.
Hayward has a pair of programs bundled with his book. (L.EXE and X.EXE)
that calculates those capacitor values for whatever kind of filter you
want to build.

W4ZCB

# 1590. Re: More building questions - xtal filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <nyeN6CAb035zEwLA@lfheller.demon.co.uk>
Source record: 91964

In article <33E5FDCC.103@flash.net>, ka8ddz <hynde@flash.net> writes
>In several designs I see homebrew xtal filters in between each rock is
>a cap to ground. I've seen values all over the place. Can someone
>explain the purpose and how the value is calculated. I can not find any
>reference material.

Here are some ladder filter design formulae that were published in Pat Hawker's column in RadCom many years ago (I think that they originally came from a French amateur radio publication):

```
---X-----X---
C0 C1 C0
------------
```

C0 = 1, C1 = 2

```
---X---X---X---
C0 C1 C1 C0
---------------
```

C0 = 0.707, C1 = 2.121

```
---X---X---X---X---
C0 C1 C2 C1 C0
-------------------
```

C0 = 0.0.4142, C1 = 1.82, C2 = 2.828

For SSB X should be between 8 and 10 MHz (filter impedance = 800R - 1K)

To calculate the caps., multiply the coefficients by 1/(2*PI*f*R) where f is the xtal freq. in Hz and R is the input/output impedance in ohms.

These filters *must* be properly terminated.

At lower xtal freqs. use higher impedances for sufficient bandwidth. For CW use lower impedances and/or lower freq. xtals.

I've built a couple of SSB Rx filters using these formulae, they worked quite well. I'd use 4 xtals for the main filter, with a 2 xtal filter after the IF amp, to cut down the broadband noise.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a low-cost reconfigurable computing module using the XC6216 FPGA

# 1591. Re: Towers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33e62689.3163748@netnews.worldnet.att.net>
Source record: 91965
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.amateur

I used to work on BC system installs, as well as small communications towers.

I agree with Gary completely.....

On Mon, 04 Aug 1997 13:33:40 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:

>This is not a good way to erect a tower more than 40 feet tall.
>You *do not* want to tilt erect a tower that tall. The bending
>moment on the tower will be *huge* and you'll likely bend the
>tower if you don't break it. You want to stack the sections in place.
>This only requires a 15 foot gin pole which is moved up section by
>section as you hoist and install each section, IE the gin pole is
>clamped to the standing section and used to hoist up the next
>section. This method can be used to erect an arbitrarily tall tower.
>It is the way a 1000 foot TV tower is erected, for example, and
>is the way I erected my little bitty 70 foot tower.

Having seen people get killed trying to save time, I would suggest stacking ONE section at a time if possible. Our tower riggers used to pick up steel self-supporting towers in the 120 ft range with a crane, but the idea stopped after a 100 ft plus boom monster crane failed (despite the use of experienced riggers), and the whole 200 ft mess landed on the cab of the crane.

As Gary said, the bending moment is huge, sometimes fatally so.

73 Tom

# 1592. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: Don Merony <dmerony@mail.midsouth.net>
Message-ID: <01bca153$c3904220$7e5c41cf@don-merony>
Source record: 91966
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Good advice from ka8ddz. I have one of the SO239 and 5 coat hanger wire ground plane antennas which he described. It is sitting on the floor in my attic, and I can easily work 50 miles and have reached a repeater at 100 miles using a 3 watt HT. Good luck on your test.

Don Merony KE4YTZ
dmerony@mail.midsouth.net

ka8ddz <hynde@flash.net> wrote in article <33E3702A.1653@flash.net>...
> Jean-Pierre Magnan wrote:
> >
> > I'm new to this ham stuff. I don't even have my license yet. All I do
> > presently is listen to the local repeaters with my portable and study
to
> > pass my exam in september.
> >
> > I need a vertical antenna from which I can get good performance. I know
> > that quads or yagis offer a lot of gain but I have no rotor and I don't
> > plan on getting one in the near future.
> >
> > Now, according to the latest posts in the various ham NG, a J-pole is a
> > lousy antenna. I had planned to build one sometimes this month. Now I'm
> > not just sure I should. I heard about dipoles doing a better job. Is
> > this true and where, on the Internet, can I get plans to do this ? Is
> > there other omnidirectionnal antennas that can be built on a thight
> > budget ?
> >
> > 73
> >
> > Jean-Pierre Magnan
> > Future VE2 or VA2
>
> Interesting, Im not sure who said a J pole was a lousy antenna, I guess
> if they were comparing it to a 10 element yagi and the comparison was
> gain and directivity perhaps a J pole could be considered lousy. You can
> make a ground plane in 15 minutes. Buy a female coax connector and
> solder four 20" wires to the flat base portion sticking straight our or
> bent down slightly, then solder one vertical 19.5" wire to the center.
> Voila, a 2m ground plane.
>
> I dont have my antenna book handy but I belive a J pole has a small
> amount of gain over a 1/4 wave ground plane as described above. I used a
> J pole for many contacts to the RS-10 satellite, didn't seem to lousy to
> me. Your not going to see much difference if your monitoring local

> repeater activity. Jean, I strongly suggest you buy the ARRL antenna
> book, (a good investment in your ham education) after reading it a few
> times you'll see there is not much magic in antennas and you can build
> them out of just about anything.
>
> Good luck, Tim, ka8ddz
>

## 1593. contact cleaner cleanup....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: Joe BV/N0IAT FITR <joentam@transend.com.tw>
Message-ID: <33E6DE45.70C@transend.com.tw>
Source record: 91967
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi,
Bought a US$10 aerosol can of contact cleaner. Used it
on some gear and it fixed a relay problem for about 10 days.
Now, I notice the metal contacts have a green film on
them, and the relays are again intermittant. The film
is transparent, not opaque, so I guess it is a residue
of the contact cleaner rather than oxidation.

Can anyone suggest a contact cleaner that leaves NO
residue, yet rids oxidation of exposed
metal contacts? Does such a beast exist? The stuff
I bought is from Germany, called Kontax if I recall.

I have tried DEOXIT with a similar result. Could the
base metal be causing the problem?

thanks,
Joe

# 1594. Re: More building questions - xtal filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33e6f082.37384920@news.erols.com>
Source record: 91968

On Mon, 04 Aug 1997 09:05:32 -0700, ka8ddz <hynde@flash.net> wrote:

>In several designs I see homebrew xtal filters in between each rock is
>a cap to ground. I've seen values all over the place. Can someone
>explain the purpose and how the value is calculated. I can not find any
>reference material.
>
>Tim, ka8ddz

Tim - There were a couple of really good articles in QST on this subject. They have been reprinted in several of the ARRL tech books. I see them in W1FB's Design Notebook. They are by Wes Haywood, W7ZOI and originally apeared in the May 82 and July 87 QSTs . Doug DeMaw presented a Testing device used to determine crystal values (needed for the calculations in Wes's articles) in the Jan 90 QST.

Wes and Doug do a great job of explaining how to build the ladder filters, but I think they overestimate the ability of your average homebrewers when they imply that this process is sort of easy. It looked fairly formiidable to me. The circuit for the tester was almost as complicated as that of the receiver I was building.

I think I found a temporary way around the problem: Instead of building the 250 Hz three crystal ladder filter, I used a very simple, one crystal filter. I have a dual gate MOSFET mixer and a dual gate MOSFET IF amp. One of my 3.579 rocks went between the drain of the mixer and the input of the IF amp with a 2.7 k resistor to ground. I borrowed the idea from another W1FB circuit. The bandwith is a lot wider, but I still get single signal effect, have had lots of very pleasant CW QSOs and have the added benefit of being able to listen to SSB signals. (they sound great). I'll build the ladder filter later.

Good luck. Hope this helps. 73 de N2CQR Bill

# 1595. Re: contact cleaner cleanup....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: CJ Johansson <"-.-. .---"@boi.hp.com>
Message-ID: <33E785A3.54BE@boi.hp.com>
Source record: 91969

Jsender104 wrote:
>
> >Hi,
> >Bought a US$10 aerosol can of contact cleaner. Used it

< SNIP >

> >base metal be causing the problem?
> >
> >thanks,
> >Joe
> Hi Joe,
> The base metal could very well be showing through, probably time to
> change the relays The BEST contact cleaner I"ve ever used is called
> CRAMOLIN. At work we call it "Technician in a can". At $30.00 for 2
> ounces it had better be. Don't let the price scare you off a little bit
> goes a long way and this stuff really works. Does anybody else Know about
> this stuff?

Cramolin is indeed expensive, but great stuff. However, it's not really
a contact cleaner, but a contact lubricant. I generally use one of the
spray type cleaners (TF type), which remove the gunk AND lube, then put
a super thin film of the cramolin on the contacts to lube/protect.

Some of the cheap cleaners are actually cleaner/lube, which can cause
corrosion on some metals, depending on what film is left and what metals
the contacts are made of. Really tricky stuff since you generally can't
figure out either one (it's the ol' test of compatibility in a spot that
won't show). Perhaps this is the problem the original poster is having.

-cj

--

|cj_@_boi.hp.com | KD6AEG (Remove the '_'s for E-mail) |
|Hewlett-Packard | Give a man a beer |
|Storage Systems Division | and he'll waste an hour |
|11413 Chinden Blvd. M/S 831 | Teach him to brew |
|Boise, ID 83714 | and he'll waste the rest of his life.|

## 1596. Yaesu mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: Doep <barend@fast.co.za>
Message-ID: <01bca11a$8f6df160$56191cc4@pentium>
Source record: 92053

Hi from RSA
Does anyone know the mod for Yaesu CPU-2500R to get the full frequency
range? Please reply to barend@fast.co.za

# 1597. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5s6lv5$abs$1@nadine.teleport.com>
Source record: 92054
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <33E6ACD6.D7ECEE6@direct.ca>,
laura halliday <ve7ldh@direct.ca> wrote:
>Robert Casey wrote:
>
>> Yeah, it's full of harmonics, but at these QRP levels, that
>> shouldn't much matter. But if you do RFI your neighbor during
>> his favorite TV show, just wait untill that show is over.
>
>Aren't there regulations about spurious emissions? I use these
>things as marker generators. Up to L band. To hook one to an antenna
>without a filter is simply irresponsible...

I second that. A TTL gate produces enough high-frequency energy to cause a
lot of interference. There's no excuse for not following it with a filter.

Roy Lewallen, W7EL

# 1598. Re: CW (Morse Code) triumphs again!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: Mark Little <markl@dove.net.au>
Message-ID: <33E6DD15.B609AD1E@dove.net.au>
Source record: 92055
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Bry wrote:
>
> Forwarded message:
>
> From: "Benny Owens K5KV" <k5kv@cyberview.net>
> To: "CW - Reflector" <cw@qsl.net>
> Subject: [CW] NAVY-MARINE CORPS MARS CW IS BACK!!!!
> Date sent: Sun, 27 Jul 1997 01:09:12 -0500
>
> HELLO AND THANKS FOR READING
>
> TONIGHT WAS A NIGHT WORTH WAITING FOR.
>
> IN A RECENT CHIEF NAVY-MARINE CORPS BROADCAST, THE CHIEF NAVY-MARINE
> CORPS
> MARS ANNOUNCED THAT DOD HAS AUTHORIZED CW NETS AGAIN. IN SHORT ORDER,
> WE
> HAVE FOUR NETS WORKING AGAIN IN LA. WHILE I CAN NOT GIVE OUT THE
> EXACT
> DETAILS, THOSE IN SOUTH CENTRAL STATES WILL HEAR ONE AT 2100 CDT JUST
> A FEW
> KHZ ABOVE THE 80M HAM BAND. AFTER A WEEK OUT OF TOWN, IT WAS VERY
> NICE TO
> HEAR A MESSAGE PASSED BY CW FROM AN ANOTHER MARS STATION TO A
> NAVY-MARINE
> CORPS STATION FOR RELAY ON THE DIGITAL NETWORK.
>
> NO I AM NOT JUST HUNG UP ON CW FOR THE H__L OF IT. I WAS NECOS OF A
> NAVY-MARINE CORPS VOICE (SSB) NET EARLIER THIS EVENING AND COULD NOT
> HEAR MANY OF THE STATIONS ON THE NET. WITH SIMILAR CONDITIONS (LOCAL
> THUNDERSTORMS) I WAS ABLE TO COPY A MULTI ADR MESSAGE SENT THREE HOURS
> LATER VIA CW. IT IS REALLY TRUE THAT CW CAN GET THROUGH BETTER THAN
> SSB.

I wouldn't have thought that that was ever in question. Given your
situation, however, the question should be is CW the BEST way to get
though noise? The answer is no. Obviously in this case, it is the most
cost-effective (as the system already exists).

> YES I KNOW THAT NOT ALL HAMS CAN READ CW THROUGH THE NOISE, BUT THOSE
> WHO CAN FIND IT EASIER THAN SSB. WE HAD THE MESSAGES PASSED WITH SOME
> CHAT
> TIME AFTER THE NET. I HAVE SEEN VOICE NETS TAKE LONGER TO HANDLE LESS
> TRAFFIC. MAYBE THE WISDOM OF USING A SYSTEM THAT WORKS MAKES SENSE

> AFTER
> ALL.

Voice provides practically the WORST way of passing messages over the air (except where the content has to explained interactively). It's not suprising that voice nets can take longer than "written" contacts. The more accurate comparison is to compare different text based systems with each other, that is, comparing Morse coding to FEC type coding, for example.

> CW WAS NEVER DEAD AT K5KV AND IS REVIVED AT NNN0LGN.

CW will never die as long as people want to use it (however, compulsion does not engender interest, rather it breeds rejection).

>
> 73
>
> BENNY

Regards,
Mark.

# 1599. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0508970408270001@wd1v.mv.com>
Source record: 92056
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

# 1600. Re: contact cleaner cleanup....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970805145801.KAA10305@ladder02.news.aol.com>
Source record: 92057

>Hi,
>Bought a US$10 aerosol can of contact cleaner. Used it
>on some gear and it fixed a relay problem for about 10 days.
>Now, I notice the metal contacts have a green film on
>them, and the relays are again intermittant. The film
>is transparent, not opaque, so I guess it is a residue
>of the contact cleaner rather than oxidation.
>
>Can anyone suggest a contact cleaner that leaves NO
>residue, yet rids oxidation of exposed
>metal contacts? Does such a beast exist? The stuff
>I bought is from Germany, called Kontax if I recall.
>
>I have tried DEOXIT with a similar result. Could the
>base metal be causing the problem?
>
>thanks,
>Joe
Hi Joe,
The base metal could very well be showing through, probably time to
change the relays The BEST contact cleaner I"ve ever used is called
CRAMOLIN. At work we call it "Technician in a can". At $30.00 for 2
ounces it had better be. Don't let the price scare you off a little bit
goes a long way and this stuff really works. Does anybody else Know about
this stuff?

# 1601. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: Dave Keyser <nospam.david.keyser@ln.ssw.abbott.com>
Message-ID: <33E75CBA.4DB8@ln.ssw.abbott.com>
Source record: 92058

Good technique here, same as I've been using for (my god am I that old?)
over 20 years. Also, silver PL-259s with gold center contacts are much
easier to deal with than the cheaper nickel-plated ones, IMHO.

73 de KE6PHU/9

---

Dave Keyser | The opinions expressed herein are not necessarily
Gurnee, Illinois | those of my employer, Abbott Laboratories.

Jeep Meister wrote:
>
> I have attached many PL259's to coax over the years and this is the
> process I have developed. First you need a proper soldering iron, a
> soldering gun won't work. (as you found out). The iron should be 100
> to 150 watt with a large tip that will retain a lot of heat. I
> usually use a solder tip adapter attached to a hand held propane tank.
> This may sound like an overkill, but you want to get a lot of heat to
> the shell quickly so that you can apply the solder and remove the heat
> before the insulation cooks. Trim the outer coax insulation back a
> inch or so and tin the braid, then sweat (cool) the braid with a damp
> sponge or rag. Use a tubing cutter to cut the braid to length, then
> strip off the inner insulation to the proper length and tin the center
> conductor. Slip the connector shell on the cable and install the
> connector so that the braid is visable at the connector holes.
> Using your hot, well tinned soldering iron, flow solder into the holes
> and sweat the connector as soon as possable trying to avoid damage to
> the coax.
> Whenever you solder be sure that the metal is clean and free of grease
> or oil. Soldering is alloying of lead/tin to a base metal. If that
> base metal is not exposed, solder can't alloy to it and the result
> will be a poor joint. Heat for soldering is transfered via the solder
> on a well tinned iron. When you have the proper heat touch the solder
> to the iron / metal junction and the solder should flow and "wet" the
> metal without balling up and running off.
> After the connector is totally cool I use flux remover to clean off
> any flux residues that may absorb moisture and corrode in the future.
> Happy Soldering,
> Buzz
>
> > I was wondering what the best way to attach a PL259 to a coax cable is.
> >I was told a soldering gun, but I'm having the darndest time getting
> >this weller 140 watt soldering gun to heat the PL259 up enough to melt
> >solder inside. It has a duty cycle of 20%, use it for 1 minute, let it
> >cool for 4. If you try to go a bit past the 1 minute, the gun actually

> >seems to start to cool on its own, because the tip gets "stuck" in the
> >solder joint. On field day, we used a 100 watt weller soldering iron
> >to attach some PL259's to cables with no problem whatsoever. So I'm
> >wondering if I should be looking to purchase one of those.
> >
> >Any tips or hints or what works best for you would be appreciated!
> >
> >73,
> >Niel Brieger, KC5ZJR
>
> Attempting to thwart SPAM. Substitute buzzer for nospam in email address

## 1602. Cartons of components...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-05 00:00:00 UTC
From: 629371@worldnet.att.net
Message-ID: <33e726df.11184922@netnews.worldnet.att.net>
Source record: 92059

Last week, I asked for some ideas in how to dispose of some electronic components from a friend of mine fathers estate who passed away recently. About 4 people responded with offers to buy the cartons of components sight unseen but I didn't feel we could do that - without at least an idea of what was in the boxes (thanks anyway).

We've now sorted through the cartons and combined everything into 3 (heavy) but shippable boxes and found the following: (this is NOT a complete list by any means! :))

1st box - is full of various ganged tuning capacitors of different sizes, a lot of ceramic core, wound inductors (some variable, I believe they're called roller inductors), of various sizes - some look new, some look used. There are some complete tuning assemblies (with knobs) out of some unknown equipment. Several new (in carton) coils of various sizes.

2nd box - must be hundreds of (primarily new) electronic components, consisting of packages of resistors, capicitors, diodes, mini reostats and misc electronic construction aids, wire wrap holders, heat shrink tubing, etc., etc....for building gear. It's a treasure chest if you build your own stuff - we don't.

3rd box - consists of some various metal and plastic enclosures (for building your own projects), some meters (miliamp, volt, counters, etc) plus a few different transformers, some new speakers, various gauges of wire, and more packaged resistors, etc...plus wire wound coils in storage trays with other components...

This is just a rough idea of what's involved. There are other items we've haven't listed...

If the people who offered to purchase the gear would please re-send their offer (now that you have an idea of what's involved), we can get this stuff moving. I will need help on the shipping - these cartons are heavy - include your zip code, so I can get an estimated cost.

This is obviously an "as is" transaction. I'm sure in my own mind that everything involved must be worth a few hundred dollars (probably more), but I certainly can'tt guarantee anything.

Open to any offers - or trades for any type of HF gear or accessories. In the case of a trade, we'll take the value of the trade and put the money into the estate trust ourselves...

Thanks for reading this very long post...

John Lewis (and friend Paul)

# 1603. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33e7bbd3.45131597@news.pipeline.com>
Source record: 91970

ka8ddz <hynde@flash.net> wrote:

>Newbie builder wants to know:
>
>In regards to the W1FB Universal DC reciever, of course there are
>several coil, cap combos for the tuned input, each to tune a different
>band. Typically using 100pf or so to tweak it in.
>
>My question is, why not use one coil in the middle of the road and then
>a ganged 365pf cap to tune? I seemed to have success with this on 40/80
>and even 160 when I lumped in another fixed cap. For someone wanting a
>multiband Rx this seemed to make the most sense.
>
>Am I missing something? Do I loose somthing by doing this?
>
>Tim, ka8ddz

While it is true that a range of capacitances will give a range of frequencies
or reactions by a circuit, with the inductance held steady, it is also true that
Q is not linear through that range. check it out: Hi-H, Lo-C will give you the
same LC resultant as the proper Hi-c, Lo-H circuit, but they are not going
to interchange at all well.

So, the thing is to use a major cap of a fixed valye, and a major coil of a
fixed value, and all else is compromise, or cut-to-fit.

Radio has come a long way since meters were 20 K-Ohm/Volt, and caps
and resistors were +/- 20% standard, but it is still largely cut and try, and
try to guess what went wrong.

Anent which, why don't you try the circuit you mention?
It should be fun and give you a lot of learning for a small cost.

Good luck
Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)

# 1604. HELP WANTED $24.00/HR TO SHOP IN HOMETOWN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: shop2udrop@juno.com
Message-ID: <5s8tsn$5he@winter.news.erols.com>
Source record: 91971

HELLO FELLOW NETIZEN:

EARN UP TO $24.OO PER HOUR TO SHOP IN YOUR FAVORITE STORES IN YOUR OWN

HOMETOWN. CONSUMER RESEARCH AGENTS NEEDED NOW. PAID EXPENSES. MEDICAL

AND DENTAL BENEFITS. PLUS SO MUCH MORE. POSITIONS ARE FILLING QUICKLY.

WE NEED SERIOUS PEOPLE TO WORK THERE OWN HOURS.

ALL AGES ARE WELCOME. EXPERIENCE IS NOT NECCESSARY.

WE MUST FILL OUR QUOTA FOR THE UPCOMING XMAS SEASON

IF YOU WANT TO MAKE MONEY WHILE YOU SHOP IN YOUR FAVORITE MALL, THIS IS

PERFECT FOR YOU!

SOME OF OUR AGENTS ARE MAKING $30,000 A YEAR

FOR COMPLETE DETAILS AND A JOB APPLICATION

PUT" JOB APPLICATION" IN THE SUBJECT FIELD AND EMAIL TO:

shop2udrop@juno.com

THANK YOU
S. GERTSCH

# 1605. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <33E82AF1.153805E4@rl.ac.uk>
Source record: 91972

By far the best technique is to use N-type or BNC plugs
on your cable. If you have to have an SO239 - like on the
back of a rig, get an adapter to whatever plug
you are using.

PL259s are bad news above HF, difficult to fit without
damaging the coax and often of such low quality that they
don't screw together properly or take solder.

If you really must use a PL259 - get it from Greenpar or
MA/COM.

# 1606. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: "Ed Hare, W1RFI" <ehare@arrl.org>
Message-ID: <5s9rj2$bve@mgate.arrl.org>
Source record: 91973
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

w7el@teleport.com (Roy Lewallen) wrote:

>In article <33E6ACD6.D7ECEE6@direct.ca>,
> laura halliday <ve7ldh@direct.ca> wrote:
>>Robert Casey wrote:

>>> Yeah, it's full of harmonics, but at these QRP levels, that
>>> shouldn't much matter. But if you do RFI your neighbor during
>>> his favorite TV show, just wait untill that show is over.

>>Aren't there regulations about spurious emissions? I use these
>>things as marker generators. Up to L band. To hook one to an antenna
>>without a filter is simply irresponsible...

>I second that. A TTL gate produces enough high-frequency energy to cause
>a lot of interference. There's no excuse for not following it with a >filter.

FCC regulations require an absolute minimum spurious emission
attentuation of 30 dB for an HF transmitter running 5 W or less.

In addition, Part 97 stipulates that if any spurious emission causes
interference to another radio service (ie, your neighbor's TV), you would
need to attenuate the spurious to whatever level is required. If you use
a TTL device on HF, it is probable that your harmonics will extend into
the VHF range, requiring filtering as needed.

At -30 dBc, the 5 watt signal could have harmonics at a level of 5 mW. A
number of us QRP types have used less power than that to work DX under
ideal conditions. A VHF signal level of 5 mW will cause severe
interfernece to a nearby TV.

--

73 from ARRL HQ,
Ed Hare, W1RFI
ARRL Laboratory Supervisor

# 1607. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33E873A4.447B@erols.com>
Source record: 91974

Rae Baker wrote:
> 
> To Bill Vanremmen
> 
> Dont use a solder gun. They cannot do a good job especially because
> you sound new to this.
> 
> Buy a 150 soldering iron and it should deliver sufficient heat to
> complete the job.
> 
> I have been in the business since 1946 and only a rank amateur would
> use a gun
> 
> 73
> 
> Rae VE3CZN

It depends primarily on the size of the gun.

# 1608. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: "Ed Hare, W1RFI" <ehare@arrl.org>
Message-ID: <5s9rts$bve@mgate.arrl.org>
Source record: 91975
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Mark J Sandford <sandford@tridsys.com> wrote:

>Roy Lewallen wrote:

>> I second that. A TTL gate produces enough high-frequency energy to
>> cause a lot of interference. There's no excuse for not following it
>> with a filter.

> If I understand what is proposed, isn't it the same thing as the last
>project in the ARRL handbook atleast 96-97 which is used 10m-80m upto
>1/2 watt and they claim that it passes all FCC regs on out of band
>signals, I don't think they have any filtering.

In that project, L1, C1, L2 and C2 are a low-pass filter.

--

73 from ARRL HQ,
Ed Hare, W1RFI
ARRL Laboratory Supervisor

# 1609. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: "Ed Mathes, RPA-C" <emathes@servtech.com>, no.span
Message-ID: <5sb9p7$h58$1@post.servtech.com>
Source record: 91976
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jason wrote:
>
> Some bad things about it was the poor quality of the feedline, which was
> tiny and must have had great loss in signal (although I honestly believe
> that for a shortwave receiver such as mine, the amount of signal that
> I'm loosing probably isn't hurting me all that much).

Actually Jason, the "feedline" is probably functioning as a component of
the antenna....in the form of a "long wire"....adding to the reception
ability. SWR, antenna impedance, etc are important when transmitting,
not usually when receiving only. You may find better reception by using
MFJ's SWL tuner...I forget the model number.

--
Edward J. Mathes, RPA-C
emathes@servtech.com
---

"Drill for oil? You mean drill into the ground to try and find oil?
You're crazy!"
--Drillers who Edwin L. Drake tried to enlist in his project to drill
for oil in 1859
---

# 1610. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5s9i6n$f70$1@news.belwue.de>
Source record: 91977

>PL259s are bad news above HF,

Not true. If properly fitted they work well up to UHF.

>difficult to fit without
>damaging the coax and often of such low quality that they
>don't screw together properly or take solder.

sad but true.

Moritz

# 1611. Re: Yaesu mod

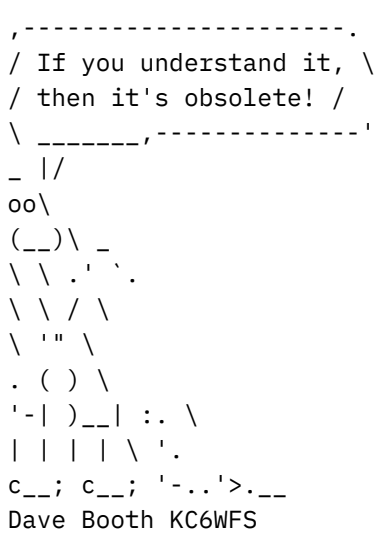
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33E887F0.15FB@pactitle.com>
Source record: 91978

Doep wrote:
>
> Hi from RSA
> Does anyone know the mod for Yaesu CPU-2500R to get the full frequency
> range? Please reply to barend@fast.co.za

Hello,
I have the same radio in use for packet.

I have sent many querys out on this radio with no luck..

Dave Booth kc6wfs dm04
http://www.geocities.com/Hollywood/5860/50am.html
-



Dave Booth KC6WFS

# 1612. WTB: Triad M-15A Modulation Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: Chuck O'Neal <CONEAL@microtouch.com>
Message-ID: <01bca287$42db8a60$f7512ec0@coneal>
Source record: 91979

Anyone have one of these I can buy?
I'll pay $50 for one.
Thanks!
73,
Chuck...

# 1613. Re: 900 MHz Beam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: ge@sr.hp.com
Message-ID: <5sakg7$f6g@canyon.sr.hp.com>
Source record: 91980

Jason (kb5urq@earthlink.net) wrote:
: Anyone know of some lans for a 900 MHz beam?

You can look at
http://www.tapr.org/~n6gn/antenna/antenna.html

Glenn n6gn

# 1614. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-06 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bca239$10186100$f9915cc1@dummy.forthnet.gr>
Source record: 91981

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS. OPEN FROM 14/April/97
TO 31/October/97. FOR INFORMATIONS
CONTACT:SV9ANJ QRA MANOS VIA
EMAIL OR FAX AT ++30 81 761382

# 1615. Re: Microstrip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <33e92156.26412498@news.azstarnet.com>
Source record: 91982

On Wed, 06 Aug 1997 14:23:19 -0700, Rae family
<rae4@popd.ix.netcom.com> wrote:

>You will find software for microstrip design (DOS based but useful and
>free) on the Rogers web site (www.rogers-corp.com)
>This is mainly for their teflon materials, but works also for glass
>fiber with the appropriate dielectric constant..
>Happy etching!
>73
>Dan AC6AO/G3NCR

I didn't see the original post on this, so I'll tack on here.

Try http://www.appwave.com/ and download their free software.

73, Wes N7WS

# 1616. Re: Ham-Homebrew Digest V97 #439, power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: w1gak@mindport.NET
Message-ID: <199708070304.XAA13372@Eden.mindport.net>
Source record: 91983

Linear Tech. has some very nice 5 & 7 amp regs.

# 1617. Macintosh Ham Radio Users Group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0708970734130001@wd1v.mv.com>
Source record: 91984
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

There is an informal group of amateur radio operators that use Macintosh computers called "Macnet" with > 800 members world-wide.

We stay in touch with each other via packet & Internet and we have a HyperCard stack that tells the story of each of us called "Macnet Roster" that list

o CALL SIGN @ HOME PBBS
o FULL NAME
o Street ADDRESS
o CITY, STATE, ZIP
o INTERNET ADDRESS
o MACS USED
o RADIOS USED
o SOFTWARE USED
o PASSIONS
o COMMENTS

Macnet members can then communicate with one another directly or use our Macnet Moderated Mailing List to pose comments or questions to all of us on the Net.

To join Macnet, put YOUR INFO (via EMAIL or via disk using TEACH TEXT on a formatted disk in a self addressed and stamped disk mailer that is in a large envelope clearly marked "ROSTER").

http://www.mv.com/ipusers/wd1v/Page2.html

-------<sent to all new Macnet Subscribers & Macnet Roster Updates>---------

Welcome to Macnet!

A trip to my home page also reveals there are many superb files and programs for amateur radio operators that want to use Mac computers. See more details in January 1997 QST, page 100. http://www.mv.com/ipusers/wd1v/

* Ham Radio Test Simulators - where you can go from Novice to Extra Class practicing the actual tests right on your Mac! Check out the info on the new NO CODE license or scramble your neurons and learn Morse on the Mac too!

* Macnet Email Reflector - send an Email to all Macnet users on the Internet.

* Macnet Roster - a virtual "Who's Who" HyperCard stack with > 800 entries giving the names, addresses, phone numbers, of radio operators all over the world that are using Macs. Check out their projects and

their passions and put a design on your Mac Radio future. See what neat things are being done with Macs and Ham Radio!

* Mac Ham Radio Software Listing - as the name implies, its "The List" of the latest - much of it with FTP links so what you see is what you can get your new programs with just a click.

* Ham Radio.FAQ - compiled on a Mac with a lots of links to great Mac FTP sites for radio, electronic engineering, and similar data.

73,

# 1618. Re: Mods for FT757?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <33E9F8CA.15FB@pactitle.com>
Source record: 91985

James Patterson wrote:
>
> Does anyone know any good mods for the 757?
>
> Thanks..
>
> Is there a DGroup just for mods?
> --
>
> (**********)
>
> James Patterson
> Web Development
> Motorola (GSSC),
> Maple Building, Kembrey Park, Swindon,
> Wiltshire, United Kingdom.
>
> Tel: +44 (0)1793 566422
> E-Mail: pattersj@ecid.cig.mot.com

Here are a few I got from
http://oak.oakland.edu:8080/pub/hamradio/mods/yaesu

copied from packet:

Msg# TSF Size #Rd Date Time From MsgID To
32969 BF 1796 0 13-Jan 1138 F1LOU 30523_ON7RC YAESU@WW ()
Sb: FT757GX and GXII MODS

YAESU FT757GX and GXII - TX 1,5 to 30 MHZ.
==========

- Disconnect FT757 from all connections.

- Open tranceiver like explained in your "OPERATING MANUAL".

- Locate on the "CONTROL UNIT" SW03 and change is position.

- Close tranceiver back and reconnect power.

- This give you 100w between 1,5 and 30 mhz.

73's de Phil, F1LOU @ ON7RC.BT.BEL.EU
==========
Note: I haven't tried or verified this, proceed at your own risk. And
DO NOT transmit outside of legal bands! WA2ISE

From cbfsb!att!pacbell.com!network.ucsd.edu!news-mail-gateway Thu Feb 13 15:00:38 EST 1992
Article: 14043 of rec.radio.amateur.misc
Path: cbfsb!att!pacbell.com!network.ucsd.edu!news-mail-gateway
From: kfeeney@helios.TN.CORNELL.EDU (Kevin Feeney)
Newsgroups: rec.radio.amateur.misc
Subject: FT757 Computer control
Date: 12 Feb 1992 15:21:31 -0800
Organization: UCSD Usenet Gateway
Lines: 46
Sender: daemon@ucsd.edu (The Devil Himself)
Message-ID: <9202122317.AA12800@helios.TN.CORNELL.EDU>
NNTP-Posting-Host: ucsd.edu

On the 757 and computer control, I've found it easy to do and it requires
very little hardware. The simplest interface I have built consisted of an
optoisolator and nothing else contained in a nine pin D-shell connector on
the rear of my laptop. The optoisolator is wired with the collector and
emitter across the data input pins on the rear of the 757 (emitter at
ground, collector on the data input pin). The LED side of the optoisolator
is driven very simply by wiring the LED connections such that the diode is
turned ON when the data pin sends a ONE (data pin goes to the RS232 level
of -3 to -15 volts). No current limiting resistor is needed because the
port hardware can only source 10 ma anyhow. When a zero is sent, the
polarity goes positive, but an LED is still a diode, so it doesn't conduct
in that direction. It works and has been in use in my car on long trips
with a program I wrote to scan my 757 through interesting frequencies, or
do channelised tuning and at home to scan interesting shortwave
frequencies. (it was very useful during the gulf war to be able to scan
tables of frequecies for interesting listening)

The 757 expects to see data at 4800 baud, and you have to follow the
information in the manual on how to send the data (basically you push 5
bytes of information onto a stack). I uploaded a program in Turbo Pascal
to CI$ several months ago that I wrote to control my 757. It's in the
hamnet software area and called something like 757CAT.ZIP. I think I put
the pascal source and the .exe both on there.

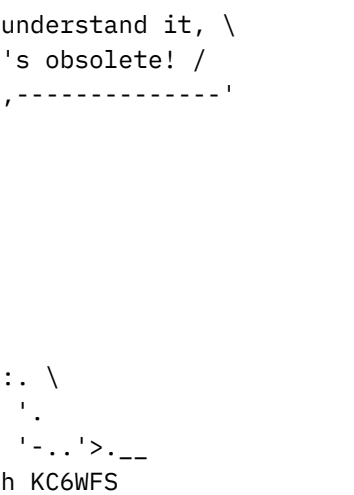
The only drawback I could see was that in the 757GX, there is no provision
to send data back out from the radio to the computer. But that doesn't
make a lot of difference. I think the GXII does do bidirectional data, and
my 736 will do some but basically the Yaesu radios are mostly set up

just
to accept external commands simply and easily.

As far as the hardware requirements, none of the radios mentioned seem
to
be any more hardware ready for computer control than the 757. They all
seen to require some sort of RS232 to TTL level interface box, usually
priced in the $100 range. And you can build a variety of homebrewed
solutions for that using max232's, 1488/1489's or doing it dirt simple
with the optoisolator idea above.

---
| F. Kevin Feeney WB2EMS | COFFEE: That wonderful
elixir |
| | that makes life
possible |
| EMAIL - kfeeney@helios.tn.cornell.edu | before
noon. |
| CIS - 72237,2760
| |
|
----------|----------|
| Without the Second Amendment, the rest of the Constitution is just
paper.|
|---|

--



Dave Booth KC6WFS

# 1619. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <33EA13A3.3D29@apollo.wes.army.mil>
Source record: 91986

Roger, Roger Tony, :)

My two speed Weller does a fine job. I saw a "helpfull Hint" in QST
a ways back and I used my Dremmel tool to grind a new element down to
fit the hole in the collar of the PL-259 and it does a super fast job of
putting a PL-259 together.

Butch KF5DE

# 1620. Re: Need help with a radio.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <33ea5d1f.3506093@news.sprynet.com>
Source record: 91987
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 06 Aug 1997 01:13:06 GMT, kyaphas!@erols.com (Kyaphas Wells)
wrote:

> I recently bought a Radio Shack Audionic transceiver. I was
>going to use it for bike-to-bike communications (I ride motorcycles
>with my buddies) becuase it's got this neat mic/earpiece. It picks up
>your voice via vibrations thru the jawbone and transmits VOX. This
>eliminates any wind roar your may encounter with other radios made for
>motorcycles. Anyway, the bad news is that the range (stated to be
>1/8th of a mile, more than enough) is really abouot 100ft. That should
>be enough, but i was thinking, If i could come up with a way to hook
>this earpiece into a small CB radio, it'd have better range and the
>ability to yak with truckers on the hiway for info.
> So, the problem is, it's hardwired into the RS unit. Any tips
>on changing them over? And do you guys know of any particular CB's
>that would work well with this idea, meaning can be VOX? Thanks in
>advance. You can email me or post here as I'll read for a bit looking
>for an answer. Read my sig before responding.
>
>
>To respond, remove "anti-spam" exclamation point from email address.
>PGP v. 2.6.2. key ID: 0xA8764AFD
>PGP keyserver: http://www-swiss.ai.mit.edu/~bal/pks-toplev.html
>"The price of freedom is _eternal_ vigilance"
> -Thomas Jefferson
Hi
I might be completely missing the point here, but, the radio you are
talking about, I believe, operates on 48 mhz fm. Cb is on 27 mhz am
an ssb.
Larry ve3fxq

# 1621. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya02408000R0708971514290001@news.zippo.com>
Source record: 91988

In article <19970807165540704 32@zetnet.co.uk>, Frank Dinger
<frank.dinger@zetnet.co.uk> wrote:

>There are PL259 plugs available (from a company in the UK named
>Westlake ,and perhaps a number of others) which are very similar to
>the N-plug design ie the braid is not soldered ,but a flanged insert
>takes care of the braid contact .

Now THAT is something I would love to find! Anyone know if there is an
American importer of such wonderful devices?!

73, Dick
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://www.delphi.com/electronic/

# 1622. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya02408000R0708970929360001@news.zippo.com>
Source record: 91989

In article <5sbg68$kbf@nntp02.primenet.com>, markem@primenet.com (M. Monninger) wrote:

>>That's too broad a statement. A 150 watt gun is insufficient, true,
>>but a 250 watt Weller does a beautiful job on PL259s. I've tried all
>>kinds of irons and the Weller is best. It heats up and cools down
>>fast and best of all, the heat is controllable by cycling the switch
>>on and off as needed.
>>
>>73, Bill W7TI
>>
>Yep, that's what I use and it works fine. I don't think they make the big guns
>anymore, do they? All I've seen is the weenie little 100-150W models. They
>just can't cut it.

Check the larger hardware stores. I just bought a 250 watt Weller gun at one of the bigger Coast-To-Coast hardware stores. They only had one in stock and it cost around $40, but they are out there.

73, Dick
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://www.delphi.com/electronic/

## 1623. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: oolong@netcom.ca
Message-ID: <33EA03C3.15EC@netcom.ca>
Source record: 91990

Bill Turner wrote:
>
> rbaker@worldchat.com (Rae Baker) wrote:
>
> >To Bill Vanremmen
> >
> >Dont use a solder gun. They cannot do a good job especially because
> >you sound new to this.
> >
> >Buy a 150 soldering iron and it should deliver sufficient heat to
> >complete the job.
> >
> >I have been in the business since 1946 and only a rank amateur would
> >use a gun
> >
> >73
> >
> >Rae VE3CZN
> <><><><><><><><><><><><><><><><><><><><><><><><><><><><>
> That's too broad a statement. A 150 watt gun is insufficient, true,
> but a 250 watt Weller does a beautiful job on PL259s. I've tried all
> kinds of irons and the Weller is best. It heats up and cools down
> fast and best of all, the heat is controllable by cycling the switch
> on and off as needed.
>
> 73, Bill W7TI
Ditto,
I have a dual range gun and no problem soldering anything practically.
When I need more heat, just sqeeze the trigger for higher temp. Lot of
times the tip gets loose from the heat and it does not work well. Just
make sure to tighten the screws holding the tip.
Tony, VE6CGX

# 1624. Re: SK-740

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <5rue2HAe$h6zEwQB@pacsat.demon.co.uk>
Source record: 91991

In article <c=US%a=_%p=Lucent_Technolog%l=WHPOST-970807143320Z-6800@whpost.wh.lucent.com>, Seth Taylor <staylor@whpost.wh.lucent.COM> writes
>Need info on SK-740 used with 4CX300A. Some of these air system sockets
>have grounded contacts and or bypass caps. Anyone have the particulars
>on the SK-740 ?
>
>Seth T. KC2WE
>staylor@lucent.com

Check out the webpages for Svetlana, they have loads of base info for 4cx300 VV - their link is at my web page

73 Simon

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

## 1625. Source for filters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5sda3o$ipe$1@rosenews.rose.hp.com>
Source record: 91992

Thanks to all who posted re: ceramic resonators.

I have been through several catalogs and websites but
cant seem to find any 455 khz ceramic or crystal filters
(the standard toko 3-pin type) anywhere.

Does anyone know of any sources for these?

Thanks in advance.

Your radio pal, Tony

## 1626. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-07 00:00:00 UTC
From: jmaass@freenet.columbus.oh.us
Message-ID: <5sd2qm$fvl@login.freenet.columbus.oh.us>
Source record: 91993

M. Monninger (markem@primenet.com) wrote:
: In article <33e90349.1589774@eskinews.eskimo.com>, wrt@eskimo.com wrote:
: >rbaker@worldchat.com (Rae Baker) wrote:
: >
: >>To Bill Vanremmen
: >>
: >>Dont use a solder gun. They cannot do a good job especially because
: >>you sound new to this.
: >>
: >>Buy a 150 soldering iron and it should deliver sufficient heat to
: >>complete the job.
: >>
: >>I have been in the business since 1946 and only a rank amateur would
: >>use a gun
: >>
: >>73
: >>
: >>Rae VE3CZN
: ><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
: >That's too broad a statement. A 150 watt gun is insufficient, true,
: >but a 250 watt Weller does a beautiful job on PL259s. I've tried all
: >kinds of irons and the Weller is best. It heats up and cools down
: >fast and best of all, the heat is controllable by cycling the switch
: >on and off as needed.
: >
: >73, Bill W7TI
: >
: Yep, that's what I use and it works fine. I don't think they make the big guns
: anymore, do they? All I've seen is the weenie little 100-150W models. They
: just can't cut it.

Yes, they still make them. I just bought one this past weekend. 200/250 or
260 Watt, labelled by Waller as "Professional" model.

Is an 80 Watt iron sufficient? There's a log more thermal mass on it than
on any of the guns' tips, but people here have been recommending 100 Watt
irons.
--
Jeff Maass (jmaass@freenet.columbus.oh.us) Amateur Radio K8ND
USPSA/IPSC # L-1192 NROI/CRO NW of Columbus Ohio
25000 Members in 2000!

## 1627. jobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: GETcareers@gettec.com
Message-ID: <33eba009.0@snn.softcom.net>
Source record: 91911

GET1410
Oracle Applications Engineer: CA
Requires BSCS and 1 -3 years of Oracle V7, and proficiency in SQL on a UNIX workstation platform. UNIX scripts and C/C++. Powerbuilder, SunOS and networking are preferred. duties include supporting field service personnel by developing queries and custom reports from large Oracle data bases and data extract activities. Outstanding communications skills are requiredand a track record of development of user requirements and full life cycle project involvement with USA based clients.

To apply for this position, please send resume to GETcareers@gettec.com or fax your resume to General Engineering Tectonics @ 209-469-2614 or the best way for us to serve you visit our web site at http://www.gettec.com and fill out our candidate profile form. You may mail your resume to 1807 Navy Drive Suite A , Stockton, CA 95206. Please be sure to include the position identification code, this is very important, it makes it much easier for us to serve you.

# 1628. Re: Long Live Cut and Try (was Re: Front end of DC RX)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000808971936160001@news.primenet.com>
Source record: 91912

In article <33eaee04.0@newshost.pcug.org.au>, Peter Parker
<parkerp@pcug.org.au> wrote:

:Some of us enjoy being amateurs and like cutting and trying. If I wanted
:to learn from books and doing computer simulation models, I'd be an
:engineer and not a ham. Some of us have no interest in theory and/or
:can't be bothered to spend time learning it (once we have our tickets).

This is exactly what the "perpetual motion device" designers say. I think
they have a number of their own news groups :)

But I would bet that you really know quite a bit of theory. Just because
you don't sit down with a pen and paper or computer and work out every
detail in advance does not mean that you're not doing engineering. You
just have a much better intuitive idea of how electronics works. Most of
the time I design equipment in my head and make the schematic later. I
have a hybrid DDS/PLL synthesizer sitting on the shelf. It has no
schematic since I have some fine tuning to do- but it still works.

Some of my friends have asked me in the past why I build all these strange
contraptions. My reply is that its ART plain and simple. Some people like
to paint or sculpture. I like to construct hardware- engineering or no
engineering. I think a lot of hams fall into the same category. Maybe you
do to. But then in the next paragraph you say you are building equiment
that you intend to "use" for some "purpose": ham radio. Thats pretty much
the definition of engineering! whether you use CAD or not
:
:I'll leave it to the propeller-heads with all their clever computer
:models to argue some arcane point amongst themselves, while I'll just
:reach over and plug the soldering iron in, build a rig and actually use
:it on air, and not just operate it into a high-tech CRO or power meter,
:say "it works" and move over to the next academic exercise on the
:computer.

Rob.

# 1629. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: niel brieger <nbrieger@ix.netcom.com>
Message-ID: <33EBE450.2EFF@ix.netcom.com>
Source record: 91913

I just wanted to give a big Thank You! to all the wonderful replies. I tightened the screws on the Weller Solder Gun and got a little better result out of it, although still not enough to do a decent job on the PL259's. I tried using a 100 watt soldering iron, and I just can't seem to get the PL259 hot enough to melt solder inside of it. I ended up melting all the insulating material away though :). So that tells me I'm getting it hot enough, not sure why solder isn't melting. I'm using Sn63, 1/32" solder....any other types I should be looking at? When I touched the iron to the tip of the PL259, I was able to melt solder into it no problem, yet it didn't have the "flow" characteristics I expected it to. It just sort of melted and "sat" there. When we melted it on field day, it seemed to turn to a real fine liquid and just flowed into the connector around the center tip.

Thanks again for all your help and maybe I'll get the hang of this yet. I'm off to try the 7th PL259 now :).

73,
Niel Brieger
KC5ZJR

## 1630. jobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: GETcareers@gettec.com
Message-ID: <33eb54ed.0@snn.softcom.net>
Source record: 91914

GET1412
Program Manager: Multi state
Responsibilities:
You will be responsible for overall planning and execution of significant contracts. You will also be responsible for all business planning, customer interface, sub contracts, and subsequent build out of the installed network. You should be an experienced manager having managed contracts, sub contracts and worked with multi-disciplined programmatic issues. You will supervise all on-site personnel and coordinate the activities of corporate, sub contractor and customer personnel dedicated to the program. A BS degree in business administration, systems management or related disciplines is a must with 5 -8 years of relevant experience.
Ideally, you should have a strong foundation in logistics, have RF communications in your background, and done propagation.
Skill sets include:
Management skills: Should be excellent in people / process / resources. Able to work within time and budget to get objectives done.
Developed suburb diplomatic and leadership skills. Good presentation skills. Able to interface at VP / director level in a utility environment. Also, able to sell to associated and current utility accounts.

To apply for this position, please send resume to GETcareers@gettec.com or fax your resume to General Engineering Tectonics @ 209-469-2614 or the best way for us to serve you visit our web site at http://www.gettec.com and fill out our candidate profile form. You may mail your resume to 1807 Navy Drive Suite A , Stockton, CA 95206. Please be sure to include the position identification code, this is very important, it makes it much easier for us to serve you.

## 1631. jobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: GETcareers@gettec.com
Message-ID: <33eb615c.0@snn.softcom.net>
Source record: 91915

GET1423
Wireless Communications Field Integration Engineer:
Take a wireless communications application from design process through field installation; involves operations, applications, and systems integration responsibilities as well as close cooperation with the development group. Desired background includes a BS and 3 - 6 years experience in high tech applications/product marketing including software application development involving integration with SQA, hardware, RF networking, field installation, and user operations training. A proficiency in UNIX and shell/Perl scripting, ability to write and communicate clearly, and willingness to travel 10 - 20% is required. To apply for this position, please contact GETcareers@gettec.com or fax your resume to General Engineering Tectonics @ 209-469-2614 or visit our web site at http://www.gettec.com and fill out our candidate profile form. Please be sure to include the position identification code, this is very important, it makes it much easier for us to serve you.

# 1632. VvC diode tuning prob.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33EBD0CE.7422@flash.net>
Source record: 91916
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

My DC receiver saga continues. After getting her tuned up on on 40 (it sounds soooo clean) I decided to implement VVC tuning, I like it because it seems to be a little more mechanically stable although I know it has shortcommings.

I can get about 35Khz using a 4001 diode (hey it's what I had in the junk box)
Seems to be a real winner, BUT, I am coupling it to the LC circuit via a 5pf cap in series with the diode, if I understand this right, that means Im only able to change the LC circuit by a maximum of 5pf yes? Series capacitor formula?

When I try to use any higher than 5pf to connect the diode in the circuit it dies, dead as a doornail, nada. If I use a tuning cap I can get over 150Khz so I believe the LC circuit is OK. The circuit will NOT take more than 5pf in series with the VVC diode.
Any ideas?

Tim Hynde, ka8ddz

Content-Disposition: inline; filename="!A.HTM"
Content-Base: "file:///C|/NETSCAPE/!A.HTM"

KA8DDZ

Enjoy Amateur Radio more, build your next
radio©

QRP & Homebrew!

## 1633. Re: contact cleaner cleanup....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEEnr1u.MCI@netcom.com>
Source record: 91917

In article <19970805145801.KAA10305@ladder02.news.aol.com>,
Jsender104 <jsender104@aol.com> wrote:

>>I have tried DEOXIT with a similar result. Could the
>>base metal be causing the problem?

> The base metal could very well be showing through, probably time to
>change the relays The BEST contact cleaner I"ve ever used is called
>CRAMOLIN.

DeoxIT is the new Cramolin Red, they had to reformulate it to take
the freon out. Same folks (Caig Labs). Cramolin Blue is replaced
by PreservIT.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 1634. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33EB82E6.7A61@kfa-juelich.de>
Source record: 91918

Kelvin Charlson wrote:
> 
> Hi
> 
> I have just built a 6 meter reciever and want to tune the local oscillator
> in. The easiest and cheapest way I know how to do this is to build a
> crystal oscillator.
> 
> Because an approx 50 MHz crystal is expensive ie $20, is it possible to say
> use a 17.73 MHz crystal and use its third overtone ie around 53 MHz. As
> this crystal is only a few dollars.
> 
> I have a siimple schematic for a crystal osillator, but do you have to do
> anything special to the circuit to make sure you get the third overtone. Or
> do you get it anyway once the crystal is operating and no high pass filters
> are added to the circuit.
> 
> I hope this makes some sense because I am only new at this stuff
> 
> Kelvin
> 
> kelvin@netspace.net.au
Well, normally you cannot use just any oscillator; an overtone
oscillator will usually have a tuned circuit at the overtone. Look for
an appropriate circuit. (Read "usually" as "almost always"!) But why
not just use a harmonic of the fundamental. The frequency will be right
on and if the oscillator is one making generous harmonics you are in
with no tuning to get it running or anything of the sort. You could use
a 10 MHz crystal and hit 50 MHz on the 5 th harmonic, and 10 MHz is
cheap (but the cheap ones may not be all that exact, though you can pull
it to 10 MHz with a goodd reference.

Bob

# 1635. Re: Old freq counter - down but not out.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <33EB292A.3E88@hp.com>
Source record: 91919

ka8ddz wrote:
>
> Anyone know of a replacement? The chip data is below, anyone recognize
> it.
> PS S 02
> SP8680B
> 8309A
> Tim, ka8ddz

Hmmmm SP prefix is PLESSEY semiconductors, and though they were
a major maker of ECL high-speed prescalers, they also made some larger
scale counter devices. From memory, that part number seems to be right
for some sort of counter/prescaler, but I've just checked and I've only
got their linear radio circuits, and fast ADC/DAC databooks left.

David GM4ZNX

## 1636. jobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: GETcareers@gettec.com
Message-ID: <33eb90ae.0@snn.softcom.net>
Source record: 91920

GET1409
Sr. Oracle Developer/Architect: CA
Requires 4 - 10 years (minimum 1 1/2 years work in the USA) IS. experience in applications development and a proven track record of architecting Oracle based applications. The ideal candidate would possess an understanding of Powerbuilder, know where to integrate corporate data with field service applications, and have knowledge of Oracle RDBMS structures in addition to design of tables. Requires a demonstrated background in development of user requirements and full life cycle project involvement with USA based clients.
Requires BSCS. Oracle V7, UNIX, UNIX scripts and C/C++. Powerbuilder, SunOS and networking are preferred.

To apply for this position, please send resume to GETcareers@gettec.com or fax your resume to General Engineering Tectonics @ 209-469-2614 or the best way for us to serve you visit our web site at http://www.gettec.com and fill out our candidate profile form. You may mail your resume to 1807 Navy Drive Suite A , Stockton, CA 95206. Please be sure to include the position identification code, this is very important, it makes it much easier for us to serve you.

## 1637. jobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: GETcareers@gettec.com
Message-ID: <33eb4fab.0@snn.softcom.net>
Source record: 91921

GET1401
Data Base Administrator Oracle/UNIX CA

Apply your 3 - 10 years of data base administration to the administration of fixed point, wireless network cutting edge technology. Skill set must include a current knowledge of Oracle DBA activities (performance tuning, system administration, etc.)in a UNIX, SUN Solaris, client server environment.

To apply for this position, please send resume to GETcareers@gettec.com or fax your resume to General Engineering Tectonics @ 209-469-2614 or the best way for us to serve you visit our web site at http://www.gettec.com and fill out our candidate profile form. You may mail your resume to 1807 Navy Drive Suite A , Stockton, CA 95206. Please be sure to include the position identification code, this is very important, it makes it much easier for us to serve you.

# 1638. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: David Newkirk <dnewkirk@bellatlantic.net>
Message-ID: <01bca452$a9d65200$6f79c697@namn>
Source record: 91922

Jerry W. O'Dell <psyodell@mail.provide.net> wrote in article
<33ea61c9.1277555@news.provide.net>...

> Could someone clear up the question of the j-pole for me. My ARRL
> antenna handbook says that it's simply a quarter wave with a matching
> section attached, which is easily mounted. No particular gain.

Oh, I hope the ARRL Antenna Book doesn't really say that, because the J is a *half*-wave vertical element end-fed by a quarter-wave matching stub. It can be considered a special case of the antenna older-time MF and HF operators called a Zepp.

> Yet I hear ham after ham singing the glories of the j-pole. Have I
> missed something? Does the j-pole really have 11 db gain, as some
> have said quite definitely on the repeater?

Maybe compared to something like a really bad "rubber duck" a J could exhibit a gain of 11 dB, but not compared to something like a quarter-wave groundplane or half-wave dipole. It's just a half-wavelength radiator, after all.

Regards,

David Newkirk, W9VES

# 1639. Re: Need help with a radio.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: kyaphas!@erols.com
Message-ID: <33eb91bf.7613477@news.erols.com>
Source record: 91994
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 07 Aug 1997 23:42:48 GMT, lar01@sprynet.com (larry) wrote:
>On Wed, 06 Aug 1997 01:13:06 GMT, kyaphas!@erols.com (Kyaphas Wells)
>wrote:
>

>> So, the problem is, it's hardwired into the RS unit. Any tips
>>on changing them over? And do you guys know of any particular CB's
>>that would work well with this idea, meaning can be VOX? Thanks in
>>advance. You can email me or post here as I'll read for a bit looking
>>for an answer. Read my sig before responding.
>>
>>
>Hi
>I might be completely missing the point here, but, the radio you are
>talking about, I believe, operates on 48 mhz fm. Cb is on 27 mhz am
>an ssb.
>Larry ve3fxq
>

Yeah, you may have. What I want to do is use the earpiece in
the CB unit. I'm not a ham, so is there something about CB I'm
missing? I thought that the handheld unit's have better range than the
small RS unit I have. I also have an old Kenwood 2-meter radio, but no
license to use it, so that's out of the question until I get my
license at least.

To respond, remove "anti-spam" exclamation point from email address.
PGP v. 2.6.2. key ID: 0xA8764AFD
PGP keyserver: http://www-swiss.ai.mit.edu/~bal/pks-toplev.html
"The price of freedom is _eternal_ vigilance"
-Thomas Jefferson

# 1640. Re: Mods for FT757?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: rick@area.com
Message-ID: <5se8kj$69r$1@nixon.area.com>
Source record: 91995

In article <33E86541.8E2CEDFE@ecid.cig.mot.com>,
James Patterson <PattersJ@ecid.cig.mot.com> wrote:
>Does anyone know any good mods for the 757?

I did a bunch of mods to my FT-757/I. I added an RF choke
and decoupling cap right where the +12V enters to fix a bad
TVI problem due to the power supply leads radiating.

I added an extra IF gain stage using a BF980 FET.
Big improvement in receiver.

I added the Fox Tango CW filter with a second additional IF gain
stage that is only switched in when the filter is in place.

I added some filter switching that allows me to use the CW filter
in lower sideband mode for RTTY.

I attenuated the CW sidetone so it was reasonable with headphones.

I understand there is a time constant capacitor you can change that
speeds up the AGC so that AMTOR works better.

Rick Karlquist N6RK
rick@area.com

# 1641. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5sdr5g$a9m@hpcvsnz.cv.hp.com>
Source record: 91996

Jeffrey Maass (jmaass@freenet.columbus.oh.us) wrote:

: Is an 80 Watt iron sufficient? There's a log more thermal mass on it than
: on any of the guns' tips, but people here have been recommending 100 Watt
: irons.

Heck, I've used a 40 watt Weller WTCP soldering station, with a heavy 800 degree tip. Those things have remarkable heat transfer capability. Of course, it helps to use Teflon-insulated coax so you don't end up with melted insulation all over. I've found in the past that putting a close-wound layer of 28ga or 30ga silvered wire over the braid helps a lot, especially on coax with "thin" braid coverage. If the silvered wire is clean, the solder wicks into it very quickly, and it helps a lot to keep the melted polyethylene dielectric from oozing out the holes.

(Propane torch...now there's the ticket! WWHHHOOSH! :-)

--
Cheers,
Tom
tomb@lsid.hp.com

# 1642. Re: Mods for FT757?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <33EAC92F.7C5D@hevanet.com>
Source record: 91997

Has anyone implemented a mod for the FT757 that switches to the correct
sideband when you change bands?
It's not programmable, so I can't change bands with the remote base.
It looks like there are lots of options to swizzle the switch
connections,
I just have never figured out how to do it in the space available
inside the unit. One PAL would do it, but the voltages are 8 volts.

No, I'm not buying a GXII.
TIA, miker

--
Please remove NOSPAM from return address before replying.

# 1643. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: claude@bauv.unibw-muenchen.de
Message-ID: <claude.871039344@bauv111>
Source record: 91998

wrt@eskimo.com (Bill Turner) writes:

>That's too broad a statement. A 150 watt gun is insufficient, true,
>but a 250 watt Weller does a beautiful job on PL259s.

I'm using a 100 W iron and it's OK.
--
Claude
(claude@bauv106.bauv.unibw-muenchen.de)
The opinions expressed above represent those of the writer
and not necessarily those of her employer.

## 1644. Re-PL259 Connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: rbaker@worldchat.com
Message-ID: <08-08-1997.9930@worldchat.com>
Source record: 91999

Pl259 connectors are an inherintley poor connector at any frequency because the center pin moves and changes the impedance. I would suggest that for VHF, and especially for UHF you should use Type "N" connectors or BNC. they are stable.

73
Rae VE3CZN

# 1645. Re: Need help with a radio.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <33EB263E.5D60@tir.com>
Source record: 92000
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

larry wrote:
>
> On Wed, 06 Aug 1997 01:13:06 GMT, kyaphas!@erols.com (Kyaphas Wells)
> wrote:
> ....snipped for brevity....
> .... i was thinking, If i could come up with a way to hook
> >this earpiece into a small CB radio, it'd have better range and the
> >ability to yak with truckers on the hiway for info.
> > So, the problem is, it's hardwired into the RS unit. Any tips
> >on changing them over? And do you guys know of any particular CB's
> >that would work well with this idea, meaning can be VOX? Thanks in
> >advance. You can email me or post here as I'll read for a bit looking
> >for an answer. Read my sig before responding.
> >
> >
> >To respond, remove "anti-spam" exclamation point from email address.
> >PGP v. 2.6.2. key ID: 0xA8764AFD
> >PGP keyserver: http://www-swiss.ai.mit.edu/~bal/pks-toplev.html
> >"The price of freedom is _eternal_ vigilance"
> > -Thomas Jefferson
> Hi
> I might be completely missing the point here, but, the radio you are
> talking about, I believe, operates on 48 mhz fm. Cb is on 27 mhz am
> an ssb.
> Larry ve3fxq

He was asking about taking the earphone/microphone/vox and applying that part to a cb radio. It could be done, but is probably not reasonable for inexperienced people (experienced people wouldn't have to ask). There *are* units already made this way for cb operation on motorcycles. I helped a neighbor install one on his motorcycle. It also had an "intercom" function so he and his wife could converse more or less normally while on the road. Sorry, they're cruising somewhere and I don't even remember the brand name. Try looking in rv and motorcycle newsgroups for more info. There is also a cb newsgroup if I remember correctly.

Bill KU8H

# 1646. Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: Kelvin Charlson <kelvin@netspace.net.au>
Message-ID: <01bca3e8$03693d20$446211cb@default>
Source record: 92001

Hi

I have just built a 6 meter reciever and want to tune the local oscillator in. The easiest and cheapest way I know how to do this is to build a crystal oscillator.

Because an approx 50 MHz crystal is expensive ie $20, is it possible to say use a 17.73 MHz crystal and use its third overtone ie around 53 MHz. As this crystal is only a few dollars.

I have a siimple schematic for a crystal osillator, but do you have to do anything special to the circuit to make sure you get the third overtone. Or do you get it anyway once the crystal is operating and no high pass filters are added to the circuit.

I hope this makes some sense because I am only new at this stuff

Kelvin

kelvin@netspace.net.au

# 1647. Long Live Cut and Try (was Re: Front end of DC RX)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33eaee04.0@newshost.pcug.org.au>
Source record: 92002

Some of us enjoy being amateurs and like cutting and trying. If I wanted to learn from books and doing computer simulation models, I'd be an engineer and not a ham. Some of us have no interest in theory and/or can't be bothered to spend time learning it (once we have our tickets).

I'll leave it to the propeller-heads with all their clever computer models to argue some arcane point amongst themselves, while I'll just reach over and plug the soldering iron in, build a rig and actually use it on air, and not just operate it into a high-tech CRO or power meter, say "it works" and move over to the next academic exercise on the computer.

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 1648. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5seer1$oot$1@news.belwue.de>
Source record: 92003

>Could someone clear up the question of the j-pole for me. My ARRL
>antenna handbook says that it's simply a quarter wave with a matching
>section attached, which is easily mounted. No particular gain.

Actually it is a half-wave. may be you misread it.

>Yet I hear ham after ham singing the glories of the j-pole. Have I
>missed something? Does the j-pole really have 11 db gain, as some
>have said quite definitely on the repeater?

Surely it has 11 dB gain over a rubber duck. So has a simple ground plane,
which is much easier to construct.

73, Moritz

## 1649. Re: Source for filters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: Dana Gould <NOSPAMdgould@bev.etn.com>
Message-ID: <01bca3f9$93a0bba0$4ce06e97@pc3527.bev.etn.com>
Source record: 92004

Tony Zugec <tonyz@rose.hp.com> wrote in article
<5sda3o$ipe$1@rosenews.rose.hp.com>...
> Thanks to all who posted re: ceramic resonators.
>
> I have been through several catalogs and websites but
> cant seem to find any 455 khz ceramic or crystal filters
> (the standard toko 3-pin type) anywhere.
>
> Does anyone know of any sources for these?
>

http://www.digikey.com/

# 1650. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: bart@wb6hqk.ampr.org
Message-ID: <EELs6u.9J0@wb6hqk.ampr.org>
Source record: 92005

In article <5scv6r$lbq@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:
>Lou Hinshaw (aruder@pipeline.com) wrote:
>
>: Radio has come a long way since meters were 20 K-Ohm/Volt, and caps
>: and resistors were +/- 20% standard,
>
>>>>but it is still largely cut and try, and try to guess what went wrong.<<<
>
>What a sorry world that must be; it's not the one I live in, and never has
>been. Design things using the best knowledge you have; simulate them if
>you wish as a check and rework the design as appropriate; build and test.
>If things are not as you designed, or if your design turns out to be not
>what you really wanted, learn from that. It's not guessing, it's
>learning. You can bootstrap yourself into as much knowledge as you can
>handle that way. I see it as a "design-learn" cycle, not a "cut, try and
>guess" cycle.

Not the one I live in either. Like most engineers I know, the circuits I design
generally work as designed when first prototyped. If not, it is usually
an error building the prototype or a design oversight which wouldn't have
happened if normal attention had been paid to the particular detail. In the
vast majority of cases, if you know what the final circuit is actually supposed
to do, then you are expected to get it right the first time. In my world,
the majority of the time in the lab spent fooling around is usually
trying to either figure out what the real system requirements are or what
somebody elses widget actually does.

bart wb6hqk

# 1651. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33EB849B.1783@larc.nasa.gov>
Source record: 92006

There is a difference between third overtone and third harmonic. The third overtone of the crystal is not exactly equal to the third harmonic. Harmonics are exact multiples of the oscillator frequency, overtones are not. So, build the crystal oscillator for 17.73 MHz and you should have a strong third harmonic at 53.19 MHz.
By the way, a high pass filter would let the harmonics pass, a low pass filter would block the harmonics (assuming the corner frequency was the crystal frequency).
Hope this helps,
John

# 1652. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33f82031.8148178@news.pipeline.com>
Source record: 92007

Lou Hinshaw replies . . .
Several people snapped at me for saying something they didn't like, and one even said I sould learn radio instead of wasting my time on CW. I never did do well ion CW, but I believe it is needed, so I try to keep able to use it.

Anent not learning radio, though, that just makes my point. He/she knows so little of the subject that if I don't agree with them, I must not know radio. I don't know radio at all. I built my first receiver in 1952, and my latest project was a 24-Amp power supply last week where I redesigned the transformer, and designed an inrush current limiter, and I still don't know radio.

I am one with Einstein on that. He said "The more I study the macrocosm and microcosm, the more I become appalled at my own ignorance." Amen. But, since I am, in all my ignorance, in such good company, I will keep on trying to cut and fit like always. The tools get closer, the parts get better (didn't I say we've come a long way?) but it is still cut and try and guess what went bad. See the next post:

tomb@lsid.hp.com (Tom Bruhns) wrote:

>Lou Hinshaw (aruder@pipeline.com) wrote:
>
>: Radio has come a long way since meters were 20 K-Ohm/Volt, and caps
>: and resistors were +/- 20% standard,
>
>>>>but it is still largely cut and try, and try to guess what went wrong.<<<
>
>What a sorry world that must be; it's not the one I live in, and never has
>been. Design things using the best knowledge you have; simulate them if
>you wish as a check and rework the design as appropriate;

> build and test.
cut try

>If things are not as you designed, or if your design turns out to be not
>what you really wanted, learn from that. It's not guessing, it's
>learning.

A distinction without a difference.

> You can bootstrap yourself into as much knowledge as you can
>handle that way. I see it as a "design-learn" cycle, not a "cut, try and
>guess" cycle.

I think he is right. It is a sorry world, and he may be right that it is not his world. Unfartch, it is the real world.

ciao.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 1653. jobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: GETcareers@gettec.com
Message-ID: <33ebb189.0@snn.softcom.net>
Source record: 92008

GET1411
Powerbuilder GUI S/W Engineers: CA
The Opportunities/Requirements:
Develop custom Oracle/SQL RDBMS applications with Powerbuilder front ends. Work directly with customers throughout the US developing applications and interfaces and optimizing the performance of large Oracle data bases. Our client server operating environment includes: Oracle V7, UNIX, C/C++. Powerbuilder, and SunOS Solaris.
Specific needs include:
Apply your 4+ years (including at least 1 1/2 years at USA sites) experience with Powerbuilder to develop front ends to our client server applications. SunOS and networking platforms are preferred. In addition to GUI development, your excellent communications skills will be put to use by developing system requirements through users interaction and training your user group.

To apply for this position, please send resume to GETcareers@gettec.com or fax your resume to General Engineering Tectonics @ 209-469-2614 or the best way for us to serve you visit our web site at http://www.gettec.com and fill out our candidate profile form. You may mail your resume to 1807 Navy Drive Suite A , Stockton, CA 95206. Please be sure to include the position identification code, this is very important, it makes it much easier for us to serve you.

# 1654. jobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-08 00:00:00 UTC
From: GETcareers@gettec.com
Message-ID: <33eb593c.0@snn.softcom.net>
Source record: 92009

GET1421
Senior RF Design Engineer:
Responsible for designing the RF portion of high-performance 900 MHz direct sequence spread spectrum transceivers for wireless local area network. Requires BSEE/MSEE and 2+ years' experience in design of high-performance VHF/UHF receivers. 4+ years' experience in the design of RF circuits, including filters, mixers, oscillators, synthesizers, low-noise amplifiers, phase-locked loops and auto gain control is also required. Designing for medium volume production and 900 MHz spread spectrum receivers is a plus, as is RF ASIC development. To apply for this position, please contact GETcareers@gettec.com or fax your resume to General Engineering Tectonics @ 209-469-2614 or visit our web site at http://www.gettec.com and fill out our candidate profile form. Please be sure to include the position identification code, this is very important, it makes it much easier for us to serve you.

# 1655. Re: Oscilloscope.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: holford@cnwl.igs.net.nospam
Message-ID: <5sgf8a$lq8$1@news.igs.net>
Source record: 91923
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <john-0708970735380001@wd1v.mv.com>, john@wd1v.mv.com6 says...
>
>Oscilloscope.FAQ is located on
>my home page.
>
>If you'd like an Email version
>sent to you as an attached text
>file (50k), send an Email with
>SCOPE FAQ on the SUBJECT LINE.
>
>73,

Where is your home page?

--
Dave Holford.

# 1656. Re: Need help with a radio.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: kyaphas!@erols.com
Message-ID: <33ebdc88.9739134@news.erols.com>
Source record: 91924
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 08 Aug 1997 09:59:26 -0400, Bill <wrc@tir.com> wrote:

>He was asking about taking the earphone/microphone/vox and applying that part
>to a cb radio. It could be done, but is probably not reasonable for
>inexperienced people (experienced people wouldn't have to ask). There *are*
>units already made this way for cb operation on motorcycles. I helped a
>neighbor install one on his motorcycle. It also had an "intercom" function so
>he and his wife could converse more or less normally while on the road.
>Sorry, they're cruising somewhere and I don't even remember the brand name.
>Try looking in rv and motorcycle newsgroups for more info. There is also a cb
>newsgroup if I remember correctly.
>
> Bill KU8H

Cool, thanks, I'll try them.

To respond, remove "anti-spam" exclamation point from email address.
PGP v. 2.6.2. key ID: 0xA8764AFD
PGP keyserver: http://www-swiss.ai.mit.edu/~bal/pks-toplev.html
"The price of freedom is _eternal_ vigilance"
-Thomas Jefferson

# 1657. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5sgm0f$p1o@cletus.bright.net>
Source record: 91925

"Kelvin Charlson" <kelvin@netspace.net.au> wrote:
>Hi
>
>
>I have just built a 6 meter reciever and want to tune the local oscillator
>in. The easiest and cheapest way I know how to do this is to build a
>crystal oscillator.
>
>Because an approx 50 MHz crystal is expensive ie $20, is it possible to say
>use a 17.73 MHz crystal and use its third overtone ie around 53 MHz. As
>this crystal is only a few dollars.
>
>I have a siimple schematic for a crystal osillator, but do you have to do
>anything special to the circuit to make sure you get the third overtone. Or
>do you get it anyway once the crystal is operating and no high pass filters
>are added to the circuit.
>
>I hope this makes some sense because I am only new at this stuff
>
>Kelvin
>
>kelvin@netspace.net.au

Kelvin, you will get the third harmonic, as well as all the others) at
the same time. Each higher order harmonic is weaker than the last. The
way to use the one you want is to build an amplifier with an input and
output tuned to the harmonic you want. This will eliminate the unwanted
ones and the output can be fed to your mixer or if the one you want is
strong enough the mixer input can be tuned to it.

Norm N8RGR

# 1658. Need CRYSTAL SET plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: n9kc@aol.com
Message-ID: <19970809033901.XAA20061@ladder01.news.aol.com>
Source record: 91926

Hi All,

Need plans to build a simple CRYSTAL SET from readily available parts.
Have a teenager in the neighborhood who needs help.

We live close to an AM tower (KOA in Denver), so this should be a piece of
cake.

Reply to N9KC@aol.com

Thanks!!!

Lou

# 1659. FS PC Board Screen Printer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: tonys2@aol.com
Message-ID: <19970809032701.XAA26563@ladder02.news.aol.com>
Source record: 91927

MPM SP1500 for sale
Leave fax no for details
Tony
Alex Va

## 1660. Tuning question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: pgibbon@axionet.com
Message-ID: <5sgotv$eqs$1@straylight.axionet.com>
Source record: 91928

I know that the Antenna coil is used to 'tune' the curcuit.
Are there any other ways of changing the intuctance?

# 1661. Odessa Tx Hamfest, Nov 1st & 2nd

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: n5rkn <n5rkn@apex2000.net>
Message-ID: <33EC00CC.1B95@apex2000.net>
Source record: 91929

WEST TEXAS AMATEUR RADIO CLUB
American Radio Relay League Approved
Fourteenth Annual Odessa Texas Hamfest

November 1st and 2nd, 1997

LOCATION: Ector County Coliseum: Exhibit Building C
42nd St.(Hwy. 191) and Andrews Hwy. (U.S. Hwy. 385) in Odessa, Texas.

There will be over 21,000 square feet of exhibit space. Our talk in
frequency is 145.470 neg. with an 88.5 tone.

Distributors - Dealers - Grand Prizes - Door Prizes

VE Exams on Saturday (1:00 p.m.)

Major Prizes for 1997:
1.Pre-registration prize: IC-2710 DualBand Mobile
2.1st Grand Prize: IC-706MKII HF/6mtr/2mtr
3.2nd Grand Prize:Yaesu VX-1R DualBand H/T
4.3rd Grand Prize: To Be Announced

Lots of Hourly Door Prizes.
(You must be present to win door prizes.)
(You do not need to be present to win the GRAND PRIZES or
Pre-registration prizes)

DEALERS PLANNING TO ATTEND OUR 1997 HAMFEST: (List Current as of 8/8/97)
K-Comm
Rad-Com
Texas Bugcatcher
DFN Systems
WBOW INC.
Joe Beesinger, Inc.
Caps Unlimited
Edwards Electronics
Battery Tech
Digital Con Rep Daryl Cooley
Bearcat
CM Comtronics
Texas Connectors
Magnum Computers
Texas Radio Products
Monograms by Essie
ADI
3 HAMS PC RECYCLERS

RV Parking is available on site with electrical only for $5.00 a day.

Pre-registration $7.00 ($8.00 at the door)
Tables - $8.00 - with a paid registration
Special Package - 1 pre-registration & 20 extra tickets - $20.00
Extra prize tickets $1.00 each
Sunday Barbecue $7.00

If you would like to be added to the Hamfest Mailing List, or if you have
had a change of address, or if you would like more information about the upcoming Hamfest, contact ROBERT JORDAN. (N5RKN) at 915-335-7980 or by e-mail:
n5rkn@apex2000.net

West Texas Amateur Radio Club
American Radio Relay League Approved
Fourteenth Annual Odessa Hamfest

***Pre-Registration Form***

Name:_____Call:_____

Address:_____

City:_____State:_____Zip:_____

Number of Pre-registrations: _____@ $7.00 each $_____
$8.00 at the door

Number of tables:_____@ $8.00 each $_____
(You must have a registration paid.)

Special Package:_____@ $20.00 each $_____
(One pre-registration and 20 extra tickets.)

Extra Prize Tickets:_____@ $1.00 each $_____

SUNDAY BARBECUE:_____@ $7.00 each $_____

GRAND TOTAL: $_____

CIRCLE ONE: I (will) or I (will not) be taking a VEC exam.

If your answer is will, which exam will you be taking?_____

Please mail this form and your check to:

West Texas Amateur Radio Club
P.O.Box 7033
Odessa, Texas 79760

--
73' Robert N5RKN
mailto:n5rkn@apex2000.net
N5RKN homepage: http://www.apex2000.net/personal/n5rkn/

Odessa Hamfest: http://www.apex2000.net/personal/wd5cwj/main2.htm

"If you dig a hole that's deep enough,
everyone will want to jump into it."
Firesign Theatre

## 1662. Recommend 2m 50w amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Ken Harris <kjh@shoreline-studios.com>
Message-ID: <01bca491$fdafc7a0$010000c0@nt2>
Source record: 91930

I want to boost the power on my 7w HT (HTX202), so I want to
build a 50 watt amp. Can you recommend plans/kits (with T/R switch)?

# 1663. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: bry@REMOVE.mns.net
Message-ID: <33ec2455.4235596@news1.mnsinc.com>
Source record: 91931
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 31 Jul 1997 04:56:25 GMT, wa2ise@netcom.com (Robert Casey)
wrote:

>Seems a quick and easy way to do a QRP CW transmitter would be to
>select one of those TTL oscillator modules that oscillate on a ham band
>frequency, perferrably in a CW subband. Saw some surplus "AS-IS"
>soundblaster PC cards with 28.322MHz, seen a few other ham freqs
>elsewhere too.

But I don't think too many QRP CW ops are monitoring 28.322 MHz
looking for a QSO!

>Mount the oscillator module at the feedpoint of a dipole or vertical,
>and run a +5 volt switched (by morse code key) from the ham shack.
>You'll need a seperate recieve antenna. Or just use a Radio Shark
>shortwave receiver with BFO and a long-wire antenna. It would be like the
>old days of the All-code novice license, with xtal locked xmit frequencies.
>
>Yeah, it's full of harmonics, but at these QRP levels, that shouldn't
>much matter. But if you do RFI your neighbor during his favorite TV show,
>just wait untill that show is over.

# 1664. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33ede25e.46996576@news.pipeline.com>
Source record: 91932

dick@merlin.libelle.com (Dick Flanagan) wrote:

>In article <19970807165540704 32@zetnet.co.uk>, Frank Dinger
><frank.dinger@zetnet.co.uk> wrote:
>
>>There are PL259 plugs available (from a company in the UK named
>>Westlake ,and perhaps a number of others) which are very similar to
>>the N-plug design ie the braid is not soldered ,but a flanged insert
>>takes care of the braid contact .
>
>Now THAT is something I would love to find! Anyone know if there is an
>American importer of such wonderful devices?!
>
>73, Dick

MOST decent-quality (excluding the popular corner-store source) 259s
are that way: Look inside the cable barrell and see if it is threaded. If so,
you should find the thread is slightly larger than the cable.

BUT:

Turn the shield braid back over the cable and screw it into the barrell and
you have a very good fit indeed. No soldering required. That is for stuff the
size of RG-8U. For stuff the size of RG-58U, there is an insert that you turn
the braid back over and proceed as above. Elementary, Watson.

Lou HInshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 1665. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33EC6CC2.5614@crpl.cedar-rapids.lib.ia.us>
Source record: 91933

John M. Franke wrote:
>
> There is a difference between third overtone and third harmonic. The
> third overtone of the crystal is not exactly equal to the third
> harmonic.

Overtone crystals always operate in a series-resonant mode, which is different than the third harmonic of the fundamental parallel resonant mode.

Bill W0IYH

# 1666. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33EC6C1C.6B4F@crpl.cedar-rapids.lib.ia.us>
Source record: 91934

Bart Rowlett wrote:
>
> Like most engineers I know, the circuits I design
> generally work as designed when first prototyped.

The best of all worlds is an optimum mix of design, simulation and experimentation. Invariably, I find that at least one loop-around through this cycle is needed because of unforseen discrepancies and deficiencies that show up in the experimental phase. This loop-around process is very enlightening and it leads to something that doesn't just "work", but works much better than on the first go-around. There is a school of thought that the breadboard stage is no longer needed. I do not believe that for one moment.

Bill W0IYH

# 1667. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970809133600.JAA12723@ladder01.news.aol.com>
Source record: 91935

>
>Hi.
>I have a couple of projects that involves silverplating but I dont know
how
>to do it.
>The electrolythic way seems to be adequate for RF-filters and similar
>devices.
>
>Any tip?

Kool -Amp. From Portland Oregon. They manufacture a scouring powder that you wet with water and rub onto copper, silver, brass, anything lower on the work function, and it deposits pure silver on the base metal. Power companies have used it for years to replate relay contacts and switches to lower the resistance of the contact...Therefore the name.

I buy a pound jar every 30 years, so am a bit out of touch on price but probably in the neighborhood of $40 per pound. 1 pound usually lasts nearly a lifetime.

W4ZCB

# 1668. Re: Re-PL259 Connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19970809014217704 32@zetnet.co.uk>
Source record: 91936

In message <08-08-1997.9930@worldchat.com>
rbaker@worldchat.com (Rae Baker) writes:
> Pl259 connectors are an inherintley poor connector at any frequency
> because the center pin moves and changes the impedance. I would
> suggest that for VHF, and especially for UHF you should use Type "N"
> connectors or BNC. they are stable.
> 73 Rae VE3CZN
=======
Fully agree with you Rae ,however if coax has to be connected to
commercial equipment with a SO239 socket ,you can't escape fitting a
PL259 plug, unless you are prepared to replace the SO239 socket with
a N female socket
73 Frank GM0CSZ / KN6WH
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

# 1669. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000908970905070001@news.primenet.com>
Source record: 91937

In article <19970809133600.JAA12723@ladder01.news.aol.com>,
johnsonhe@aol.com (JohnsonHE) wrote:

:>
:>Hi.
:>I have a couple of projects that involves silverplating but I dont know
:how
:>to do it.
:>The electrolythic way seems to be adequate for RF-filters and similar
:>devices.
:>
:>Any tip?
:
:Kool -Amp. From Portland Oregon. They manufacture a scouring powder that
:you wet with water and rub onto copper, silver, brass, anything lower on
:the work function, and it deposits pure silver on the base metal. Power
:companies have used it for years to replate relay contacts and switches to
:lower the resistance of the contact...Therefore the name.
:
:I buy a pound jar every 30 years, so am a bit out of touch on price but
:probably in the neighborhood of $40 per pound. 1 pound usually lasts
:nearly a lifetime.
:
:W4ZCB

Harold,

I've looked in the phone book here before for that company, since I
remember it from Handbook years ago, but never could find it. Just checked
yellow pages again and its not there. Checked combined listings, silver,
plating, electronic sections- nothing there.

If anyone has the address or phone number, would appreciate the info.

thanks, Rob.

# 1670. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <33EC76FF.6870@one.net>
Source record: 91938

niel brieger wrote:
>
> I just wanted to give a big Thank You! to all the wonderful replies.
> I tightened the screws on the Weller Solder Gun and got a little
> better result out of it, although still not enough to do a decent job
> on the PL259's. I tried using a 100 watt soldering iron, and I just
> can't seem to get the PL259 hot enough to melt solder inside of it. I
> ended up melting all the insulating material away though :). So that
> tells me I'm getting it hot enough, not sure why solder isn't melting.
> I'm using Sn63, 1/32" solder....any other types I should be looking at?
> When I touched the iron to the tip of the PL259, I was able to melt
> solder into it no problem, yet it didn't have the "flow"
> characteristics I expected it to. It just sort of melted and "sat"
> there. When we melted it on field day, it seemed to turn to a real
> fine liquid and just flowed into the connector around the center tip.
>
> Thanks again for all your help and maybe I'll get the hang of this
> yet. I'm off to try the 7th PL259 now :).
>
> 73,
> Niel Brieger
> KC5ZJR

Sorry for coming in a bit late on this one -- I actually had a summer vacation this year :-)

Of the several replies I read, I didn't see anyone mention filing the plating off the 259. With "silver plated" 259's, you don't need to do this, but the nickel-plated ones can be tougher to solder to. I routinely file the plating off around the solder holes and use the point of the file to scrape it off the inside of the hole. These cleaned spots take solder much more readily.

GL 73

Rich W2RG

# 1671. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <33ec7f62.4426570@news.azstarnet.com>
Source record: 91939

On Sat, 09 Aug 1997 08:12:34 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>John M. Franke wrote:
>>
>> There is a difference between third overtone and third harmonic. The
>> third overtone of the crystal is not exactly equal to the third
>> harmonic.
>
>Overtone crystals always operate in a series-resonant mode, which is
>different than the third harmonic of the fundamental parallel resonant
>mode.
>
>Bill W0IYH

Don't you mean to say "overtone crystal (oscillators) *usually*
operate....."

Wes N7WS

# 1672. has anyone seen a sound board controlled spectrum analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: willard561@aol.com
Message-ID: <19970809145800.KAA16758@ladder01.news.aol.com>
Source record: 91940

I am wondering if any one has made, or plans for a spectrum analyzer using
a sound board as both D/A and A/D to control an tv tuner based unit
bill higdon
willard561@aol.com

# 1673. WANTED: 11 meter kit or plans to build trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: David Hinkle <hink@scioto.net>
Message-ID: <33ECA0F7.298@scioto.net>
Source record: 91941

Soes anyone know where I could obtain a kit for building an 11 meter radio? Or, how about a good set of plans to build from parts? I'd like to build my own base station (SSB optional).

Thanks in advance. Please email me at:

mailto://hink@scioto.net/

# 1674. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33EC9376.1992@crpl.cedar-rapids.lib.ia.us>
Source record: 91942

Wes Stewart wrote:
>

> Don't you mean to say "overtone crystal (oscillators) *usually*
> operate....."

Hello Wes.

I have read that they always operate in the series mode. My personal experience agrees with that. The overtone circuits that I have used all try to encourage that mode of oscillation using the series mode. When you buy an overtone xtal the frequency marked on the can is the series-mode overtone frequency. Also, the fundamental parallel mode has to be suppressed somehow. I think that is right, as far as I know (I am not an expert on xtal osc).

I have a quote from the book "Crystal Oscillator Design" by Frerking:

"Overtone crystals are nearly always operated at series resonance". There are also circuit examples to verify.

Bill W0IYH

# 1675. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19970809015101704 32@zetnet.co.uk>
Source record: 91943

> PL259s are bad news above HF,

> Not true. If properly fitted they work well up to UHF.

> >difficult to fit without
> >damaging the coax and often of such low quality that they
> >don't screw together properly or take solder.

> sad but true.

> Moritz
==========
Coax is never damaged if you use Pl259 plugs with flanged inserts and
compression sleeve as with N-type plugs . These are available also
for RG58 cable ,from a UK supplier called Westlake. Today I saw the
latter type made by MACOM ,possibly American.
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

# 1676. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <33EC74D3.341A@boeing.com>
Source record: 91944

John M. Franke wrote:
>
> There is a difference between third overtone and third harmonic. The
> third overtone of the crystal is not exactly equal to the third
> harmonic. Harmonics are exact multiples of the oscillator frequency,
> overtones are not. So, build the crystal oscillator for 17.73 MHz and
> you should have a strong third harmonic at 53.19 MHz.
> By the way, a high pass filter would let the harmonics pass, a low pass
> filter would block the harmonics (assuming the corner frequency was the
> crystal frequency).
> Hope this helps,
> John
Technically, an overtone is the harmonic number plus one...A third
overtone crystal is on the fourth harmonic. I do not know what current
ham jargon is on this subject. You can modify the feedback such that
the overtone is emphasized in the oscillation. There are a number of
ways to do this including an LC tank in positive feedback. Look at the
schematic for an overtone oscillator. I haven't looked at the new ones,
but the older ARRL handbooks had such things.
Ralph

# 1677. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33ec9a48.8221634@news.capital.net>
Source record: 91945
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Wed, 06 Aug 1997 21:31:13 -0700, "Ed Mathes, RPA-C"
<"emathes"@servtech.com,no.span> wrote:

>Actually Jason, the "feedline" is probably functioning as a component of
>the antenna....in the form of a "long wire"....adding to the reception
>ability. SWR, antenna impedance, etc are important when transmitting,
>not usually when receiving only. You may find better reception by using
>MFJ's SWL tuner...I forget the model number.

>Edward J. Mathes, RPA-C

I have an MFJ Receiver Antenna Tuner / Preamplifier Model # MFJ 959B
connected to my Kenwood R-1000 SW receiver. I would strongly recommend
this tunner. It does an excellent job for me. The tuner helps a lot on
bands that the antenna is not resonant on. Brings the signals up 3 or
4 S units on the meter sometimes. The preamp is adjustable from the
front panel, so very weak signals can be amplified. It also has an
attenuator which is handy when strong signals overwhelm the receiver.
On the rear panel, it has connectors for two receivers and two
antennas, and a jack for 12 volts DC to power the unit. Cost from MFJ
is $99.00. It's well worth the money.

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

# 1678. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33ECCC56.6732@kfa-juelich.de>
Source record: 91946

Ralph Reinhold wrote:
> 
> John M. Franke wrote:
> >
> > There is a difference between third overtone and third harmonic. The
> > third overtone of the crystal is not exactly equal to the third
> > harmonic. Harmonics are exact multiples of the oscillator frequency,
> > overtones are not. So, build the crystal oscillator for 17.73 MHz and
> > you should have a strong third harmonic at 53.19 MHz.
> > By the way, a high pass filter would let the harmonics pass, a low pass
> > filter would block the harmonics (assuming the corner frequency was the
> > crystal frequency).
> > Hope this helps,
> > John
> Technically, an overtone is the harmonic number plus one...A third
> overtone crystal is on the fourth harmonic. I do not know what current
> ham jargon is on this subject. You can modify the feedback such that
> the overtone is emphasized in the oscillation. There are a number of
> ways to do this including an LC tank in positive feedback. Look at the
> schematic for an overtone oscillator. I haven't looked at the new ones,
> but the older ARRL handbooks had such things.
> Ralph
Whatever this business about "an overtone is the harmonic number plus
one.." is supposed to mean, it is correct the overtone and the harmonic
which are near each other (however you may choose to name or count them)
are not on exactly the same frequency. The harmonics are just a kind if
distortion produced when the oscillator is not producing an exact
sinewave output. (The electronics are probably more responsible than
the crystal in nearly every case.) The harmonics are exact multiples of
the fundamental frequency at which the crystal is running. In an
overtone system the crystal itself is not operating at the "fundamental"
frequency at all and the oscillator produces little if any fundamental.
To picture what is happening, sketch a 1/2 wavelength sine and then
under it a wave with 3/2 wavelenghts in the same distance as the above
wave needed for a single half wavelength. If you could photograph the
crystal operating on the third overtone it would be making motions of
the latter kind. You can extend the idea to 5/2 or 9/2 or beyond. The
same effect can be seen in a taut string.
On account of little "end effects" the overtones will not be at
exactly the harmonics of the fundamental, whether in a quartz
oscillator, a plucked string or a blown flute unless measures are taken
to fix the "errors".

Bob

# 1679. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bca4d8$5a18d7c0$b295f5ce@wa6vse.fast.net>
Source record: 91947

Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article
<33f82031.8148178@news.pipeline.com>...
> Lou Hinshaw replies . . .
> Several people snapped at me for saying something they didn't like, and
one even
> said I sould learn radio instead of wasting my time on CW. I never did
do well
> ion CW, but I believe it is needed, so I try to keep able to use it.
>
> Anent not learning radio, though, that just makes my point. He/she knows
so
> little of the subject that if I don't agree with them, I must not know
radio.
> I don't know radio at all. I built my first receiver in 1952, and my
latest
> project was a 24-Amp power supply last week where I redesigned the
transformer,
> and designed an inrush current limiter, and I still don't know radio.
>
> I am one with Einstein on that. He said "The more I study the macrocosm
and
> microcosm, the more I become appalled at my own ignorance." Amen. But,
since
> I am, in all my ignorance, in such good company, I will keep on trying to
cut
> and fit like always. The tools get closer, the parts get better (didn't
I say
> we've come a long way?) but it is still cut and try and guess what went
bad.
> See the next post:

Lou,

If you were truly smart enough to recognize your own ignorance, (that you
compare
yourself with Einstein is laughable) then you would attempt to do something
about it by
learning how to design and simulate before you build stuff that doesn't
work, instead
of simply accepting your old-fashioned guess/cut/try/fail/guess mode as
"the way things
are done" ... that is NOT how modern design is done ...

The critics (myself included) were blasting you, not for making mistakes,
but for attempting

to assert that "that's just the way it is/must be" ... that's a bad message to send to those
who might be interested in learning something about radio ... you're saying, in essence,
that "it's a frustrating exercise in try/fail/try_again," when, in fact, it's a science that can be
mastered and where knowledge, skill, and the use of modern techniques/tools pay off in results ...

In the "real world" we design things based on an understanding of theory,

then we simulate the circuit to verify that our design ideas work as we expect
(and, with Monte Carlo analysis techniques we consider the effects of variations
in component values, temperature, supply voltages, etc.) ...

we can even optimize for specified performance parameters over specified ranges
of component value variations, temperature, supply voltage, etc.,

and only then do we actually build hardware, rather confident that it will work as expected.

(when you know what you're doing, it's MUCH faster, easier, and more efficient to "bread-
board" your circuits on the computer than by kludging together a bunch of parts that end
up being wasted as you cycle endlessly and cluelessly through your "cut and try" cycles)

That's the "real world" ... it's a place where science, knowledge, and skill make things work,
not the backward world of superstition, guesswork, and stagnation that so many beepers
embrace in the name of "tradition" (and other pseudo-religious dogma/mantras) ...

It's like the difference between modern medicine (MRIs, microsurgery, modern drugs, etc.)
and some primitive native witchdoctor whose answer to everything is to repetitively chant the
old mantras and rub mud on the patient. That's the difference between my perception of the
"real world" and yours ...

Carl - wa6vse
wa6vse@fast.net

# 1680. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19970809210901.RAA17032@ladder02.news.aol.com>
Source record: 91948

HI Steve;
There are several kits you can purchase. The material comes in powder form and you can apply it in a bathroom sink. This method just provides a flash coating but it will prevent copper and brass discoloration and makes projects look more professional. If your using the coating for improved conductivity its a waste of time. If you can't find a place to purchase drop me an email and I'll check my files; I believe Newark distributors carries the material. 73 Bill N4Mxf@aol.com

# 1681. Wanted - Laser Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <6Hee9TAa5N7zEwbF@pacsat.demon.co.uk>
Source record: 91949

```
Wanted
------

Visible light (640nm) red laser diodes. Required for laser transceiver
project. As powerful as possible, pref with collimating optics.

A diode from a broken CD player or laser printer would do for starters,
or an unwanted laser pointing device.

offers and ideas please

73 Simon GM4PLM
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+
```

# 1682. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33ecdb21.0@newshost.pcug.org.au>
Source record: 91950

"Kelvin Charlson" <kelvin@netspace.net.au> wrote:
>Hi
>
>
>I have just built a 6 meter reciever and want to tune the local oscillator
>in. The easiest and cheapest way I know how to do this is to build a
>crystal oscillator.
>
>Because an approx 50 MHz crystal is expensive ie $20, is it possible to say
>use a 17.73 MHz crystal and use its third overtone ie around 53 MHz. As
>this crystal is only a few dollars.
>

Kelvin - try building a 3rd overtone crystal oscillator (identical to what you'd use if you had a 50 MHz xtal). It may well work with the 17.73 MHz xtal. To check that the crystal is operating in its overtone mode (and not in its fundamental) tune your receiver around 17.73. If you don't hear anything there, but there's output on 50 Mhz, you've done it right.

However, if you use a crystal in this fashion, you won't be able to pull its frequency (ie your receiver will be fixed frequency). Operating the xtal in its fundamental mode and multiplying (provided you have adequate filtering) is best if you want frequency agility. Provided you're using the right kind of crystal (HC6/U), you should be able to obtain between 20 and 40 kHz VXO shift on 17 MHz (and 60-120 kHz on 50 MHz).

73,

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____________________________________________________

# 1683. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <EU6h5aALFO7zEws+@pacsat.demon.co.uk>
Source record: 91951

In article <19970809210901.RAA17032@ladder02.news.aol.com>, N4MXF
<n4mxf@aol.com> writes
> If your using the coating for improved
>conductivity its a waste of time.

I would actually disagree with this. RF only follows in the top few
microns of a conductor and certainly it will improve material
conductivity. It will not be a solid layer though and it will certainly
be hard to run high power through such a layer. It will stop detuning
through tarnishing.

73 Simon GM4PLM

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 1684. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Don Huff <W6JL@HP.com>
Message-ID: <33ED0A84.6C66@HP.com>
Source record: 91952

Bart Rowlett wrote:
>
> In article <5scv6r$lbq@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:
> >Lou Hinshaw (aruder@pipeline.com) wrote:
> >
> >: Radio has come a long way since meters were 20 K-Ohm/Volt, and caps
> >: and resistors were +/- 20% standard,
> >
> >>>>but it is still largely cut and try, and try to guess what went wrong.<<<
> >
> >What a sorry world that must be; it's not the one I live in, and never has
> >been. Design things using the best knowledge you have; simulate them if
> >you wish as a check and rework the design as appropriate; build and test.
> >If things are not as you designed, or if your design turns out to be not
> >what you really wanted, learn from that. It's not guessing, it's
> >learning. You can bootstrap yourself into as much knowledge as you can
> >handle that way. I see it as a "design-learn" cycle, not a "cut, try and
> >guess" cycle.
>
> Not the one I live in either. Like most engineers I know, the circuits I design
> generally work as designed when first prototyped. If not, it is usually
> an error building the prototype or a design oversight which wouldn't have
> happened if normal attention had been paid to the particular detail. In the
> vast majority of cases, if you know what the final circuit is actually supposed
> to do, then you are expected to get it right the first time. In my world,
> the majority of the time in the lab spent fooling around is usually
> trying to either figure out what the real system requirements are or what
> somebody elses widget actually does.
>
> bart wb6hqk

Hi Bart OM,

After 32 years in R/D work as a designer and manager, and currently a hardware designer, I can say that the breadboard phase is an essential one, no matter how much analysis and simulation is done beforehand. It is my experience that there is always something that was assumed that shouldn't have been, or unforseen, or just plain overlooked, that finally shows up in what you hoped would be just a "verification" of your design. So you go around the test-learn-test loop at least once , typically, several times, even with modern tools and techniques, at least with analog and power design. I have seen complex ASICS designed and frozen into silicon, and "work" the first time. But not to the nth degree; we always find something that we need to change before design freeze, even with digital logic IC's, which are easier to simulate

accurately than analog and/or mixed-signal designs.
Having said all of the foregoing, let's remember back when some of us did know "nothing" about what we were doing, building ham gear, and bumbling around until it worked. It was a magical time! I learned a lot, and it fostered motivation to learn more, and was exciting stuff. I am glad I went through it because it sparked my imagination and love of electronics (so many have noted that the word "amateur" is derived from the Latin "Amo or Amare" which means for the love of it). So if you are not designing for a living, you can use ANY method that suits you, efficient or not, because efficiency has nothing to do with it at all. Cut, try, guess: all's fair, cuz it's for fun, folks.

Keep on tinkering...

73,

Don, W6JL

## 1685. Kenwood TR-2500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Larry Kebel <Kebel@iag.net>
Message-ID: <33ED1667.5A0@iag.net>
Source record: 91953

Has anybody tried to run this radio from a 9 volt battery? If so, how?
--

***** Let's talk Stamp Collecting or Genealogy *****

# 1686. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000908972125040001@news.primenet.com>
Source record: 91954

In article <EU6h5aALFO7zEws+@pacsat.demon.co.uk>, Simon Lewis
<pacsat@pacsat.demon.co.uk> wrote:

:In article <19970809210901.RAA17032@ladder02.news.aol.com>, N4MXF
:<n4mxf@aol.com> writes
:> If your using the coating for improved
:>conductivity its a waste of time.
:
:I would actually disagree with this. RF only follows in the top few
:microns of a conductor and certainly it will improve material
:conductivity. It will not be a solid layer though and it will certainly
:be hard to run high power through such a layer. It will stop detuning
:through tarnishing.
:
:73 Simon GM4PLM
:

I have heard of people using spent photographic developing solution for silver plating. This method also results in a very thin layer since once the copper surface is gone, there is no more electrochemical reaction. You'd think that it would only get one molecular layer thick, but who knows.

You could also go to a chemical supply store and buy silver nitrate. It will also give a thin layer. You'd have to supply an external source of energy to plate it any thicker. (this stuff is caustic to skin, they use it for cauterizing severe nosebleeds- sticks of it look like sparklers)

Rob

# 1687. Re: PL259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Dave Lee <dave.lee@zetnet.co.uk>
Message-ID: <19970809234624707 65@zetnet.co.uk>
Source record: 91955

In message <33ede25e.46996576@news.pipeline.com>
aruder@pipeline.com (Annette or Lou Hinshaw) writes:

> MOST decent-quality (excluding the popular corner-store source) 259s
> are that way: Look inside the cable barrell and see if it is
threaded. If so,
> you should find the thread is slightly larger than the cable.

> BUT:

> Turn the shield braid back over the cable and screw it into the barrell and
> you have a very good fit indeed. No soldering required. That is for stuff the
> size of RG-8U. For stuff the size of RG-58U, there is an insert that you turn
> the braid back over and proceed as above. Elementary, Watson.

Hope you can stand the flack Lou, ;) there's a lot of otherwise sane
and intelligent people who will insist that you still have to solder
the braid.
For the record I changed from clamp to screw in in 1980 and cannot
attribute one failure to lack of soldering the braid.
The original post mentioned field day. The clamp type 259's or for
better impedance match "N" type's, will stand a weekend of most
weather conditions without the need to tape them up.
Dave

# 1688. Re: VvC diode tuning prob. - Problem SOLVED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33EC2298.61A8@flash.net>
Source record: 91956

ka8ddz wrote:

> When I try to use any higher than 5pf to connect the diode in the
> circuit it dies, dead as a doornail, nada. If I use a tuning cap I can
> get over 150Khz so I believe the LC circuit is OK. The circuit will NOT
> take more than 5pf in series with the VVC diode.
> Any ideas?
>
> Tim Hynde, ka8ddz

Apparently by reducing the C in the LC circuit allowed greater use of the VVC diode, still not sure why it was dropping out (I would think the freq would just go higher or lower) but by removing a 56pf in parallel with the coil and replacing it with 47, I can now use 10pf to couple the VVC resulting in over 100Khz coverage.

Tim

# 1689. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-09 00:00:00 UTC
From: Edward Slimak <afn01212@afn.org>
Message-ID: <33EC6E4F.7010@afn.org>
Source record: 91957

A regular J pole is a 1/2 wavelength element with a 1/4 wave matching stub feed in its simplest form Sparks

# 1690. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33f20194.42522935@news.pipeline.com>
Source record: 91861

"William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>Bart Rowlett wrote:
>>
>> Like most engineers I know, the circuits I design
>> generally work as designed when first prototyped.

GENERALLY? Lou.
>
>The best of all worlds is an optimum mix of design, simulation and
>experimentation. Invariably, I find that at least one loop-around
>through this cycle is needed because of unforseen discrepancies and
>deficiencies that show up in the experimental phase. This loop-around
>process is very enlightening and it leads to something that doesn't just
>"work", but works much better than on the first go-around. There is a
>school of thought that the breadboard stage is no longer needed. I do
>not believe that for one moment.
>
>Bill W0IYH

Right on, Bill
Give it all the fancy names you wish, it is still cut & try even on a; computer
or after, as I do, on a plug-in breadboard so I don't waste parts, chips, etc.,
but can recycle them. Poli-tickle Correcty, me. First get an idea. Next make
it fit whatever you want to by redesign (cut to fit) then simulate a TRYOUT
on your computer, then breadboard it to see if it works in the real world, then
make it on a metal chassis or PC board, or whatever, and then hope it
doesn't smoke when it is supposed to be ready.

BTW, my comparison of myself with Einstein seemed to me on rereading to
be very obviously lmited to the ignorance we both profess.

There is indeed a loop back and refit process in most things electronical,
and a 1% tolerance is still a tolerance, and IRC, for whom I worked in the
'70s, made adjustment devices to allow fitting without rebuilding. They called
them trim pots. From the rants I have heard blasting me, I must assume those
ENGINEERS no longer use trim pots.

Or do they?

Ciao, and Bill, thank you for a clear post.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.

(Typical of the Breed)
Tulsa OK, USA

# 1691. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5sjdtn$c7f@newsworthy.West.Sun.COM>
Source record: 91862

In article <5scv6r$lbq@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:
>Lou Hinshaw (aruder@pipeline.com) wrote:
>
>: Radio has come a long way since meters were 20 K-Ohm/Volt, and caps
>: and resistors were +/- 20% standard,
>
>>>>but it is still largely cut and try, and try to guess what went wrong.<<<
>
>What a sorry world that must be; it's not the one I live in, and never has
>been. Design things using the best knowledge you have; simulate them if
>you wish as a check and rework the design as appropriate; build and test.
>If things are not as you designed, or if your design turns out to be not
>what you really wanted, learn from that. It's not guessing, it's
>learning. You can bootstrap yourself into as much knowledge as you can
>handle that way. I see it as a "design-learn" cycle, not a "cut, try and
>guess" cycle.

I've been ridiculed a few times for daring to say things like
"you can successfully model RF circuitry". I don't even get
to mention that the accuracy of the simulation depends on the
accuracy of the model, which is an incentive to understand how
things really work, not dodging reality by saying things like
"you gotta tweak it best ya can".

Now, simulations aren't gospel, like Tom says. However, electronic
circuitry works on generally well-known principles that aren't
difficult to model by themselves, you just need to have a model
that reflects reality. You learn that capacitors have series L
and R values, that inductors have series R and shunt C, and skin
effect modifies the series depending on frequency. You learn
how to work with S-parameters. You get the idea. You can tinker
something into existence and hope it works under changing conditions,
or you can design something by understanding how it works.

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

# 1692. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970810042000.AAA14298@ladder02.news.aol.com>
Source record: 91863

>Could someone clear up the question of the j-pole for me. My ARRL
>antenna handbook says that it's simply a quarter wave with a matching
>section attached, which is easily mounted. No particular gain.
>
>Yet I hear ham after ham singing the glories of the j-pole. Have I
>missed something? Does the j-pole really have 11 db gain, as some
>have said quite definitely on the repeater?
>
>We older fellas tend to doubt antenna statements. Jerry W8GND

Here are the instructions for the Better J-Pole.
Remember, the spacing is important, If you use any material
other than what is shown here, you may have to change the spacing
to get a low SWR.
Please e-mail me, and let me know how this works out.
and let me know if you have any questions.
You may want to print the page showing the J-Poles at....
<A HREF="http://members.aol.com/Arrow146/index.html">Arrow Antenna</A>
or
http://Members.aol.com/Arrow146/index.html

Construction Plans for the Model J146 2 Meter Solid Aluminum J-Pole

Parts Needed:

Radio Shack # 21-961 3/8"-24/SO239 Mount (Mobile CB Antenna)
Radio Shack # 15-826 TV Mast U-Bolt Clamp Assembly
About 80 inches of 3/8" diameter Solid Aluminum Rod.
5 1/2 inch piece of strut angle Aluminum 1 1/2" X 1 1/2" X 3/16" Thick.
2 Stainless Jam Nuts 3/8-24 thread

Tools needed:

Drill Press with drill Bits up to 1/2".
Tap & Die for 3/8-24 thread.
Sander or file to de-burr the cut edges.
2 9/16 wrenches & a 3/4 wrench.
Vice-grips

Make sure the piece of angle Aluminum is exactly 5 1/2 inches long.
Drill 2 1/4" holes on one side, centered to fit the U-Bolt for mounting.
On the other surface of the angle
Measure in 1/2" in from each end and drill a 1/4" pilot hole.
This should give you 4 1/2" from center to center of the two holes.
Redrill one of the pilot holes to 11/32" Then tap the hole with a 3/8-24
Tap.

Redrill the other pilot hole to 1/2&#65533;
Finish as required.

Cut a piece of the 3/8&#65533; Aluminum rod to about 59&#65533;.
Attach a vice-grip to one end.
Using a 3/8-24 Die cut in about 8 threads in the other end.
Screw on the Coupling Nut that came with the SO239 Mount
Tighten as much as you can.
Measure the rod & coupling nut & cut to exactly 57 1/2&#65533;

Cut a piece of the 3/8&#65533; Aluminum rod to about 21&#65533;
Attach a vice-grip to one end.
Using a 3/8-24 Die cut in about 14 threads in the other end.
(If you don&#65533;t have jam nuts, cut enough threads for 2 nuts & the thickness
of the angle bracket.)
Screw on one of the Jam nuts & tighten as much as you can.
Measure from the bottom of the nut and cut the rod to exactly 19 1/4&#65533;
(Remember the nut must be included in the Measurement.)
(Put a small amount of grease on the threads)
Screw the element into the threaded hole of the angle bracket and tighten.
Screw on the other nut and tighten it.
Attach the 57 1/2&#65533; element in the 1/2&#65533; hole using the rest of the SO239
Mount.
Mount & test your new antenna. SWR should be < 1.2-1 at 146 MHz and
<1.4-1 at 144 &148 MHz.

```
This Model J146 is available from Arrow Antenna for only $ 35.
The J146/440 Dual Band with single SO239 feed is only $ 43.
Please add $ 6. Shipping & Handling per order (for US Funds).
```

73 Allen Lowe N&#65533;IMW
Arrow Antenna
1803 S. Greeley Hwy. # B
Cheyenne, WY 82007
(307) 638-2369 Fax (307) 638-3521
Arrow146@aol.com

## 1693. Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970810043201.AAA15096@ladder02.news.aol.com>
Source record: 91864

Have a brand new Dow-Key "bypass" antenna relay with SO-239 connectors, 110v AC but no accessory contacts. Anybody know what they go for on the used market?

Thanks,

Evan
K9SQG@AOL.com

# 1694. Simple 170Mhz receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Alan Gilchrist <agilly@dove.net.au>
Message-ID: <33EDCD60.72FF@dove.net.au>
Source record: 91865

Hi ... thanks for reading this request.

I am looking for a design for a simple VHF receiver to operate on a single freq in the 170 Mhz region.

With the multitute of special "chips" about it must nearly be at the stage of building a receiver with a single chip or am I out of touch and it is already possible ?

I would be interested to hear from anyone who may have come up with such a design.

Thanks Alan VK5BWG

agilly@dove.net.au

# 1695. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: John Cramond <john@gm4nhi.demon.co.uk>
Message-ID: <$zA0MCAYVX7zEw47@gm4nhi.demon.co.uk>
Source record: 91866

In article <01bca49c$84d5f880$0100a8c0@stevedah>, Steve Dahlqvist
<steve.dahlqvist@bamsebo.pp.se> writes
>Hi.
>I have a couple of projects that involves silverplating but I dont know how
>to do it.
>The electrolythic way seems to be adequate for RF-filters and similar
>devices.
>
>Any tip?
>
>
>73 /Steve

Try to get hold of a back copy of Ham Radio for February 1985.

K9EYY did an excellent article on "Safe, Sensible Silverplating".
The method used spent photographic fixer, a 6 volt battery, a 10K pot
and a 0-100 mA meter.
You can plate to whatever thickness you want. I have used this method to
plate repeater cavity filters with excellent results.
--
John Cramond - GM4NHI
<john@gm4nhi.demon.co.uk>

## 1696. Silver plating

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970810092701.FAA19337@ladder01.news.aol.com>
Source record: 91867

```
>
>:>
>:>Hi.
>:>I have a couple of projects that involves silverplating but I dont know
>:how
>:>to do it.
>:>The electrolythic way seems to be adequate for RF-filters and similar
>:>devices.
>:>
>:>Any tip?
>:
>:Kool -Amp. From Portland Oregon. They manufacture a scouring powder that
>:you wet with water and rub onto copper, silver, brass, anything lower on
>:the work function, and it deposits pure silver on the base metal. Power
>:companies have used it for years to replate relay contacts and switches
to
>:lower the resistance of the contact...Therefore the name.
>:
>:I buy a pound jar every 30 years, so am a bit out of touch on price but
>:probably in the neighborhood of $40 per pound. 1 pound usually lasts
>:nearly a lifetime.
>:
>:W4ZCB
>
>Harold,
>
>I've looked in the phone book here before for that company, since I
>remember it from Handbook years ago, but never could find it. Just
checked
>yellow pages again and its not there. Checked combined listings, silver,
>plating, electronic sections- nothing there.
>
>If anyone has the address or phone number, would appreciate the info.
>
>
```

Hi Rob. Almost missed your post, I don't usually review old notes. I may be the one who led you astray, I just went to the workshop and got my second jar in a lifetime and it's COOL-AMP not Kool-amp. Every jar is registered, and I've given away a lot more than I've ever used.

The address on the jar is

8603 S.W. 17th Avenue
Portland, OR 97219

I'm sure they are still in business, they do a pretty large business with the Utility industry. However, I have about 20 percent of a pound left and can share if you can't obtain any from that address.

W4ZCB

# 1697. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5skkjp$l10@cletus.bright.net>
Source record: 91868

Evan,

Since its 120 vac I assume its a series 60 since they only list 1 120v model in the catalog. New price for those units is $234.

I would be interested in the responses you get. I have a number of Model 164 Dow Key units I want to sell.

73, Norman N8RGR

# 1698. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <5sjsjl$4v7@nntp02.primenet.com>
Source record: 91869

europa@primenet.com wrote:
>In article <19970809133600.JAA12723@ladder01.news.aol.com>,
>johnsonhe@aol.com (JohnsonHE) wrote:
>:>I have a couple of projects that involves silverplating but I dont know
>:
>:Kool -Amp. From Portland Oregon. They manufacture a scouring powder that

It's Cool-Amp.

>I've looked in the phone book here before for that company, since I
>remember it from Handbook years ago, but never could find it. Just checked
>yellow pages again and its not there. Checked combined listings, silver,

Cool-Amp has an ad in the September, 1997 issue of Electronics Now
magazine on page 72. The price is not mentioned.

Order factory direct:

(503) 624-6426
or
(503) 624-6436 FAX

# 1699. Wanted - Copy of Article: Ham Radio Feb 85

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <b3HWhtA8Xd7zEwcI@pacsat.demon.co.uk>
Source record: 91870

```
wanted
------

Photocopy of article on hombrew silver plating - Ham Radio Feb 85

Any help appreciated

73 Simon

+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+
```

## 1700. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <5skndt$13s$1@gte1.gte.net>
Source record: 91871

K9SQG wrote:
>
> Have a brand new Dow-Key "bypass" antenna relay with SO-239
> connectors,
> 110v AC but no accessory contacts. Anybody know what they go for on
> the
> used market?

Typical hamfest prices for Dow-Key relays run in the $25-50 range.
Nobody in their right mind would pay the current catalog prices for new
ones. Good new/used relays are quite plentiful, and not really an item
to plan your retirement around :-)

Grant/NQ5T

nq5t@gte.net
http://home1.gte.net/nq5t

## 1701. Smart Charger Schematic/Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Stephanie Steele <kc7dba*NOSPAM*@primenet.com>
Message-ID: <33EDE124.7BB8@primenet.com>
Source record: 91872

Does anyone have plans for a "Smart Charger" circuit. I would like to build one but have been unable to find plans anywhere. Thanks in advance for any assistance.

--

SPAM Prevention - To reply to this message remove " *NOSPAM* " from the address

Stephanie Steele

e-mail address kc7dba@primenet.com

---
Thinking is the hardest work there is, which is probably why so few engage in it.

-Henry Ford

# 1702. Re: Oscilloscope.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <33EDD96C.9F8@tir.com>
Source record: 91873

First I removed all those crosspost addresses. Then I brought up Yahoo and typed in wd1v. I found
a very large ham radio page with lots of nice links. I also found the faq you are looking for at
http://www.mv.com/ipusers/wd1v/dsofaq.html When I tried "oscilloscope" on Yahoo it found the
page quite easily. There may a few others of interest as well. I am sure that your favorite search engine could do as well. Have fun surfing.

Bill KU8H

# 1703. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970810154601.LAA01714@ladder01.news.aol.com>
Source record: 91874

>
>Ugg! sounds fun!
>
>I will be interested to see if anyone comes up with a good, safe, method
>of diy plating
>
>73 Simon

Well, I have been using the Cool-Amp product for something over 40 years. Sometimes extensively, plating such things as the complete circuit board for 2 meter converters sorts of thing. (And an occasional penny to demonstrate the procedure.) I usually just dampen my thumb under the faucet and dip it in the cool-amp and rub whatever sticks onto the surface to be plated. No gloves, it does darken your thumbnail for a couple days when you don't get it all off, but no worse than applying stain to a wall. I just made 70 years and as far as I know, haven't suffered from the procedure. (Who knows, If I hadn't used it, I probably would have given Einstein a run for his money.

The product is hydroscopic however, keep the jar sealed or it'll be a lump.

W4ZCB

# 1704. Re: VvC diode tuning prob. - Problem SOLVED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <33EDF739.6F1A@pop.removethistomailme.net>
Source record: 91875

ka8ddz wrote:
>
> ka8ddz wrote:
>
> > When I try to use any higher than 5pf to connect the diode in the
> > circuit it dies, dead as a doornail, nada. If I use a tuning cap I can
> > get over 150Khz so I believe the LC circuit is OK. The circuit will NOT
> > take more than 5pf in series with the VVC diode.
> > Any ideas?
> >
> > Tim Hynde, ka8ddz
>
> Apparently by reducing the C in the LC circuit allowed greater use of
> the VVC diode, still not sure why it was dropping out (I would think the
> freq would just go higher or lower) but by removing a 56pf in parallel
> with the coil and replacing it with 47, I can now use 10pf to couple the
> VVC resulting in over 100Khz coverage.
>
> Tim

Assuming the 1N4001 isn't simply introducing too much capacitance to begin with, this sounds like a Q problem. When you add more capacitance, the LC circuit becomes more capacitance-dominant. Normally this is not bad in itself, because conventional capacitors have much higher Q factors than inductors... but as a rule, even 'real' varactor diodes have lower Q factors than ordinary capacitors. I don't know what to expect from a 4001, Q-wise, but it's possible that it just exhibits so much loss at 7 MHz that it no longer effectively functions as a capacitor. When you allow a lossy capacitor (the 1N4001) to become such a dominant part of the LC circuit, the effective Q drops to the point where oscillation is no longer reliable.

You don't say whether you're using a Hartley- or Colpitts-derived oscillator; you might try playing with the feedback coupling capacitance(s) to see if that helps. In general, though, you don't want a low-Q tank circuit in a receiver LO. I think your best bet is to tear up an old FM radio or UHF varactor tuner and steal a legitimate tuning diode from it. If you have an ECG or NTE distributor nearby, they'll have a good selection of replacement varactor diodes as well. A 1N4001 is probably not the optimal choice for good noise and stability performance in an LO.

-- jm (de KE5FX)

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Note: My E-mail address has been altered to avoid spam
-----------------------------------------------------
```

# 1705. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bca5b7$59356140$0595f5ce@wa6vse.fast.net>
Source record: 91876

Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article
<33f20194.42522935@news.pipeline.com>...
> "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>
> >Bart Rowlett wrote:
> >>
> >> Like most engineers I know, the circuits I design
> >> generally work as designed when first prototyped.
>
> GENERALLY? Lou.

Yes, generally ... sometimes people, being people, make mistakes ...
in the case of modern design techniques, it is usually an error of omission
or an inaccurate specification from the requirements definition phase ...

> >The best of all worlds is an optimum mix of design, simulation and
> >experimentation. Invariably, I find that at least one loop-around
> >through this cycle is needed because of unforseen discrepancies and
> >deficiencies that show up in the experimental phase. This loop-around
> >process is very enlightening and it leads to something that doesn't just
> >"work", but works much better than on the first go-around. There is a
> >school of thought that the breadboard stage is no longer needed. I do
> >not believe that for one moment.

It is not at all uncommon in modern design to go from computer design and
simulation to production-ready hardware without a "traditional" (there's
that
word again ... the more I hear it, the more I'm convinced it's a synonym
for
"backward ways") breadboard stage ... modern product design/development
cycles are so abbreviated that the time involved in messing around with
breadboards (which often are not good models of the final product anyway
because of layout differences, etc.) is impractical and wasteful ...

> There is indeed a loop back and refit process in most things
electronical,
> and a 1% tolerance is still a tolerance, and IRC, for whom I worked in
the
> '70s, made adjustment devices to allow fitting without rebuilding. They
called
> them trim pots. From the rants I have heard blasting me, I must assume
those
> ENGINEERS no longer use trim pots.

NOT IF WE CAN POSSIBLY AVOID IT ...
Good designs can, in many cases, allow for "worst case" component

tolerances
well beyond the specifications of the components used ... it's a matter of taking
the variations into account in the design in many cases.

And yes, most of us ENGINEERS are under tremendous pressure to eliminate ALL "tune at test" adjustments from our designs, because the labor to do the tuning
and the cost of the variable parts are prohibitively expensive ... things like trim pots,
variable capacitors, etc. are ONLY used when there is NO other way ... in many cases,
equipment is made self-calibrating ... or is calibrated once by an automated process at
the factory and the values are stored in on-board, non-volatile memory to be reloaded
at each subsequent power-up ... design techniques like this have replaced manual
tuning adjustments in many applications ...

Things have changed dramatically since the '70s ... obviously you haven't kept up
with the times ... but don't feel "like the Lone Ranger" ... there are tens of thousands of
other hams who are similarly stuck in a technological time warp and, like you, are blissfully
ignorant of how far behind they are ... THAT is the single largest problem facing ham radio
... and the insistence folks like that have on clinging to the code is both a symptom and an
exacerbating factor in this problem ...

Carl - wa6vse
wa6vse@fast.net

# 1706. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33EE0509.2808@crpl.cedar-rapids.lib.ia.us>
Source record: 91877

Carl R. Stevenson wrote:

> with the times ... but don't feel "like the Lone Ranger" ... there are tens
> of thousands of
> other hams who are similarly stuck in a technological time warp and, like
> you, are blissfully
> ignorant of how far behind they are ...

Baloney.

Bill W0IYH

# 1707. Re: Kenwood TR-2500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Roland Burgan <nobody@up.net>
Message-ID: <33EE0438.41AD@up.net>
Source record: 91878

Larry Kebel wrote:
>
> Has anybody tried to run this radio from a 9 volt battery? If so, how?
> --
>
> ***** Let's talk Stamp Collecting or Genealogy *****

I've never tried to run mine from a 9 v.battery simply because the
smaller batteries do not have enough capacity to run the radio
under normal operating conditions for very long.

--
**********
TO REPLY BY E-Mail, replace the 'nobody' in the
reply-to address with: rburgan
**********

# 1708. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bca5bb$b78a68e0$8a95f5ce@wa6vse.fast.net>
Source record: 91879

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<33EE0509.2808@crpl.cedar-rapids.lib.ia.us>...
> Carl R. Stevenson wrote:
>
> > with the times ... but don't feel "like the Lone Ranger" ... there are
tens
> > of thousands of
> > other hams who are similarly stuck in a technological time warp and,
like
> > you, are blissfully
> > ignorant of how far behind they are ...
>
> Baloney.

Really, Bill? I think not ... just look, with a realistic eye, at the
level (or, more
accurately, LACK) of technical competence amongst that majority of hams.

Relative to technology, hams have (in general) have fallen farther and
farther
behind the SOTA over the past 20 years or more ...

Carl - wa6vse
wa6vse@fast.net

# 1709. Re: PIN Diode Source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970810134701.JAA25472@ladder01.news.aol.com>
Source record: 91880

Hi --

Try Microsemi Corp, 580 Pleasant St., Watertown, MA 02172 or 617-926-0404.
The UM9401 is a popular choice.

Rick K1BQT

# 1710. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33EE1375.255E@kfa-juelich.de>
Source record: 91881

Simon Lewis wrote:
> 
> In article <europa-ya023580000908972125040001@news.primenet.com>,
> europa@primenet.com writes
> >I have heard of people using spent photographic developing solution for
> >silver plating. This method also results in a very thin layer since once
> >the copper surface is gone, there is no more electrochemical reaction.
> >You'd think that it would only get one molecular layer thick, but who
> >knows.
> >
> 
> Yes I have heard of this too, I think you would find it would be thicker
> than 1 molecule though! You'd be very hard pushed to even see it! I
> think electroplating is much thicker because of the electro deposition
> process thats used, you can control the thickness much easier. The
> liquid or pastes are much harder to plate any thickness.
> 
> >
You are right and wrong on this guess; the layer is indeed more than 1 molecule thick and could be a few microns thick if done by this so-called "Displacement" method. What is happening is that the surface of the base metal (copper wire of cavity?) is going into solution and silver is depositing out. Whether this happens depends on the electrochemical potentials of the metals and these can be looked up in tables. What you will find is the method works for copper but not for a gold base (in fact in a gold solution, silver would go into solution and gold would plate out).
Where I must disagree is in the argument about thickness. In displacement plating one of the metals must diffuse through the other, for example, the copper must go through the already deposited silver, get to the surface and then go into solution. It simply is not going to go very far diffusing that way, at least at any decent speed, so the process just stops. In electrolytic plating this is not what is happening. An electron out of the power supply mates with a positive ion and forms a neutral metal atom which then binds to the surface. Normally a new metal ion is formed at the other electrode as an electron is stripped off one of the metal atoms there. This is not limited by any diffusion process in the solids (although the ions may be traveling in the liquids partly by diffusion, though simple mixing is more important in most cases, or forces from electrical potentials working on the ions) so it can go on "forever". Centimeters of metal are built up in some cases, like electrolytic refinement of copper.
There is a company offering a silver-plating bath which is likely not to be dangerous as it contains no cyanide; however, I don't have the

www address at hand and even hesitate to mention it for now because I cannot clear up a "misunderstanding" about the ability of the solution to plate onto copper. I have not been able to get a clear statement it will defintiely produce high quality silver well-bonded to a copper substrate and why it works when things I have read say it does not work from an acid plating bath!(the company "suggests" it will work but does not say "It definitely works on copper!") In cyanide baths there is a secret; the ions about which I wrote are not there except in very tiny quantities (one free ion per cubic centimeter is the order of magnitude). The cyanide gives up the silver bound to it at the critical moment, but does not give it up to the displacement reaction.
I should mention, metals deposited by displacement are often poorly bound to the substrate. I was experimenting yesterday and got a silver coat but when it built up a little in thickness it just peeled off, right down to the bare copper (this was in a bath with no cyanide and there was both electrolytic and displacement plating taking place.) My present interest is repairing a flute with ugly silver but those of you wanting to do electronics will not be any happier if the bond is poor as I expect poor electrical contact at the interface and thus Q is likely to be less than great.
I know people will be saying "What?!" when I make the suggestion, but consider gold plating. The simple truth is that gold is not such a great conductor and will not bring the benefits of silver plating when the silver is new, but those benefits are oversold anyway (Do you want to go to all that trouble for a 3% increase in conductivity?) In fact, in the past silver was sometimes overplated with a bit of gold. What is all this about? Gold does not oxidize nor does it react to make sulphides like those which form on silver. You may have a little less conductivity, but you will have all it tomorrow, and the day after, too. I once looked into an HP Q-meter and the whole works is gold-plated (Whether there is silver under the gold I don't know) in the critical places. Futhermore, gold has a more favorable chemistry than silver and it can be very well plated out of solutions with low toxicity. There are excellent, if expensive solutions on the market. A good supplier will charge you for the gold at international market prices on the date of sale plus a flat fee for the other chemistry and processing needed to produce the solution, feeding the workers, rent, mailing and phone calls, and all the other "hidden" costs. The greater part of the cost is delivered to you as gold in solution and it can be recovered at a later date. And you will not endanger yourself or the family while enjoying rf circuits with good performance over their whole lifetime!

Oh, well, I close, hoping it all helps to clear up some misunderstandings.

Bob

PS Though I try to make solutions to deposit silver, far better chemists than I have attempted to get around the cyanide and gave up. There are some known solutions which do work under reasonable

conditions, but cyanides remain the standard because they are much more flexible and tolerant than any of the alternatives. I even found a recipe for a bath depositing an alloy of about 80% silver, rest Cu. It is quite safe, but it would be a real flop for plating rf stuff as alloys are almost always inferior in conductivity except if you go the route of superconductors! Even then, the best rf work is done with pure niobium, I believe. Anyone for rf at liquid helium temperatures? (Stop the government from venting this precious resource into the air!)

# 1711. Re: Simple 170Mhz receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970810134201.JAA02857@ladder02.news.aol.com>
Source record: 91882

Hi Alan--

I've had good luck with the MC13135. It will, however, need a preamp.

Rick K1BQT

# 1712. Re: Need CRYSTAL SET plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <33EE3130.4FD2@erols.com>
Source record: 91883

N9KC wrote:

Lou,

For starters, have a look-see at the Web Page of the
Xtal Set Society at:

http://www.midnightscience.com

Follow the path to the Quaker Oats Box radio, and other items.
That should get you started.

73, Dave K7HMP

> Hi All,
>
> Need plans to build a simple CRYSTAL SET from readily available parts.
> Have a teenager in the neighborhood who needs help.
>
> We live close to an AM tower (KOA in Denver), so this should be a piece of
> cake.
>
> Reply to N9KC@aol.com
>
> Thanks!!!
>
> Lou

# 1713. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <YSwGYoAiVY7zEwPq@pacsat.demon.co.uk>
Source record: 91884

In article <europa-ya023580000908972125040001@news.primenet.com>,
europa@primenet.com writes
>I have heard of people using spent photographic developing solution for
>silver plating. This method also results in a very thin layer since once
>the copper surface is gone, there is no more electrochemical reaction.
>You'd think that it would only get one molecular layer thick, but who
>knows.
>

Yes I have heard of this too, I think you would find it would be thicker
than 1 molecule though! You'd be very hard pushed to even see it! I
think electroplating is much thicker because of the electro deposition
process thats used, you can control the thickness much easier. The
liquid or pastes are much harder to plate any thickness.

>You could also go to a chemical supply store and buy silver nitrate. It
>will also give a thin layer. You'd have to supply an external source of
>energy to plate it any thicker. (this stuff is caustic to skin, they use
>it for cauterizing severe nosebleeds- sticks of it look like sparklers)
>
>Rob

Ugg! sounds fun!

I will be interested to see if anyone comes up with a good, safe, method
of diy plating

73 Simon
+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

# 1714. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970810125738.15964C-100000@oso.slonet.org>
Source record: 91885

Photographic solutions do work for minor silver plating! There seems to be two tricks that help. First, be sure that the surface is clean and secondly, be sure that surface remains away from the air.
One item that cleans well is any phosphate product used to remove lime from bathroom surfaces. Scrub the object to be plated with a non-conductive pad. Then immediately, after rinsing well, plunge the object into silver laden photo solution. After a few hours you will probably see a darkened surface. Most of the silver will rub off but a small amount will remain---probably enough to do some good. Cliff K7RR

On Sun, 10 Aug 1997, Simon Lewis wrote:

> In article <europa-ya023580000908972125040001@news.primenet.com>,
> europa@primenet.com writes
> >I have heard of people using spent photographic developing solution for
> >silver plating. This method also results in a very thin layer since once
> >the copper surface is gone, there is no more electrochemical reaction.
> >You'd think that it would only get one molecular layer thick, but who
> >knows.
> >
>
> Yes I have heard of this too, I think you would find it would be thicker
> than 1 molecule though! You'd be very hard pushed to even see it! I
> think electroplating is much thicker because of the electro deposition
> process thats used, you can control the thickness much easier. The
> liquid or pastes are much harder to plate any thickness.
>
> >You could also go to a chemical supply store and buy silver nitrate. It
> >will also give a thin layer. You'd have to supply an external source of
> >energy to plate it any thicker. (this stuff is caustic to skin, they use
> >it for cauterizing severe nosebleeds- sticks of it look like sparklers)
> >
> >Rob
>
> Ugg! sounds fun!
>
> I will be interested to see if anyone comes up with a good, safe, method
> of diy plating
>
> 73 Simon
> +--------------------------------------------------------------------+
> | Simon Lewis GM4PLM Editor - EMN |
> | European Microwave News - Supporting Microwave Radio Across Europe |
> | Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
> +--------------------------------------------------------------------+

>
>

## 1715. Electronic Projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: John Fleenor <johnf@cyberramp.net>
Message-ID: <33EE44C4.225A@cyberramp.net>
Source record: 91886

See electronic projects at http://www.cyberramp.net/~johnf for several electronic projects you can download.

# 1716. Re: QRP CW xmitter: Use a TTL oscillator module on a ham band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33ee2710.0@newshost.pcug.org.au>
Source record: 91887
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

bry@REMOVE.mns.net (Bry) wrote:

>But I don't think too many QRP CW ops are monitoring 28.322 MHz
>looking for a QSO!
>

True. It's also a little low for SSB activity (here mostly 28.4-28.5 MHz). However, I'd still say that you'd have better chance of success on phone than CW on that frequency. You could add a 741 mic amp, a NE602 balanced modulator and 3 or 4 transistors to get QRP DSB on 10m.

However, bear in mind that with QRP, crystal control has a similar effect to putting a 20dB attenuator in line as regards the number of QSOs you'll have. With frequency agility you can at least call other stations calling CQ, with crystal control you're stuck to calling yourself, hoping that someone else will hear you. I have some more thoughts on crystal control Vs freq agility on my home page (URL below).

73,

Peter VK1PK

--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 1717. Re: WANTED: 11 meter kit or plans to build trans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33ee298f.0@newshost.pcug.org.au>
Source record: 91888

David Hinkle <hink@scioto.net> wrote:
>Soes anyone know where I could obtain a kit for building an 11 meter
>radio? Or, how about a good set of plans to build from parts? I'd like
>to build my own base station (SSB optional).
>
>Thanks in advance. Please email me at:
>
>mailto://hink@scioto.net/

David - the regulations may be different where you live, but here all CB
CB gear must be type approved. Thus if you want to build something and
legally use it, you'd have to get your Novice ham ticket and get
something going on 28 MHz. There SSB is almost mandatory, unless you
wanted to experiment with FM, AM or CW.

Having said the above, I'd start with an AM-only car radio and build a
simple two or three transistor converter. That would allow coverage of a
1 MHz range. Of course you'd need to add a BFO for SSB reception.
Selectivity won't be the best however.

For a transmitter, you'd need to decide whether you want frequency
agility or crystal control. If tyhe latter you have to decide between a
VXO (which could cover about 50 kHz on 28 MHz) using a fundamental
crystal and a multiplier and a 3rd overtone xtal osc on a single
frequency. Then have a few stages following to boost the output up to a
reasonable level. For an AM modulator, you may be able to use a LM386
audio amp (probably with a preamp before it) for rigs up to about 1 watt.
You might be able to use an AM radio speaker transformer for the
modulation transformer (which is in the DC line of the final amp stage).

73,

Peter VK1PK

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____________________________________________________

# 1718. Re: Silver plating/ small loop antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001008971442280001@news.primenet.com>
Source record: 91889

In article <19970810092701.FAA19337@ladder01.news.aol.com>,
johnsonhe@aol.com (JohnsonHE) wrote:

:>
:>:>

:Hi Rob. Almost missed your post, I don't usually review old notes. I may
:be the one who led you astray, I just went to the workshop and got my
:second jar in a lifetime and it's COOL-AMP not Kool-amp. Every jar is
:registered, and I've given away a lot more than I've ever used.
:
:The address on the jar is
:
:8603 S.W. 17th Avenue
:Portland, OR 97219
:
:I'm sure they are still in business, they do a pretty large business with
:the Utility industry. However, I have about 20 percent of a pound left and
:can share if you can't obtain any from that address.
:
:W4ZCB

Yes, I found it in the "C" section. They are now on Boons Ferry Road in
Lake Oswego, OR, much classier digs. (503)624-6426

Also, info might be useful for anyone else thinking of building small loop
antennas. I was going to silver plate the 3/8" copper tubing- it is 3ft in
diameter, but on second thought, I really want to control the Q, rather
than make it sky high. Otherwise, I'd need to use vacuum variables for the
tuning cap.

As it is now I have this huge broadcast type with 4 sections of I guess
around 300-400pf each. Two sections connect to one side of the loop, and
the other two to the other side. Thus its balanced. With 100 watts and
shiny copper loop, I only get arcing very occasionally. If I make it
silver plated, I might not be even able to use it. But I might silver
plate it and then use a resistor to control the Q.

As it is now, loop and cap only get slightly warm on 40M. I'll try 80 and
160 eventually with more cap in parallel. And I was suprised to have no
TVI and no rf on chassis, even though I had it on my bed and TV in next
room. This also makes a great SWL antenna since it can be tuned from
7-30mhz with just turning cap knob.

Rob.

# 1719. Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: wrightj@planetc.com
Message-ID: <5sl6mb$v81@news.planetc.com>
Source record: 91890

How does a homebrewer plate thru holes in making oc boards?
I have a X-Y table used to draw the art work on both sides of
the pc board and drill them. Then how do you go about plating
thru the holes?

# 1720. FYI DPDT knife switch source!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Peter Shintani <shintani@tv.sony.co.jp>
Message-ID: <5slgf4$8u7@oskgw.osk.sony.co.jp>
Source record: 91891
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi:
If anyone is looking for 15A or 30 A DPDT (double pole double throw)
knife switches with a 250 VAC rating or higher, you can find them in
Japan of all places.The blades are separated by about 40 mm. The blades
are fully enclosed making the switch safer than the traditional, fully
exposed knife switch, the the switch also has a center dent position.

I just picked up one in Akihabara for 1080 Yen + 5%
sales tax, which at 120 yen to the US$ is about $9.45 I have seens adds
in QST for knife switches for much more. Apparently, in Japan, knife
switches are stilled used in household and also industrial circuit breaker boxes.
The DPDT switch is rare but it is available at most large electrical
parts stores.I plan to use my in my balanced antenna tuner to switch
the location of a capacitor in the "L " match circuit.
Perhaps you could get a friend who is visiting Japan to pick up a few, or
try convincing a large importer to bring them into the USA.
'73
Peter
PS the 15 A unit is a bout 150 cheaper.

# 1721. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33EE480E.5E6F@crpl.cedar-rapids.lib.ia.us>
Source record: 91892

William E. Sabin wrote:
>
> Carl R. Stevenson wrote:
>
> > there are tens
> > of thousands of
> > other hams who are similarly stuck in a technological time warp

A lot of bright young folks get their engineering and science careers started via amateur radio. Very many of them later on move into specialties that are not closely related to amateur radio. Many of these folks maintain an interest in amateur radio, but don't have the time or specialized knowledge, and quite often also no desire, to be at the state of the art, amateur-radio-wise. They are content to buy their gear and operate it when they have time and to be knowledgeable only enough to do what they want to do. That is OK, I believe.

The internet has become a hangout for others who have strong technical interests. I think that is great. The usenets have become a kind of "virtual hamband" for techno-hams. It is almost impossible to get these kinds of forums on the real bands. We even seem to have a "virtual 14.313".

But in our enthusiasm for the more technical aspects, we should maintain a tolerance (appreciation) for the less technical types. I have a special feel for the many retirees who like to get together in the afternoon, for example on 20/40/80 meter CW/SSB, etc.

Bill W0IYH

# 1722. FS: NIB EIMAC 4CX250B Tube/Socket/Chimney

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: w1ksz@juno.com
Message-ID: <5sli94$f1@news-central.tiac.net>
Source record: 91893

I have 6 of each:
EIMAC NIB 7203/4CX250B
SK600A Air System Socket
SK606 Ceramic Chimney

All are Unused in Original EIMAC Boxes
Will sell in sets (Tube/Socket/Chimney) for $75 each

or trade;

Looking for TEK 465/475 Scope
Quality Sig Gen (up to 500 MHz)

73, Dick, W1KSZ

# 1723. Re: Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <33EDBADA.2C8A@rica.net>
Source record: 91894
Cross-posted to: alt.comp.hardware.homebuilt,alt.satellite.tv.crypt,comp.home.automation,rec.radio.amateur.homebrew,sci.engr.control,sci.engr.electrical.sys-protection,sci.engr.semiconductors

Stanley Koontz wrote:
>
> I need to build a tone decoder system. The system is based of a 2+2 System.
>
> The range is 600 to 1500 Hz I was thinking of using 2 NE567's.
> If anyone has a better idea please let me know. Web page reference
> welcome.
>
> My design seems like the best but it never hurts to get input..

There is a much more noise immune approach that is more analog. Build a pair of narrow band filters that detect each of the carrier frequencies, and detectors that convert magnitude to DC level. Also, build a double notch filter that passes all but the two carrier frequencies, and convert this to dc level. Then compare the level representing each carier to the background level. The bit rate is limited by the roll off of the low ppass filter that produces the DC level from the rectified signal. Higher roll off, allows higher baud rate, but is less noise immune. Straight trade off. All the filtering (bp notch and lp) can be performed by switched capacitor digital filters, rather than op-amp versions, if desired.

The digital approach you are using looks much simpler, until you do all the analog things necessary to let it work in a real world noisy environment.

John Popelish

# 1724. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: marty-k@snet.net
Message-ID: <33EE706D.65A1@snet.net>
Source record: 91895

Simon Lewis wrote:
>
> In article <europa-ya023580000908972125040001@news.primenet.com>,
> europa@primenet.com writes
> >I have heard of people using spent photographic developing solution for
> >silver plating. This method also results in a very thin layer since once
> >the copper surface is gone, there is no more electrochemical reaction.
> >You'd think that it would only get one molecular layer thick, but who
> >knows.
> >
>
> Yes I have heard of this too, I think you would find it would be thicker
> than 1 molecule though! You'd be very hard pushed to even see it! I
> think electroplating is much thicker because of the electro deposition
> process thats used, you can control the thickness much easier. The
> liquid or pastes are much harder to plate any thickness.
>
> >You could also go to a chemical supply store and buy silver nitrate. It
> >will also give a thin layer. You'd have to supply an external source of
> >energy to plate it any thicker. (this stuff is caustic to skin, they use
> >it for cauterizing severe nosebleeds- sticks of it look like sparklers)
> >
> >Rob
>
> Ugg! sounds fun!
>
> I will be interested to see if anyone comes up with a good, safe, method
> of diy plating
>
> 73 Simon
> +-------------------------------------------------------------------+
> | Simon Lewis GM4PLM Editor - EMN |
> | European Microwave News - Supporting Microwave Radio Across Europe |
> | Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
> +-------------------------------------------------------------------+

There is a method of silver plating that I've used for many years,
and which I haven't seen described recently. It involves rubbing on
a silver salt-containing mixture. I've used it to plate coils and
ribbon conductors for homebrewed tuners and amplifiers, and it has done
a surprisingly good job. My current amplifier, using a pair of 4-400's,
is sitting here looking as shiny as when it was built almost 20 years
ago.

The mixture is a dry powder comprising 1 part by weight of silver chloride or silver acetate, 3 parts sodium chloride (common table salt) and 2 parts of cream of tartar (potassium acid tartrate) which can be found in the baking ingredients department of your supermarket. They should be mixed well and kept dry. It is a stable mixture; I've had some around for over 10 years and it still works as well as it did when first mixed. So far as I know this mixture presents no serious hazard, and it does not stain the skin as silver nitrate does. Regardless, I still use vinyl gloves when using it, and it's always wise to take precautions against inadvertent ingestion or inhalation.

Although I have plated coils that were already wound, it's much easier to
plate the wire first. My amplifier coils were made from #10AWG solid building wire, first straightened and then cleaned with very fine steel wool. A generous pinch of the powder is applied to a piece of *wet* paper
toweling or cloth and rubbed onto the wire until there is no hint of the copper showing through.

I've never seen any sign of the silver loosening, and it seems to be holding up on an ARC-5 rotary inductor that I replated and have been using in an antenna tuner for several years. Of course, that's a rotating contact; I wouldn't recommend it for sliding contacts.

73, Marty K1FHR

# 1725. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <5sm14k$dbk@chong.cs.ubc.ca>
Source record: 91896

If you are just using the silver plating to prevent corrosion, not for better conductivity, perhaps tin plating would work as well. You can buy commercial tin plating solution for use on copper-clad PC boards after etching but before any solder mask is applied. It exchanges copper for tin atoms on any exposed copper surface, but probably doesn't build up any significant depth of tin. The resulting tin layer is probably more corrosion-resistant than silver.

On the other hand, if you *do* want better conductivity, you want a significant thickness of silver. Just exposing the copper to silver salts in solution won't do this - you need electricity to deposit more silver once all the exposed surface is silver.

Dave

# 1726. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001008972009350001@news.primenet.com>
Source record: 91897

In article <33E544A1.2957@flash.net>, hynde@flash.net wrote:

:Newbie builder wants to know:
:
:In regards to the W1FB Universal DC reciever, of course there are
:several coil, cap combos for the tuned input, each to tune a different
:band. Typically using 100pf or so to tweak it in.
:
:My question is, why not use one coil in the middle of the road and then
:a ganged 365pf cap to tune? I seemed to have success with this on 40/80
:and even 160 when I lumped in another fixed cap. For someone wanting a
:multiband Rx this seemed to make the most sense.
:
:Am I missing something? Do I loose somthing by doing this?
:
:
:Tim, ka8ddz

Caught up in reading all the nonsense (including my own post :) I forgot to actually answer the technical question.

If you can find a two or three ganged variable cap with equal sections, you can make that into a great front end filter. If you put an inductor (e.g. 20T on FT50-6 toroid) in series with each cap section, then put all 2 or 3 tuned circuits in series, and then add a coupling inductor(e.g. 4T on FT50-6) from the node between each series tuned circuit to ground, you will have a nice Cohn filter.

Without doing any calculations, you can hook it up and find what bands it will resonate on. Then if you want higher freqs you can make all of the inductors smaller, or if you want lower freqs you can make them bigger. Or if you want wider BW, you can make the coupling inductor(s) bigger.

Finally, after doing this intuitive type of construction exercise, you might even be enthused enough to do some reading on filters. The nice thing about the Cohn filter is that the caps and each series of inductors are equal.

Since the inductance remains constant as it is tuned, the BW will increase in proportion to the resonant freq. But that works out well since you really need the narrow BW more on the lower bands anyway.

You could even replace each tuning cap section with a bunch of paralleled varactors. I have a module in a receiver that uses 3 relay switched varactor Cohn filters. Covers 1.8-30mhz and does not compromise 110db dynamic range. But it uses as many as 20 or more surface mount varactors

to make up one tuning cap. Still, a preselector like this could be made very small, one thing thats hard to do with a big variable cap.

Have fun! Rob.

# 1727. Re: Need CRYSTAL SET plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33EE8695.5FB1@ix.netcom.com>
Source record: 91898

N9KC wrote:
>
> Hi All,
>
> Need plans to build a simple CRYSTAL SET from readily available parts.
> Have a teenager in the neighborhood who needs help.
>
> We live close to an AM tower (KOA in Denver), so this should be a piece of
> cake.
>
> Reply to N9KC@aol.com
>
> Thanks!!!
>
> Lou
-----
Hi Lou -- try URL:
http://www.midnightscience.com/
For The Xtal Set Society
--
73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 1728. Re: Wanted - Laser Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: John Rabson <word.factory@zetnet.co.uk>
Message-ID: <19970810072152682l3@zetnet.co.uk>
Source record: 91899

Do be careful with your eyes when using a laser (as with microwave).
The unit of issue is two = with no spares.

G3PAI

## 1729. yagis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Brian Willis <bgwillis@one.net>
Message-ID: <33EE27AC.7666@one.net>
Source record: 91900
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have been searching for the measurements for a 4 to 6 element yagi for 2m or 70cm. I haven't come up with anything. If someone out there could point me in the direction of measurements, the equations, or a piece of software it would be a big help.

thanks!

Brian Willis
KC8EGY

bgwillis@one.net
kc8egy@qsl.net

## 1730. PIN Diode Source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: n4ij@aol.com
Message-ID: <19970810010200.VAA23537@ladder01.news.aol.com>
Source record: 91958

Anyone got experience with pin diodes for high power ( 100 w plus) ??
What are mfgrs/ part numbers?

Doug N4IJ

# 1731. Pixie 2 Transceiver - Where can I get one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: vcs@ix.netcom.com
Message-ID: <33ed1b3e.32473312@nntp.ix.netcom.com>
Source record: 91959
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hello,
Does anyone know where I can get this neat little kit? It's a
CW transceiver that fits into a Tic-Tac box, sorta comparable to the
NorCal 49'er. It's supposedly distributed by HSC Electronics (at
http://www.halted.com ), but they haven't yet responded to my email.
Does anyone have an unbuilt (or even built for that matter, as long as
it works) kit that they owuldn't mind parting with? Please email me
at: vcs@ix.netcom.com

Thanks,
Vince Scoglietti
[--------------------------------------------------]
[ vcs@ix.netcom.com ]
[ UIN (ICQ) # 1727227 ]
[--------------------------------------------------]

# 1732. Re: Long Live Cut and Try (was Re: Front end of DC RX)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-10 00:00:00 UTC
From: Mark Little <markl@dove.net.au>
Message-ID: <33ED391F.DF54B9FF@dove.net.au>
Source record: 91960

Peter Parker wrote:
>
> Some of us enjoy being amateurs and like cutting and trying. If I wanted
> to learn from books and doing computer simulation models, I'd be an
> engineer and not a ham. Some of us have no interest in theory and/or
> can't be bothered to spend time learning it (once we have our tickets).
>
> I'll leave it to the propeller-heads with all their clever computer
> models to argue some arcane point amongst themselves, while I'll just
> reach over and plug the soldering iron in, build a rig and actually use
> it on air, and not just operate it into a high-tech CRO or power meter,
> say "it works" and move over to the next academic exercise on the
> computer.
>
> _____________________________________________________
> Peter Parker
> Home Page: http://www.pcug.org.au/~parkerp/
> The home of Novice Notes Online and the VK QRP Web Page.
> _____________________________________________________

Amateur Radio is big enough to accomodate every interest. How sad that amateurs seem to feel that only people who share their interests are the "true amateurs". It reminds me of religion where each sect thinks it is the only true holder of the faith and that everyone else is wrong and on a path to hell - The truth is that they are all probably wrong (at least to some degree) ;-)

Mark.

# 1733. ///// FREE CASH GRANTS \\\\\\\

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Unbeliev@ble.com
Message-ID: <8b7cd$83612.399@NEWS>
Source record: 91811

CASH GRANTS CASH GRANTS CASH GRANTS

Foundations all over the United States GIVE CASH GRANTS.

ANYONE can apply for a Grant from 18 years and up...

This money HAS to be given away, WHY not to YOU?

Grants from $500.00 to $50,000.00 possible, in some instances.

Grants don't have to be paid back.

Grants can be ideal for people who are or were bankrupt
or just have bad credit.

Get the money you need to start that business, you have always wanted.

To get your list of FOUNDATIONS that give grants, AND instructions
on how to apply.

Send a check or money order for ONLY $6.00 to:
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
B.C.S.
39 GURLEY ROAD #200
EDISON, NJ 08817
Att: GRANT INFO
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Include your E-MAIL ADDRESS

# 1734. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Dave Potter <dpotter@bbn.com>
Message-ID: <33EF05B0.683B@bbn.com>
Source record: 91812

wrightj@planetc.com wrote:
>
> How does a homebrewer plate thru holes in making oc boards?
> I have a X-Y table used to draw the art work on both sides of
> the pc board and drill them. Then how do you go about plating
> thru the holes?

I don't know how I would do it at home. In a board shop, they do what is called electroless plating, basically dipping the board in a solution or suspension of fine copper particles before it is etched but after it is drilled. The copper particles adhere lightly to the surfaces of the board, including the shafts of the holes. Takes some specific chemistry in the solution to make that work, but it does work. The boards are then plated with copper, more copper, that is, and the holes end up with half an ounce or so of copper plated into them. The next step is to clean off the resist that had been screened or photoplotted on the board. Under the resist, the copper is thinner. Etching will remove all the previously resist-covered copper but only half the bare copper areas that had been thickened by the plating. The board is done.

good luck.

73

Dave
K1MBO

# 1735. Re: Info on Tone Decoders ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: frussle@erols.com
Message-ID: <33f93a8e.16205864@news.erols.com>
Source record: 91813

On Wed, 30 Jul 1997 01:00:02 -0400, "Stanley Koontz"
<stush@toolcity.net> wrote:

>I need to build a tone decoder system. The system is based of a 2+2 System.
>
>The range is 600 to 1500 Hz I was thinking of using 2 NE567's.
>If anyone has a better idea please let me know. Web page reference
>welcome.
>
>My design seems like the best but it never hurts to get input..

Given any two arbitrary tones, and the need to retune, yeah, this is
the easy way to go. If you're trying for DTMF (Touch Tone), though,
don't overlook the SSI-202.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

# 1736. Re: Microstrip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: rburden@student.ecel.uwa.edu.au.NoSpamThanks
Message-ID: <33ed2d32.4441962@news.uwa.edu.au>
Source record: 91814

Rae family <rae4@popd.ix.netcom.com> wrote:

>You will find software for microstrip design (DOS based but useful and
>free) on the Rogers web site (www.rogers-corp.com)
>This is mainly for their teflon materials, but works also for glass
>fiber with the appropriate dielectric constant..
>Happy etching!
>73
>Dan AC6AO/G3NCR
Hi Dan,

can you please be a bit more specific on where exactly the link to download
this software is? After a quick hunt I couldn't find it.

Many thanks,
Richard
---
Richard VK6FKB
"Nothing better than home-brew, except perhaps an absence of Spam"

# 1737. 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33eee2f0.2703518@news.erols.com>
Source record: 91815

I just put the finishing touches on my (supposedly!) 12 VDC QRP station power supply. Circuit is VERY simple: 18 volt (2 Amp) tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12 VDC voltage regulator.

Problem is that the output voltage is only about 11.1 volts.

Has anyone seen this problem before? What do you think, bad component?

I also notice that the regulator gets quite hot. I put a fairly large heat sink on it and I don't seem to get to the thermal shut down point (even when pulling around 1 amp through it.)

Any suggestions?

Thanks, 73 Bill N2CQR

# 1738. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <nilJUKADi47zEwqA@pacsat.demon.co.uk>
Source record: 91816

In article <33eee2f0.2703518@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>I just put the finishing touches on my (supposedly!) 12 VDC QRP
>station power supply. Circuit is VERY simple: 18 volt (2 Amp)
>tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
>VDC voltage regulator.
>

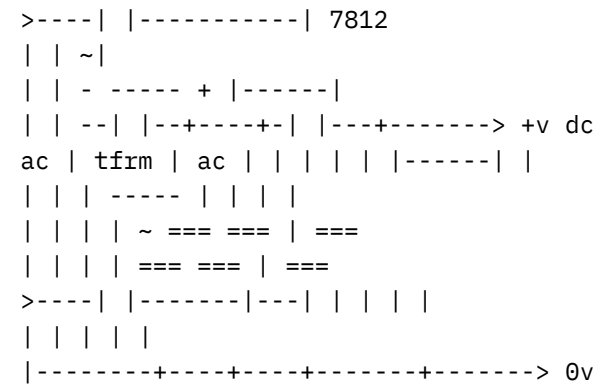
Wheres the rectifier?

>Problem is that the output voltage is only about 11.1 volts.
>
>Has anyone seen this problem before? What do you think, bad
>component?
>
>I also notice that the regulator gets quite hot. I put a fairly large
>heat sink on it and I don't seem to get to the thermal shut down point
>(even when pulling around 1 amp through it.)
>
>Any suggestions?
>
>Thanks, 73 Bill N2CQR

Probably because of the high ripple content coming from the capacitor.

Did you use a rectifier after the transformer? A simple C across the
output of the transformer really won't do the job

Rectify it and then smooth it and I think you're away! The regulator
shouldnt get that hot, also remember a 1uf tantulum across the input to
ground and across the output to ground, this will stop any oscillations
in the regulator.



(yours) (add in)(yours)(add)(yours)(add)

Hope that helps, and might explain why your reg is hot!

73 Simon

+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

# 1739. Looking for IC-W32A mods!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: AA8RC <aa8>
Message-ID: <01bca69d$c014dbc0$5eca2581@x>
Source record: 91817

Any tx and rx mods for the Icom IC-W32A dual band handheld radio? Please email me with any info you may have. Remove <spamless> from my address before mailing.

Thank you,
Will

# 1740. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5so5ng$lvs@hpcvsnz.cv.hp.com>
Source record: 91818

William E. Sabin (sabinw@crpl.cedar-rapids.lib.ia.us) wrote:
: Wes Stewart wrote:
: >

: > Don't you mean to say "overtone crystal (oscillators) *usually*
: > operate....."

: Hello Wes.

: I have read that they always operate in the series mode.

Hmmm....interesting. I have a commercial overtone oscillator circuit
for which I order crystals from International for parallel (overtone)
resonance, with a very low value of load capacitance, and things
come out on-frequency. International doesn't seem to have any
trouble understanding "parallel-mode overtone" and associated
load capacitance...and the calibration suggests that it really is
that mode.

: I have a quote from the book "Crystal Oscillator Design" by Frerking:

: "Overtone crystals are nearly always operated at series resonance".
: There are also circuit examples to verify.

Glad I didn't read that before ordering crystals, or I'd have been
rather confused about the calibration, I think! Given the 10pF or
so load capacitance, there's quite a difference between the parallel
and series resonance frequencies.

(I don't mean to be argumentative about it, it's just that I have
an overtone ckt that really does seem to operate the rock in parallel
resonance. There's really nothing special about the circuit; it
even has a trimmer for netting the crystal.)

--
Cheers,
Tom
tomb@lsid.hp.com

## 1741. 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <jj7nlFBAIz7zEwbi@two-way.demon.co.uk>
Source record: 91819

I'm not having much luck here in the UK tracking down a source of 50V alternators/generators so if someone works in this field (no pun intended) or you can suggest a company with some contact information I'd greatly appreciate it.
I'm after BIG current.

(((73)))

Phil G4ZOW/M
And no, I don't believe Leece Neville or Lestek can help me.

# 1742. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: lstras@arrow.utias.utoronto.ca
Message-ID: <4cyb68wvrv.fsf@arrow.utias.utoronto.ca>
Source record: 91820

In article <01bca3e8$03693d20$446211cb@default> "Kelvin Charlson" <kelvin@netspace.net.au> writes:

Because an approx 50 MHz crystal is expensive ie $20, is it possible to say use a 17.73 MHz crystal and use its third overtone ie around 53 MHz. As this crystal is only a few dollars.

I have a siimple schematic for a crystal osillator, but do you have to do anything special to the circuit to make sure you get the third overtone. Or

Check out Phillips app. note #1983 (http://www.semiconductors.philips.com/acrobat/8025.pdf) for a pretty good overview and introduction (IMHO) to crystal oscilators. Hardly a theoretical reference, but good enough for practical use.

--
Luke Stras lstras@utias.utoronto.ca
Webmaster University of Toronto Institute for Aerospace Studies
"...the sound of a paradigm shifting without a clutch." --Dogbert

# 1743. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Paul Helbert <phelbert@rica.net>
Message-ID: <33EF62AE.B20880AF@rica.net>
Source record: 91821

Seems to me you are trying to use the equivalent of a 28 watt soldering iron. Not enough heat is your problem. By the way, a properly hot iron will do the job in much less than a minute.

niel brieger wrote:

> I'm wondering what the best way to attach a PL259 to a coax cable is.
> I was told a soldering gun, but I'm having the darndest time getting
> this weller 140 watt soldering gun to heat the PL259 up enough to melt
>
> solder inside. It has a duty cycle of 20%, use it for 1 minute, let
> it
> cool for 4. If you try to go a bit past the 1 minute, the gun
> actually
> seems to start to cool on its own, because the tip gets "stuck" in the
>
> solder joint. On field day, we used a 100 watt weller soldering iron
> to attach some PL259's to cables with no problem whatsoever. So I'm
> wondering if I should be looking to purchase one of those.
>
> Any tips or hints or what works best for you would be appreciated!
>
> 73,
> Niel Brieger, KC5ZJR

# 1744. Re: Need CRYSTAL SET plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Jonathan Adair <adair@csee.usf.edu>
Message-ID: <01bca688$61ee46e0$51a6f783@pokey.usf.edu>
Source record: 91822

N9KC <n9kc@aol.com> wrote in article
<19970809033901.XAA20061@ladder01.news.aol.com>...
> Hi All,
>
> Need plans to build a simple CRYSTAL SET from readily available parts.
> Have a teenager in the neighborhood who needs help.

Radio Shack sells Cat. No. 28-177 ($6.99), which is an AM broadcast
crystal receiver. It includes a ferrite rod coil, some antenna wire,
a diode, a variable capacitor, and a high impedence earphone.

It's not a great buy, but I've seen worse. Some individual stores
might not have them in stock, but in any area you can probably find
several kits by calling around.

--
Jonathan Adair, KF4LFG
kf4lfg@bigfoot.com
http://www.geocities.com/CapitolHill/7330/

# 1745. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33ef7f9d.0@newshost.pcug.org.au>
Source record: 91823

psyodell@mail.provide.net (Jerry W. O'Dell) wrote:

>Yet I hear ham after ham singing the glories of the j-pole. Have I
>missed something? Does the j-pole really have 11 db gain, as some
>have said quite definitely on the repeater?
>

Probably 11dB above a rubber duckie or a wet piece of string, but anyone
who claims more than about 3dB over a dipole either isn't telling the
truth or doesn't know how to build a working dipole.

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____________________________________________________

# 1746. Re: Smart Charger Schematic/Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: nospam@worldnet.att.net
Message-ID: <33ef962b.2964391@netnews.worldnet.att.net>
Source record: 91824

You didn't say what type of batteries you were gonna use it with but
no matter you are in luck. The December issue of "Nuts & Volts" has a
charger for lead - acid in the "Solar Workshop" section while a nicad
charger is described in the "Projects" section. Try the website at
http://www.nutsvolts.com/ for a back issue.
Buzz

On 10 Aug 1997 08:40:01 -0700, Stephanie Steele
<kc7dba*NOSPAM*@primenet.com> wrote:

>Does anyone have plans for a "Smart Charger" circuit. I would like to
>build one but have been unable to find plans anywhere. Thanks in advance
>for any assistance.

Attempting to thwart SPAM. Substitute buzzer for nospam in email address

# 1747. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Dave Lee <dave.lee@zetnet.co.uk>
Message-ID: <19970811203512707 65@zetnet.co.uk>
Source record: 91825

In message <33eee2f0.2703518@news.erols.com>
wmeara@erols.com (Bill Meara ) writes:

> I just put the finishing touches on my (supposedly!) 12 VDC QRP
> station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
> VDC voltage regulator.

> Problem is that the output voltage is only about 11.1 volts.

> Has anyone seen this problem before? What do you think, bad
> component?

> I also notice that the regulator gets quite hot. I put a fairly large
> heat sink on it and I don't seem to get to the thermal shut down point
> (even when pulling around 1 amp through it.)

> Any suggestions?

> Thanks, 73 Bill N2CQR

I can't help with the output voltage, but the heat seems about right.
You don't make the DC input to the regulator clear but at 1 Amp it
will have to loose 1 Watt for every volt difference between input and
output.
With 18VAC into a bridge rectifier you could throw away the heat sink
and use it for soldering. :)
Dave

# 1748. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Tom Harrison <tomh@tyecin.com>
Message-ID: <33EF6C34.3D1E@tyecin.com>
Source record: 91826

Edward Slimak wrote:
>
> A regular J pole is a 1/2 wavelength element with a 1/4 wave matching
> stub feed in its simplest form Sparks

That's strange; all the J-poles I've seen have a 3/4 wavelength element with a 1/4 stub. For instance, for 2 meters, its 57.5 in and 19.25 inches.

Tom Harrison

# 1749. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: w6uv@wco.com
Message-ID: <33ef9ff1.363363899@news.wco.com>
Source record: 91827
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sat, 09 Aug 1997 16:45:07 GMT, orion@xyzcapital.net wrote:

>On Wed, 06 Aug 1997 21:31:13 -0700, "Ed Mathes, RPA-C"
><"emathes"@servtech.com,no.span> wrote:
>
>>Actually Jason, the "feedline" is probably functioning as a component of
>>the antenna....in the form of a "long wire"....adding to the reception
>>ability. SWR, antenna impedance, etc are important when transmitting,
>>not usually when receiving only. You may find better reception by using
>>MFJ's SWL tuner...I forget the model number.
>
>>Edward J. Mathes, RPA-C
>
>I have an MFJ Receiver Antenna Tuner / Preamplifier Model # MFJ 959B
>connected to my Kenwood R-1000 SW receiver. I would strongly recommend
>this tunner. It does an excellent job for me. The tuner helps a lot on
>bands that the antenna is not resonant on. Brings the signals up 3 or
>4 S units on the meter sometimes. The preamp is adjustable from the
>front panel, so very weak signals can be amplified. It also has an
>attenuator which is handy when strong signals overwhelm the receiver.
>On the rear panel, it has connectors for two receivers and two
>antennas, and a jack for 12 volts DC to power the unit. Cost from MFJ
>is $99.00. It's well worth the money.

Save your money and put it to better use. An "antenna tuner" is practically worthless for shortwave listening. Sure, it seems to bring signals up 3-4 S units, but it's also bringing the noise up 3-4 S units as well, and signal-to-noise ratio is really what determines what you can and cannot hear.

Modern receivers have plenty of gain. As long as the antenna brings in enough signal so that it's above the receiver's noise floor, antenna tuners and preamps can do more harm than good. I wonder about the quality of the preamp in the MFJ. Probably far inferior to the front end of your Kenwood.

I suggest that you see this for yourself by doing A-B tests with the tuner in and out of the line. At the most, the tuner is acting as a rather poor preselector, which is too bad since most receivers these days lack selectivity more than they lack sensitivity.

--
Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of
(w6uv at wco dot com) | a kamikaze pilot on his 37th mission.

# 1750. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33EFBCFB.3345@erols.com>
Source record: 91828

Bill Meara wrote:
>
> I just put the finishing touches on my (supposedly!) 12 VDC QRP
> station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
> VDC voltage regulator.
>
> Problem is that the output voltage is only about 11.1 volts.
>
> Has anyone seen this problem before? What do you think, bad
> component?
>
> I also notice that the regulator gets quite hot. I put a fairly large
> heat sink on it and I don't seem to get to the thermal shut down point
> (even when pulling around 1 amp through it.)
>
> Any suggestions?
>
> Thanks, 73 Bill N2CQR

If the voltage is low during low current draw, I'd try another regulator. Actually, the spec on many brands of three-terminal 78XX series regulators is +/-10% so you are within tolorance. You can probably hand-pick one or prop up the common terminal with a silicon diode (raising the output by 0.7 volts).

# 1751. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-1108971729310001@k4dii.ksc.nasa.gov>
Source record: 91829

In article <33eee2f0.2703518@news.erols.com>, wmeara@erols.com (Bill Meara
) wrote:
> I just put the finishing touches on my (supposedly!) 12 VDC QRP
> station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
> VDC voltage regulator.
> Problem is that the output voltage is only about 11.1 volts.
I also notice that the regulator gets quite hot. I put a fairly large
> heat sink on it and I don't seem to get to the thermal shut down point
> (even when pulling around 1 amp through it.)

Bill-

To start, 1.414 times 18 volts RMS equals about 24 volts DC. The
difference between 12 and 24, or 12 volts, is dropped across the
regulator. Power dissipated would be output current times 12, or 12 watts
for 1 Amp load current. This may exceed the regulator's ratings, and
would explain an unusually high temperature. However, if there is any
noticeable rise in temperature when there is NO load current, then you
have a defective regulator.

Getting 11.1 volts output is poor, but may just be the result of being on
the low side of tolerance. If everything else checks out OK, you might
try connecting a rectifier diode between the common terminal of the
regulator, and ground. Result would be 11.1 plus 0.7, or 11.8 Volts
output. Two in series would raise it to 12.5 Volts. If this doesn't
appear to work, then try connecting an additional 1K resistor between the
output terminal and the regulator's common terminal, to ensure that the
diodes are forward biased.

73, Fred, K4DII

# 1752. High Performance Receiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: cwonders4@aol.com
Message-ID: <19970811214801.RAA11619@ladder01.news.aol.com>
Source record: 91830

Has anybody built the High Performance Receiver published
in the ARRL Handbook 1994 to 1997?
I have built it and would like to compare notes.
Any takers?

Sameer
KF6HST

# 1753. Hammond Chassis and Transformers, Parts for Tube Constructors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5so1nl$b29@news.teleplex.net>
Source record: 91831

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# 1754. Re: Long Live Cut and Try (was Re: Front end of DC RX)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: oolong@netcom.ca
Message-ID: <33EFEE6B.A68@netcom.ca>
Source record: 91832

Mark Little wrote:
>
> Peter Parker wrote:
> >
> > Some of us enjoy being amateurs and like cutting and trying. If I wanted
> > to learn from books and doing computer simulation models, I'd be an
> > engineer and not a ham. Some of us have no interest in theory and/or
> > can't be bothered to spend time learning it (once we have our tickets).
> >
> > I'll leave it to the propeller-heads with all their clever computer
> > models to argue some arcane point amongst themselves, while I'll just
> > reach over and plug the soldering iron in, build a rig and actually use
> > it on air, and not just operate it into a high-tech CRO or power meter,
> > say "it works" and move over to the next academic exercise on the
> > computer.
> >
> > _____________________________________________________
> > Peter Parker
> > Home Page: http://www.pcug.org.au/~parkerp/
> > The home of Novice Notes Online and the VK QRP Web Page.
> > _____________________________________________________
>
> Amateur Radio is big enough to accomodate every interest. How sad that
> amateurs seem to feel that only people who share their interests are the
> "true amateurs". It reminds me of religion where each sect thinks it is
> the only true holder of the faith and that everyone else is wrong and on
> a path to hell - The truth is that they are all probably wrong (at least
> to some degree) ;-)
>
> Mark.
Hi,
My two bits worth. As long as one does little more than yaking on 2
meter repeaters day in and day out(2m DXing is different story).
Tony

# 1755. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: oolong@netcom.ca
Message-ID: <33EFF0DE.62E6@netcom.ca>
Source record: 91833

Bob Lewis wrote:
>
> Bill Meara wrote:
> >
> > I just put the finishing touches on my (supposedly!) 12 VDC QRP
> > station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> > tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
> > VDC voltage regulator.
> >
> > Problem is that the output voltage is only about 11.1 volts.
> >
> > Has anyone seen this problem before? What do you think, bad
> > component?
> >
> > I also notice that the regulator gets quite hot. I put a fairly large
> > heat sink on it and I don't seem to get to the thermal shut down point
> > (even when pulling around 1 amp through it.)
> >
> > Any suggestions?
> >
> > Thanks, 73 Bill N2CQR
>
> If the voltage is low during low current draw, I'd try another
> regulator. Actually, the spec on many brands of three-terminal 78XX
> series regulators is +/-10% so you are within tolorance. You can
> probably hand-pick one or prop up the common terminal with a silicon
> diode (raising the output by 0.7 volts).

Wonder if he bought the regulator from R.S.?
Tony

# 1756. Looking for single frequency transmitter plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Johan Denoyer <qbdata@webexpert.net>
Message-ID: <33EF6B6C.40A4@webexpert.net>
Source record: 91834

Hi, everyone i'm looking for transmitter plans for a single channel. It would be for packet use. I would be using it for APRS. If you have any idea where i can find such thing please tell me.

Thank you

73 de Johan
KB2YEQ

# 1757. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5snmhr$ock@hpscit.sc.hp.com>
Source record: 91835

In article <33ECCC56.6732@kfa-juelich.de>,
Bob Mueller <r.mueller@kfa-juelich.de> wrote:

> On account of little "end effects" the overtones will not be at
>exactly the harmonics of the fundamental, whether in a quartz
>oscillator, a plucked string or a blown flute unless measures are taken
>to fix the "errors".
>
>Bob

This is not a correct analogy. A piezoelectric resonator is
fundamentally different than a purely mechanical resonator like
a musical instrument. The reason why the overtone is not an
exact multiple of the fundamental is as follows: When an
electrical stress is applied to the crystal, it generates a
mechanical strain. This mechanical strain in turn generates
its own electric field (since piezoelectricity works both
ways). The electric field interacts with the applied electric
field. This effect is small, because quartz is only weakly
piezoelectric. The effect shifts the fundamental away from
the unperturbed resonant frequency. Overtones are shifted
less because the inner regions have purely mechanical resonances.
To this extent, you could say "end effects" are involved, but
they are not really "errors" you can take measures to fix.
It has been said that piezoelectricity in general is an
end effect.

If you take quartz resonators and excite them mechanically
only, then you will find that the fundamental and overtones
are exact integer multiples, except for end effects like
mass loading due to the electrodes.

In materials that are more piezoelectrically active, like Lithium
Niobate, this effect is much more pronounced, an the overtones
are nowhere near exact integer multiples of the fundamental.

For further information on this topic, see Harry Tiersten's
classic papers on the subject written around 1960.

Rick Karlquist, N6RK

# 1758. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <33EFF3DD.28B9@calweb.com>
Source record: 91836

Bill Meara wrote:
> 
> Thanks to all who sent advice on my regulator problems. First, let me
> confirm that I did indeed have a rectifier in the circuit! Full wave
> bridge rated at 4 amps, 50 volts.
> Transformer has an 18 volt secondary. (There is a center tap but I'm
> not using it.) The circuit I'm using is essentially the one on page
> 239 of QRP Classics (minus some of the caps and the RFC).
> 
> Following some of the suggestions posted here, I went ahead and put
> bypass capacitors on the regulator's input and output (hoping to
> suppress any oscillations that might be present). No luck. Still got
> 11 volts out. (I've measured the same voltage with two different
> meters - one a VOM and the other a VTVM.)
> 
> I'm thinking that I simply bought an 11 volt regulator in 12 volt
> clothing! Tomorrow I'll try a new part (and will report back on
> results).
> 
> Thanks again. 73 Bill N2CQR

Bill,

Try converting to an LM317 device, caclulate the needed resistor values
or use a chaeap pot and you can have exactly 12 volts or 13.8 or what
ever you like for a few cents worth of resistors. Been using the LM317
unit for years with cheap 1 percent metal films to get within less than
1 percent most of the time and not the 10 percent junk that comes with a
lot of the 7805 floor sweepings that show up from both the big time
suppliers and the convenient local shops... Watch the watts though as
the other postings warned.. Heat Sink BIG and you will probably be ok
even withe big drop...play with filter cap values a bit to let the
primary DC source sag a bit to drop the regulator diss a bit..not the
best engineering, but ok if you can make it all work.. the regulator
will eat the ripple....

Good luck

Bob, KE6F

## 1759. Custom QSLs Desgined On-Line

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: sebring@zebra.net
Message-ID: <33EF65A6.4D61@zebra.net>
Source record: 91837

Your idea. See it before it goes to printing. View several at
http://www.zebra.net/~sebring/qsls.htm

## 1760. Taking bids on rare Hallicrafters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970811010501.VAA07986@ladder01.news.aol.com>
Source record: 91901

Clear Case 1952 Hallicrafters Radio:

This rare and unusual radio is pictured on the cover and on page 170 of Chuck Dachis&#65533; book &#65533;Radios by Hallicrafters&#65533;. The clear case was used to show customers the new printed circuit board being used in the ATCL series of radios. Chuck Dachis assigned the model number CPCR-1 since it was not a production model. This particular radio came from a dealer in Portland, Oregon and the original pamphlet is still with the set. It is in extremely fine physical and working condition. Send your purchase bid to: Rog42@aol.com.

# 1761. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33ee4724.14173159@netnews.worldnet.att.net>
Source record: 91902

On 10 Aug 1997 15:40:45 GMT, Grant Youngman <nq5t@gte.net> wrote:

>Typical hamfest prices for Dow-Key relays run in the $25-50 range.
>Nobody in their right mind would pay the current catalog prices for new
>ones. Good new/used relays are quite plentiful, and not really an item
>to plan your retirement around :-)

Hi Grant,

I have Dow Key relays from the 60's that I have never used, since most of my operating is at HF and a small open frame relay works just fine. I've taken them to hamfests, and never been able to sell them for 20 bucks.

I think the prices you mentioned are fair for "like new" relays, but I would think the demand is pretty small now that Viking 500's and HRO-500's are not used much.

73 Tom

# 1762. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <5slsln$bcd$1@gte1.gte.net>
Source record: 91903

> I think the prices you mentioned are fair for "like new" relays, but I
> would think the demand is pretty small now that Viking 500's and
> HRO-500's are not used much.
Hi, Tom

Actually, with the resurgence in interest in operating these fine old radios, the demand has actually been quite strong among vintage gear ops -- like myself :-)

Most of the "big rigs" like the Viking 500 and Globe King have antenna transfer relays built in. But rigs like Viking II's, Rangers and others need the external relays. Of course its always possible to build something up using a standard 10-20A modern relay, but such contrivances lack the right sound(?), smell(?), something undefinable(?), and the Dow-Keys were de rigeur in the timeframe :-)

Grant

nq5t@gte.net
http://home1.gte.net/nq5t

# 1763. Dan's Small Parts and Kits List SUPER SPECIALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5slrjh$b83$3@zinger.callamer.com>
Source record: 91904

Dan's Small Parts and Kits has done it again.

Yes he has posted a bunch of goodies at very low prices and he is
allowing
you to take an additional 25% off the listed prices until August 31st.

He also has FOUR SUPER HOT SPECIALS!

Check it out at:

http://www.fix.net/dans.html

Enjoy,,,jerry.

# 1764. Re: Need CRYSTAL SET plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: rkotto@world-net.net
Message-ID: <33ee7e69.3066379@news.world-net.net>
Source record: 91905

On 9 Aug 1997 03:39:09 GMT, n9kc@aol.com (N9KC) wrote:

>Hi All,
>
>Need plans to build a simple CRYSTAL SET from readily available parts.
>Have a teenager in the neighborhood who needs help.
>
>We live close to an AM tower (KOA in Denver), so this should be a piece of
>cake.
>
>Reply to N9KC@aol.com
>
>Thanks!!!
>
>Lou

The Boy Scouts have a kit that you can but with all the parts. You
can geet one at your local Scout council and then use the schematic
that comes with it to try and use any parts that you may have.

# 1765. Re: opto isolator/couplers in VFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: s002veb@alpha.wright.edu
Message-ID: <5sm1tv$p1a$1@alpha.wright.edu>
Source record: 91906

Ian Liston-Smith (ianls@patrol.i-way.co.uk) wrote:
: Anyone tried using these devices to isolate VFOs from their loads? I
: saw a circuit in a professional radio/elecronics mag in the 1970 using
: one up to about 1 MHz. Surely this is easy-peasy now...up into the 10s
: or 100s of MHz? These devices don't seem to have listed their maximum
: operating freqs. Any ideas?

When I was at Drake, there was discussion of this. At the time, opto isolators were extremely nonlinear devices; they tended to square off the envelope. This was a long time ago.

I would be more interested in fiber optic cabling between modules, to reduce transient mixing products. I can never shield stuff well enough. What sort of linearity do fiber couplers have? I hear about them only in digital apps.

If there were real linear items, it would be intriguing to have a two-part trasceiver; a chunk at the feedpoint and the first mixer, audio, and control stuff on a CPU card. It would really reduce the RFI problem of the computer.

Although, putting a lot of electronics in a lightning-prone location might present a problem.

Vince Barmann
N8ASQ

# 1766. FS: New Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Kevin Harlan <sales@emodus.com>
Message-ID: <01bca609$04825ca0$528a0118@cx75859-a.msnv1.occa.home.com>
Source record: 91907

NEW TUBES: New Old Stock (NOS)

1AD4, $2.20
1T4/DF91, $1.60
5R4WGB, $4.00
USA 5U4G, $17.50
Russian 5U4G, $6.50
RCA 5V4G, $9.00
RCA 6AG7, $4.00
6AS8, $2.50
Philips 6AZ8, $4.50
6C8G, $3.00
6CB6A, $2.00
6EW6, $2.50
6F6, $5.00
RCA 6H6, $1.25
6J6WB, $1.50
6K8, $3.25
Philips 6L6WGB, $19.00
Russian 6L6GC, $6.50
6X9/ECF200, $3.25
Sylvania 12AT7, $5.00
Westinghouse12AX7, $9.00
GE 12BA6, $2.75
RCA 39/44, $2.50
RCA 84/6Z4, $4.00
Centron 572B/T160L, $94.00
Chinese 572B, $65.00
809, $20.00
Sylvania 1626, $3.00
GE JAN 5751, $5.00
5829WA, $5.00
5844, $2.50
Sylvania 5933 ( 807W ), $11.00
GE 6146, $19.00
Chinese 6146, $13.00
Sylvania JAN 6922, $5.00
Amperex 7062/180CC, $5.00
Eimac 3-500Z, $160.00
Penta 3-500Z, $105.00
Chinese 3-500C, $120.00
Sovtek EL84/6BQ5, $4.25

Shipping in USA, 1 to 6 tubes $4.00, 7 or more tubes free.
**********

ANTIQUE GLOBE SHAPE TUBES, untested by us, used,
pulled from old radios, priced accordingly

(1) Cunningham C35 $2.50
(2) Cunningham C327 $5.00
(2) RCA UY227 $5.00
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
TEST EQUIPMENT, RECONDITIONED, CALIBRATED, 120 DAY WARRANTY,
FREE SHIPPING IN USA.

Hewlett Packard 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz,
$475ea, working but may need minor repairs and/or calibration.
Units reconditioned and calibrated $675 ea

Tektronix 455 , 50 MHz Dual trace oscilloscope, $395
Tektronix 465, 100 MHz dual trace oscilloscope, $550
TEKTRONIX 465M 100MHz Oscilloscopes, reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
Tektronix 475A, 250 MHz dual trace oscilloscope, $750
HP8405A, Vector Voltmeter, $325
Power Design 6050,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $225
Power Design 6050A,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $200

**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

# 1767. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Joseph M Zawodny <J.M.nospam.Zawodny@LaRC.NASA.gov>
Message-ID: <33EF07E4.135B@LaRC.NASA.gov>
Source record: 91908

Kelvin Charlson wrote:
> 
> Hi
> 
> I have just built a 6 meter reciever and want to tune the local oscillator
> in. The easiest and cheapest way I know how to do this is to build a
> crystal oscillator.
> 
> Because an approx 50 MHz crystal is expensive ie $20, is it possible to say
> use a 17.73 MHz crystal and use its third overtone ie around 53 MHz. As
> this crystal is only a few dollars.
> 
> I have a siimple schematic for a crystal osillator, but do you have to do
> anything special to the circuit to make sure you get the third overtone. Or
> do you get it anyway once the crystal is operating and no high pass filters
> are added to the circuit.
> 
> I hope this makes some sense because I am only new at this stuff
> 
> Kelvin
> 
> kelvin@netspace.net.au

Just go to DigiKey ( http://www.digikey.com ) and by a 50.000MHz sine
wave oscillator for 2 or 3 bucks. I doubt whether you could tweak
the third harmonic down 3MHz from 53 to 50 anyway.

KO4LW

--
------ To Reply, Please remove the .nospam from addresses below ------
Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
NASA Langley Research Center KO4LW.nospam@amsat.org
E-mail: J.M.nospam.Zawodny@LaRC.NASA.gov zawodny.nospam@exis.net
(757) 864-2681 (757) 864-2671 FAX http://wwwp.exis.net/~zawodny

# 1768. Re: Simple 170Mhz receiver ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33eed278.0@newshost.pcug.org.au>
Source record: 91909

Alan Gilchrist <agilly@dove.net.au> wrote:
>Hi ... thanks for reading this request.
>
>I am looking for a design for a simple VHF receiver to operate on a
>single freq in the 170 Mhz region.
>
>With the multitute of special "chips" about it must nearly be at the
>stage of building a receiver with a single chip or am I out of touch and
>it is already possible ?
>
>I would be interested to hear from anyone who may have come up with such
>a design.
>

Alan - I don't think you can go past the MC3362. A receiver for 2m FM was described in Silicon Chip (March 1990 - give or take a year). Dick Smith sold a kit for several years - they may still have stocks left - cost is around $60. I built one to use in a homebrew 2m rig and it worked very well. The chip contains all of a dual conversion VHF FM Rx. I found the IC's internal varicap diode oscillator OK, though you may want to have a xtal controlled osc/multiplier chain instead.

73,

Peter VK1PK

--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____________________________________________________

# 1769. Battery Charging Circuit Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-11 00:00:00 UTC
From: Stephanie Steele <kc7dba*NOSPAM*@primenet.com>
Message-ID: <33EF1FA6.44FB@primenet.com>
Source record: 91910

I am looking for a battery charging circuit to use on our clubs ARES repeater backup batteries that will charge at a high rate (15 amps) when AC power is restored and drop the charge rate as the batteries approach full charge and finally shut down when at full charge. We have looked into commercial versions of this but they are outside our budget. Hope this explains better what I need.
--

SPAM Prevention - To reply to this message remove " *NOSPAM* " from the address

Stephanie Steele

e-mail address kc7dba@primenet.com

---
Thinking is the hardest work there is, which is probably why so few engage in it.

-Henry Ford

# 1770. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Mark White <markw@Iconnect>
Message-ID: <5sovuh$9ck$1@connect3.iconnect.net>
Source record: 91761

Rich Griffiths wrote:
>
> niel brieger wrote:
> >
> > I just wanted to give a big Thank You! to all the wonderful replies.
> > I tightened the screws on the Weller Solder Gun and got a little
> > better result out of it, although still not enough to do a decent job
> > on the PL259's. I tried using a 100 watt soldering iron, and I just
> > can't seem to get the PL259 hot enough to melt solder inside of it. I
> > ended up melting all the insulating material away though :). So that
> > tells me I'm getting it hot enough, not sure why solder isn't melting.
> > I'm using Sn63, 1/32" solder....any other types I should be looking at?
> > When I touched the iron to the tip of the PL259, I was able to melt
> > solder into it no problem, yet it didn't have the "flow"
> > characteristics I expected it to. It just sort of melted and "sat"
> > there. When we melted it on field day, it seemed to turn to a real
> > fine liquid and just flowed into the connector around the center tip.
> >
> > Thanks again for all your help and maybe I'll get the hang of this
> > yet. I'm off to try the 7th PL259 now :).
> >
> > 73,
> > Niel Brieger
> > KC5ZJR
>
> Sorry for coming in a bit late on this one -- I actually had a summer
> vacation this year :-)
>
> Of the several replies I read, I didn't see anyone mention filing the plating
> off the 259. With "silver plated" 259's, you don't need to do this, but the
> nickel-plated ones can be tougher to solder to. I routinely file the plating
> off around the solder holes and use the point of the file to scrape it off
> the inside of the hole. These cleaned spots take solder much more readily.
>
> GL 73
>
> Rich W2RG

And here is my 2 cents worth:

I like to use a small butane torch to solder them on, it may take
you one or two connectors to learn that they heat up a LOT faster than
with almost any type of iron, but be quick and it does a fine job. I work
on marine electronics in the summer time and it has the advantage of
being cordless, also it is much easier to use when you are outside and

there is a breeze blowing. My torch is made by blazer, costs around $30 from various tool companies. My first torch did not have electronic ignition and it was a pain to light, especially when it went out in the middle of using it. This one has pezio ignition and I don't think I will ever buy one without it again, it is that handy.

Hope this helps N9OHS

# 1771. FS: For Sale Brand New PRO-2045 inbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Gary Herbst <ggherb@ccmail.monsanto.com>
Message-ID: <01bca743$505f46c0$23022389@GGHERB.MONSANTO.COM>
Source record: 91762
Cross-posted to: de.alt.radio-scanner,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

I have for sale a brand new PRO-2045 Scanner from Radio Shack in the box. I thought I'd be able to hook it all up but do not have the time and prefer to focus on SWL. The price is $200.00 and I will pay the shipping. I will accept a Money Order, Bank Check, or COD if your prefer.

Thanks,

Gary-

---
---
Views expressed are my opinion and do not reflect those of my employeer

# 1772. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970812190800.PAA17626@ladder01.news.aol.com>
Source record: 91763

> And here is my 2 cents worth:
>
> I like to use a small butane torch to solder them on, it may take
>you one or two connectors to learn that they heat up a LOT faster than
>with almost any type of iron, but be quick and it does a fine job. I work

>on marine electronics in the summer time and it has the advantage of
>being cordless, also it is much easier to use when you are outside and
>there is a breeze blowing. My torch is made by blazer, costs around $30
>from various tool companies. My first torch did not have electronic
>ignition and it was a pain to light, especially when it went out in the
>middle of using it. This one has pezio ignition and I don't think I will
>ever buy one without it again, it is that handy.
>
>Hope this helps N9OHS
>
>
I too have used a torch to do this. It was one of the pencil type that you
can use a soldering tip with. I dropped the tip while up a tower and just
used the flame. Worked great . Don't think it would have gotten hot enough
using the soldering tip. Never considered this as a standrad way of
putting them on, but why not.

# 1773. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970812211300.RAA03679@ladder02.news.aol.com>
Source record: 91764

>om Bruhns wrote:
>>
>> Bob Lewis (aa4pb@erols.com) wrote:
>>
>> : If the voltage is low during low current draw, I'd try another
>> : regulator. Actually, the spec on many brands of three-terminal 78XX
>> : series regulators is +/-10% so you are within tolorance. You can
>> : probably hand-pick one or prop up the common terminal with a silicon
>> : diode (raising the output by 0.7 volts).
>>
>> Egad, 10%?? Can you tell us the brands so I can avoid them? All the
>> ones I've ever used are _supposed_ to be within 5%.
>>
>> (Another possibility for Bill is that his meter is inaccurate by some
>> amount...and the voltage is really somewhat higher than 11.0 volts.)
>>
>> --
>> Cheers,
>> Tom
>> tomb@lsid.hp.com
>
>According to National Semiconductor Handbook, the 7812C output falls
>between 11.4 and 12.6 volts (5%) over temperature and 11.5 to 12.5 volts
>with a junction temperature maintained at 25 deg C.
>
>The 78L12AC is +/-5% and the 78L12C is +/-10% or 10.8 to 13.2 volts over
>temperature and 11.1 to 12.9 volts at 25 deg C.
>
>
>
>
>
>
>

Whats the input voltage on this thing. I think to get them to work right
you need at least 2 or 3 volts more input than you are expecting on the
output. If this is OK I'd get a new regulator.

Thats 2 or 3 volts if you are working from a nice stiff source. If you
input is not regulated make that 5 or 8.

# 1774. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Robert Lay <w9dmk@crosslink.net>
Message-ID: <01bca730$4e2be6a0$LocalHost@w9dmk.crosslink.net>
Source record: 91765

How much would you like to bet that your voltmeter is in error? What does your voltmeter measure when you put it across your car battery with the motor not running? If it says anything other than 12.6 volts, then perhaps your voltmeter isn't in calibration.

73 de w9dmk

# 1775. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Robert Lay <w9dmk@crosslink.net>
Message-ID: <01bca730$b2f068e0$LocalHost@w9dmk.crosslink.net>
Source record: 91766

How could their be any silver in photographic developing solution? The silver is in the emulsion. If you want silver in your developing solution you have to first develop a hell of a lot of prints or film. OK?

73 de w9dmk

# 1776. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <5sr8cp$s9k@zeppo.cs.ubc.ca>
Source record: 91767

"Robert Lay" <w9dmk@crosslink.net> writes:
>How could their be any silver in photographic developing solution? The
>silver is in the emulsion. If you want silver in your developing solution
>you have to first develop a hell of a lot of prints or film. OK?

There is no significant amount of silver in the developer. But the
suggestion was to use fixer, not developer. In black-and-white
photography, the black areas are made up of metallic silver, but
the fixer removes the silver from the clear areas. In colour photography,
there is no silver left in the emulsion - it all ends up in the fixer.

Now, fresh fixer has no silver in it. But exhausted fixer has plenty
of silver ions in it. Yes, you have to develop a lot of paper or film
to get the fixer exhausted. But anyone who uses or runs a darkroom
will have access to exhausted fixer.

Dave

# 1777. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <5sr84v$s92@zeppo.cs.ubc.ca>
Source record: 91768

jsender104@aol.com (Jsender104) writes:
>I too have used a torch to do this. It was one of the pencil type that you
>can use a soldering tip with. I dropped the tip while up a tower and just
>used the flame. Worked great . Don't think it would have gotten hot enough
>using the soldering tip. Never considered this as a standrad way of
>putting them on, but why not.

You'd be surprised how much heat a little portable butane soldering iron
puts out in "soldering iron" mode as well as "torch" mode. I normally
use a temperature-controlled 40 W iron for soldering. When that doesn't
put out enough heat, I switch to a 140 W soldering gun. And when *that*
doesn't provide enough heat, I dig out my little butane-powered Weller
soldering iron. On "high", it seems to put out more heat than the gun.

Dave

# 1778. Re: Pixie 2 Transceiver - Where can I get one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <33F0EAB5.7DAF@qsl.net>
Source record: 91769
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi Vince. The pixie2 is described in detail, with all original
text and graphics on my web page. I have obtained permission
to display these, however they are copyrighted.

The pixie2 is easy to build. I bought one at Haltec for $9.95
+ tax. It was so easy, I built a second one that day from
spare parts I had. The second one was ground plane construction
and even works better than the first (PC Board)!

Haltek has them for sure.

Good luck and visit my page (In signature file below).

-Ed Loranger
Vince Scoglietti wrote:
>
> Hello,
> Does anyone know where I can get this neat little kit? It's a
> CW transceiver that fits into a Tic-Tac box, sorta comparable to the
> NorCal 49'er. It's supposedly distributed by HSC Electronics (at
> http://www.halted.com ), but they haven't yet responded to my email.
> Does anyone have an unbuilt (or even built for that matter, as long as
> it works) kit that they owuldn't mind parting with? Please email me
> at: vcs@ix.netcom.com
>
> Thanks,
> Vince Scoglietti
> [--------------------------------------------------]
> [ vcs@ix.netcom.com ]
> [ UIN (ICQ) # 1727227 ]
> [--------------------------------------------------]

--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARS#275/ARCI#9397 grid CM88ok
mailto:we6w@qsl.net http://www.qsl.net/we6w

# 1779. Re: HF antenna like G5RV etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: "Frank, G3YCC." <g3ycc@gqrpclub.demon.co.uk>
Message-ID: <fozziBAyAO8zEw0x@gqrpclub.demon.co.uk>
Source record: 91770
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <33F0710E.337F9EDA@ecid.cig.mot.com>, James Patterson
<PattersJ@ecid.cig.mot.com> writes
>Does anyone know of a site describing how to make a mult banded HF
>longwire for transmitting between 80m and 10m?
Try mine!
Frank, G3YCC GQRP Club 042
Packet: G3YCC@GB7HUL
QRP Web Page: http://www.gqrpclub.demon.co.uk

# 1780. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Jason <kb5urq@earthlink.net>
Message-ID: <33F1334B.6E90@earthlink.net>
Source record: 91771
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

orion@xyzcapital.net wrote:
>
> On Mon, 11 Aug 1997 23:40:48 GMT, w6uv@wco.com (Jerry Gardner) wrote:
>
> >On Sat, 09 Aug 1997 16:45:07 GMT, orion@xyzcapital.net wrote:
>
> >>I have an MFJ Receiver Antenna Tuner / Preamplifier Model # MFJ 959B
> >>connected to my Kenwood R-1000 SW receiver. I would strongly recommend
> >>this tunner. It does an excellent job for me. The tuner helps a lot on
> >>bands that the antenna is not resonant on. Brings the signals up 3 or
> >>4 S units on the meter sometimes. The preamp is adjustable from the
> >>front panel, so very weak signals can be amplified. It also has an
> >>attenuator which is handy when strong signals overwhelm the receiver.
> >>On the rear panel, it has connectors for two receivers and two
> >>antennas, and a jack for 12 volts DC to power the unit. Cost from MFJ
> >>is $99.00. It's well worth the money.
> >
> >
> >Save your money and put it to better use. An "antenna tuner" is practically
> >worthless for shortwave listening. Sure, it seems to bring signals up 3-4 S
> >units, but it's also bringing the noise up 3-4 S units as well, and
> >signal-to-noise ratio is really what determines what you can and cannot hear.
>
> You are absolutely wrong. The tuner DOES work. It does an excellent
> job on bands that the antenna is not resonant on. My antenna is cut
> for the 41 meter shortwave broadcast band. On this band, yes, the
> tuner does very little. (The preamp does bring in the weak signals,
> however and the attenuator is usefull for the too strong signals.) I
> listen on frequencies from 160 to 10 meters, and this is where the
> tuner is outstanding. It DOES bring up the signal strength 3 or 4 S
> units. It DOES NOT bring the noise up.
>
> >Modern receivers have plenty of gain. As long as the antenna brings in enough
> >signal so that it's above the receiver's noise floor, antenna tuners and
> >preamps can do more harm than good. I wonder about the quality of the preamp
> >in the MFJ. Probably far inferior to the front end of your Kenwood.
>
> Wrong again. Using the preamp, I can hear signals that were not
> readable without the preamp.
>
> >I suggest that you see this for yourself by doing A-B tests with the tuner in
> >and out of the line. At the most, the tuner is acting as a rather poor
> >preselector, which is too bad since most receivers these days lack selectivity

> >more than they lack sensitivity.
>
> I did extensive "A-B" tests when I received this unit. There is a
> large performance gain with the unit.
>
> >Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of
> >(w6uv at wco dot com) | a kamikaze pilot on his 37th mission.
>
> You seem to be one of those people who say "Oh, that won't work!" in
> the face of evidence that it does work. Therefore, I conclude you
> don't know what you're talking about.
>
> --
> Butch N2YMJ
>
> To reply,
> delete the xyz
> from my address.

Look Butch,

I was the guy who wrote the original note concerning my shortwave antenna... I just wanted to get some opionions and different view points. Do me a favor and take a chill pill. IT'S JUST A DAMN HOBBY!!

Thanks for your informative, well-researched paper which lacked any resemblance to a paper with a mannored-author.

## 1781. DRAKE PS-7 wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970812014800.VAA28981@ladder01.news.aol.com>
Source record: 91838

Looking for an excellent condition Drake PS-7 power supply. Prefer the newer model with the phono connectors for ALC and VOX relay connections. FA-7 fan not necessary.

Evan
K9SQG@AOL.com

# 1782. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5sog0u$pmd@dfw-ixnews8.ix.netcom.com>
Source record: 91839

In <5skndt$13s$1@gte1.gte.net> Grant Youngman <nq5t@gte.net> writes:
>
>K9SQG wrote:
>>
>> Have a brand new Dow-Key "bypass" antenna relay with SO-239
>> connectors,
>> 110v AC but no accessory contacts. Anybody know what they go for on
>> the
>> used market?
>
>Typical hamfest prices for Dow-Key relays run in the $25-50 range.
>Nobody in their right mind would pay the current catalog prices for
new
>ones. Good new/used relays are quite plentiful, and not really an
item
>to plan your retirement around :-)
>
>Grant/NQ5T
>
>nq5t@gte.net
>http://home1.gte.net/nq5t

And the crap I've seen at hamfests isn't even worth the prices you
quote. This fellow said his relay is new. BTW if no one would buy new
Dow Keys how do they stay in business? And I assure you they are in
business.

Jerry

# 1783. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <33efe5cc.22713794@news.azstarnet.com>
Source record: 91840

On 11 Aug 1997 23:03:12 GMT, tomb@lsid.hp.com (Tom Bruhns) wrote:

>William E. Sabin (sabinw@crpl.cedar-rapids.lib.ia.us) wrote:
>: Wes Stewart wrote:

>: > Don't you mean to say "overtone crystal (oscillators) *usually*
>: > operate....."

>: Hello Wes.

>: I have read that they always operate in the series mode.

>Hmmm....interesting. I have a commercial overtone oscillator circuit
>for which I order crystals from International for parallel (overtone)
>resonance, with a very low value of load capacitance, and things
>come out on-frequency. International doesn't seem to have any
>trouble understanding "parallel-mode overtone" and associated
>load capacitance...and the calibration suggests that it really is
>that mode.
>
>: I have a quote from the book "Crystal Oscillator Design" by Frerking:

>: "Overtone crystals are nearly always operated at series resonance".
>: There are also circuit examples to verify.

>Glad I didn't read that before ordering crystals, or I'd have been
>rather confused about the calibration, I think! Given the 10pF or
>so load capacitance, there's quite a difference between the parallel
>and series resonance frequencies.

>(I don't mean to be argumentative about it, it's just that I have
>an overtone ckt that really does seem to operate the rock in parallel
>resonance. There's really nothing special about the circuit; it
>even has a trimmer for netting the crystal.)

I didn't see you reply posting Bill, so I'll tack one on here.

Your quote afirms my comment. "Nearly always" isn't "always" :))

Using your reference (Crystal Oscillator Design and Temperature
Compensation, 1978 issue), for example see page 70 for "Overtone
Pierce Oscillator".

There isn't any fundamental (excuse the pun) reason why series
resonance is the only possible mode. If there is a series resonance
at the overtone, then there has to be an inductive region where
anti-resonant operation is possible.

73, Wes N7WS

# 1784. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33efbc98.11731760@news.erols.com>
Source record: 91841

Thanks to all who sent advice on my regulator problems. First, let me confirm that I did indeed have a rectifier in the circuit! Full wave bridge rated at 4 amps, 50 volts.
Transformer has an 18 volt secondary. (There is a center tap but I'm not using it.) The circuit I'm using is essentially the one on page 239 of QRP Classics (minus some of the caps and the RFC).

Following some of the suggestions posted here, I went ahead and put bypass capacitors on the regulator's input and output (hoping to suppress any oscillations that might be present). No luck. Still got 11 volts out. (I've measured the same voltage with two different meters - one a VOM and the other a VTVM.)

I'm thinking that I simply bought an 11 volt regulator in 12 volt clothing! Tomorrow I'll try a new part (and will report back on results).

Thanks again. 73 Bill N2CQR

# 1785. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5sp2u2$hkp$1@news.belwue.de>
Source record: 91842

>Probably 11dB above a rubber duckie or a wet piece of string, but anyone
>who claims more than about 3dB over a dipole either isn't telling the
>truth or doesn't know how to build a working dipole.

Not true.

Everyone who claims more than *zero* dB over a dipole does not know
what he is talking about.

73, Moritz

# 1786. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: "M.H. Sprang" <customware@pi.net>
Message-ID: <01bca6eb$ae1ea2e0$b47c4ec1@p166>
Source record: 91843

Tom Harrison <tomh@tyecin.com> wrote in article
<33EF6C34.3D1E@tyecin.com>...
> Edward Slimak wrote:
> >
> > A regular J pole is a 1/2 wavelength element with a 1/4 wave matching
> > stub feed in its simplest form Sparks
>
> That's strange; all the J-poles I've seen have a 3/4 wavelength element
> with a 1/4 stub. For instance, for 2 meters, its 57.5 in and 19.25
> inches.
It depends on what you regard as the stub. Some people only see the quarter wave rod as the stub, but I think the entire bottom quarter wave is a impedance matching transformer, to transform from 50 Ohms to high impedance, while the top half wave is acting as an end-fed dipole. Right?

Meindert, PE1GRV

# 1787. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Ed <mrmicro@techie.com>
Message-ID: <33F017C6.24BC@techie.com>
Source record: 91844

Gerald Schmitt wrote:

> BTW if no one would buy new
> Dow Keys how do they stay in business? And I assure you they are in
> business.
>
> Jerry
--

They sell the new ones to the U.S. Governmnet.
--

Ed
MrMicro@techie.com

# 1788. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33F0346D.22D0@crpl.cedar-rapids.lib.ia.us>
Source record: 91845

Wes Stewart wrote:
>
Sabin wrote:
> >: I have a quote from the book "Crystal Oscillator Design" by Frerking:
>
> >: "Overtone crystals are nearly always operated at series resonance".
> >: There are also circuit examples to verify.
>
> Your quote afirms my comment. "Nearly always" isn't "always" :))
>
> Using your reference (Crystal Oscillator Design and Temperature
> Compensation, 1978 issue), for example see page 70 for "Overtone
> Pierce Oscillator".

See also pages 71-73.

Further reading of the Frerking reference and also Terman 1955 says that overtone xtals are often prone to spurious modes and that the series circuits help to prevent the tendency to oscillate at those frequencies.

Also, if we look at the circuits that are used. xtals oscillate somewhere above the series freq and below the parallel freq, where they are slightly inductive. I don't believe that any of the commonly used circuits operate exactly at the parallel freq, but rather at the freq that has the correct loading capacitance.

In series mode oscillators a series cap is often used to adjust the series resonant frequency. The thing to look for is a very low circuit impedance between the xtal (plus its series cap) terminals at the desired frequency. The Butler overtone circuit is one famous example. Also the impedance inverting Pierce.

Also, I believe that "nearly always" is somewhat more emphatic than "usually".

This is a difficult subject to be precise about, and there are a lot of contingencies involved that I have not studied very carefully, so I am trying to be not too authoritative. But I think the basic principles are pretty clear.

Bill W0IYH

# 1789. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970812182300.OAA22278@ladder02.news.aol.com>
Source record: 91846

>
>This is a difficult subject to be precise about, and there are a lot of
>contingencies involved that I have not studied very carefully, so I am
>trying to be not too authoritative. But I think the basic principles are
>pretty clear.

Hi Bill.

Reminds me of the customer who wanted a 12 volt power supply. When I asked him the tolerance, he said "none. Exactly 12 volts." I had to admit that I didn't know how to build one of those.

While true that the Colpitts with the crystal base to ground wants to oscillate well removed from the resonant frequency of the rock, placing it (the crystal) in the feedback loop between the divider capacitors and the emitter (Colpitts again) allows operation at the resonant frequency. (Or, is that "Much closer to the resonant frequency?") Of course, it'll oscillate without the crystal too if you just install a series resistor there.

W4ZCB

# 1790. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <yXoxYIAzvE8zEwyR@ddwyer.demon.co.uk>
Source record: 91847

In article <33F0346D.22D0@crpl.cedar-rapids.lib.ia.us>, "William E.
Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> writes
>Wes Stewart wrote:
>>
>Sabin wrote:
>> >: I have a quote from the book "Crystal Oscillator Design" by Frerking:
>>
>> >: "Overtone crystals are nearly always operated at series resonance".
>> >: There are also circuit examples to verify.
>>
>> Your quote afirms my comment. "Nearly always" isn't "always" :))
>>
>> Using your reference (Crystal Oscillator Design and Temperature
>> Compensation, 1978 issue), for example see page 70 for "Overtone
>> Pierce Oscillator".
>
>See also pages 71-73.
>
>Further reading of the Frerking reference and also Terman 1955 says that
>overtone xtals are often prone to spurious modes and that the series
>circuits help to prevent the tendency to oscillate at those frequencies.

Almost all crystal spurious frequencies are above series resonance
>
>Also, if we look at the circuits that are used. xtals oscillate
>somewhere above the series freq

>and below the parallel freq, where they
>are slightly inductive. I don't believe that any of the commonly used
>circuits operate exactly at the parallel freq, but rather at the freq
>that has the correct loading capacitance.

>
>In series mode oscillators a series cap

add a small series inductance then the crystal can be pulled above and
below series resonance. often better to pull only below series
resonance.

>is often used to adjust the
>series resonant frequency. The thing to look for is a very low circuit
>impedance between the xtal (plus its series cap) terminals at the
>desired frequency. The Butler overtone circuit is one famous example.
>Also the impedance inverting Pierce.
>
>Also, I believe that "nearly always" is somewhat more emphatic than

>"usually".
>
>This is a difficult subject to be precise about, and there are a lot of
>contingencies involved that I have not studied very carefully, so I am
>trying to be not too authoritative. But I think the basic principles are
>pretty clear.
>
>Bill W0IYH

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 1791. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33F0C74D.D71@crpl.cedar-rapids.lib.ia.us>
Source record: 91848

JohnsonHE wrote:
>
> While true that the Colpitts with the crystal base to ground wants to
> oscillate well removed from the resonant frequency of the rock, placing it
> (the crystal) in the feedback loop between the divider capacitors and the
> emitter (Colpitts again) allows operation at the resonant frequency. (Or,
> is that "Much closer to the resonant frequency?") Of course, it'll
> oscillate without the crystal too if you just install a series resistor
> there.

I gave been doing some more reading in Krauss, Bostian and Raab "Solid State Radio Engineering". Also the 1995/6/7 ARRL Handbook has a very nice writeup by David Stockton in chap 14..

There are several frequencies that can be marked on a xtal can:
1) The series resonant frequency.
2) The parallel resonant frequency, involving only the xtal and its holder.
3) The series resonant frequency with a capacitor, say 30 pF, in series.
4) The series resonant frequency for an overtone xtal.

K, B and R say the overtone xtals are "always" used in circuits where the xtal operates in a low impedance series mode. Reason is it's much easier to prevent spurious modes.

Where an xtal oscillates depends on the circuit that is used. Some circuits oscillate at the series freq, most others somewhere between the series and the parallel freq. If the xtal is labeled with the series freq then we need a series circuit with no series cap if we want that freq. If it is specified for 30 pF then that is what we need. If we use the series cap in a series-type circuit the freq is quite close to the parallel resonant freq (ref. K, B and R).

For example, a fundamental mode Colpitts without a series cap works very close to its series freq. If we put 30 pF (net total value) in series it works very close to the freq marked on the can, I have noticed.

In most circuits the xtal is inductive, for example the Pierce, in order to resonate with circuit C. If the total circuit C that is across the xtal is exactly 30 pF (or whatever) then the oscillation is very close, but probably not exactly, at the freq that is marked on the can. The xtal reactance (therefore its freq) will shift a little in order to compensate for phase shift in the transistor or IC.

I have seen several cases where the xtal vendor uses the customer's circuit to grind and test the xtals.

Bill W0IYH.

## 1792. MIR 2 meter packet activity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Keith Zimmermann <keithz@austin360.com>
Message-ID: <33F0D981.8DAB5857@austin360.com>
Source record: 91849

If you want info on the latest activities related to 2meter packet from
the MIR space
station, then check out:

http://members.aol.com/k5wx/

This page is regularly updated with news and a forum is available for
exchanging reports and setting up schedules.

73,

Keith, K5WX

# 1793. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5sq7rb$2o2@hpcvsnz.cv.hp.com>
Source record: 91850

Bob Lewis (aa4pb@erols.com) wrote:

: If the voltage is low during low current draw, I'd try another
: regulator. Actually, the spec on many brands of three-terminal 78XX
: series regulators is +/-10% so you are within tolorance. You can
: probably hand-pick one or prop up the common terminal with a silicon
: diode (raising the output by 0.7 volts).

Egad, 10%?? Can you tell us the brands so I can avoid them? All the
ones I've ever used are _supposed_ to be within 5%.

(Another possibility for Bill is that his meter is inaccurate by some
amount...and the voltage is really somewhat higher than 11.0 volts.)

--
Cheers,
Tom
tomb@lsid.hp.com

# 1794. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33F0B05F.5036@erols.com>
Source record: 91851

Tom Bruhns wrote:
>
> Bob Lewis (aa4pb@erols.com) wrote:
>
> : If the voltage is low during low current draw, I'd try another
> : regulator. Actually, the spec on many brands of three-terminal 78XX
> : series regulators is +/-10% so you are within tolorance. You can
> : probably hand-pick one or prop up the common terminal with a silicon
> : diode (raising the output by 0.7 volts).
>
> Egad, 10%?? Can you tell us the brands so I can avoid them? All the
> ones I've ever used are _supposed_ to be within 5%.
>
> (Another possibility for Bill is that his meter is inaccurate by some
> amount...and the voltage is really somewhat higher than 11.0 volts.)
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com

According to National Semiconductor Handbook, the 7812C output falls between 11.4 and 12.6 volts (5%) over temperature and 11.5 to 12.5 volts with a junction temperature maintained at 25 deg C.

The 78L12AC is +/-5% and the 78L12C is +/-10% or 10.8 to 13.2 volts over temperature and 11.1 to 12.9 volts at 25 deg C.

# 1795. HF antenna like G5RV etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: James Patterson <PattersJ@ecid.cig.mot.com>
Message-ID: <33F0710E.337F9EDA@ecid.cig.mot.com>
Source record: 91852
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Does anyone know of a site describing how to make a mult banded HF
longwire for transmitting between 80m and 10m?
--

(************************************)

James Patterson
Web Development
Motorola (GSSC),
Maple Building, Kembrey Park, Swindon,
Wiltshire, United Kingdom.

Tel: +44 (0)1793 566410
Mailto: pattersj@ecid.cig.mot.com
Http://www.ecid.cig.mot.com/gssc

# 1796. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <DBwddCAScC8zEw1o@ddwyer.demon.co.uk>
Source record: 91853

We should not regard parallel and series operation as modes, they are simply convenient words to describe the circuit condition. There is a continuous range of input conditions that will modify the crystal frequency from below series resonance (inductance in series with the crystal in a zero phase amplifier) to above series resonance (capacitance in series with the crystal) .
An overtone crystal will generally be operated away from series resonance either because the series circuit is not perfect or to make fine frequency adjustment. Operation above and below series is a good idea as thy dont pull well and there are few spurious responses below series resonance.
Note
Overtone crystals do not pull as easily as fundementals they pull approximately 1/nsquared of the equivilent overtone ie a third pulls 1/9 of the fundemental.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax: +44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 1797. Battery Charging Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <871422927@infoway.com>
Source record: 91854

Kc> From: Stephanie Steele
Kc> <kc7dba*NOSPAM*@primenet.com> Newsgroups: rec.radio.amateur.homebrew
Kc> Subject: Battery Charging Circuit Needed
Kc> Date: 11 Aug 1997 07:19:00 -0700

Stephanie,

What you want is a major charger.
I am still curious about the specs.
Do you want the ARES repeater to be instantly powered by this
charger/battery compination when power fails, then when power
returns after...even days of operation, and the batteries are
near/or below voltage to operate the repeater, for the
repeater to instantly return to operation, powered by the
120, and the batteries to begin receiving charge, up to full charge?
During this time, what is the permissible ripple on the
nominal 12volts from the charger?
How much of the parts to you have on hand?
Transformers, etc?

What commercial battery chargers have you priced,
that were out side the budget....what was the price/budget?

Kc> I am looking for a battery charging circuit to use on our clubs ARES
Kc> repeater backup batteries that will charge at a high rate (15 amps)
Kc> when AC power is restored and drop the charge rate as the batteries
Kc> approach full charge and finally shut down when at full charge. We have
Kc> looked into commercial versions of this but they are outside our
Kc> budget. Hope this explains better what I need.
Kc> --

Kc> SPAM Prevention - To reply to this message remove " *NOSPAM* " from
Kc> the address

Kc> Stephanie Steele

Kc> e-mail address kc7dba@primenet.com

Kc> ------------------------------------------------
Kc> Thinking is the hardest work there is, which is
Kc> probably why so few engage in it.

Kc> -Henry Ford

... don.phelps@juno.com www.qsl.net/n6mce POB 9739 San Rafael,CA94912-9739
___ Blue Wave/386 v2.30 [NR]

# 1798. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <pYvqqTADqC8zEwxO@pacsat.demon.co.uk>
Source record: 91855

In article <33efbc98.11731760@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>
>I'm thinking that I simply bought an 11 volt regulator in 12 volt
>clothing! Tomorrow I'll try a new part (and will report back on
>results).
>
>Thanks again. 73 Bill N2CQR

Try a 78S12 Bill, its a 2A version of the same 78** series

73 Simon

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 1799. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: "Robert A. Dunstan" <robert_dunstan@ccm.jf.intel.com>
Message-ID: <33F084CA.919E3F5B@ccm.jf.intel.com>
Source record: 91856

Two comments:
1. The regulator you selected may be too heavily loaded to supply the spec'ed output voltage. 11.1 is about 8% low, so would be out the the more typical 3-5% tolerance.
2. You can probably "jack up" the output voltage of the regulator by putting a diode in series with the ground pin. This effectively elevates the ground by one diode drop ~.7 volts which should raise your output voltage by the same amount. With respect to the thermal dissapation, this will lower it by a small amount (.7 * output current).

Good luck.
-Bob Dunstan (WA7TAG)

Disclaimer: I speak for myself and let the professionals speak for Intel.

Bill Meara wrote:

> I just put the finishing touches on my (supposedly!) 12 VDC QRP
> station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
>
> VDC voltage regulator.
>
> Problem is that the output voltage is only about 11.1 volts.
>
> Has anyone seen this problem before? What do you think, bad
> component?
>
> I also notice that the regulator gets quite hot. I put a fairly large
>
> heat sink on it and I don't seem to get to the thermal shut down point
>
> (even when pulling around 1 amp through it.)
>
> Any suggestions?
>
> Thanks, 73 Bill N2CQR

# 1800. Re: HF antenna like G5RV etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Cecil Moore <cecil_a_moore@ccm.ch.intel.com>
Message-ID: <33F08E4E.8AA@ccm.ch.intel.com>
Source record: 91857
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

James Patterson wrote:
> Does anyone know of a site describing how to make a mult banded HF
> longwire for transmitting between 80m and 10m?

Hi James, try my web page(s) starting at:
http://people.delphi.com/CecilMoore

73, Cecil, W6RCA, OOTC

# 1801. FS: For Sale Brand New 2M HTX-242

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: Gary Herbst <ggherb@ccmail.monsanto.com>
Message-ID: <01bca743$e7647860$23022389@GGHERB.MONSANTO.COM>
Source record: 91858
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

I am selling a brand new Radio Shack 2M Mobile unit, model HTX-242, cat#
19-1126. This unit only been turned on to be sure everything is fully
function. I anticipated getting my Tech License but have been unable to
motivate myself to do so. My attention is being focused on SWL. The price
is $200.00 and I will pay all shipping cost. I will accept Money Orders,
Bank Check, or sned COD if you prefer.

Gary-

---
---
Views expressed are my opinion and do not reflect those of my employeer

# 1802. FS/Trade BNC and N connectors and adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: n4ij@aol.com
Message-ID: <19970812191900.PAA25880@ladder02.news.aol.com>
Source record: 91859

I posted this to rec.swap but didn't see the post so rather than repost, I'll
put it here. I have a couple more items included but part numbers are not available as I type this. Most of this is loose, but unused. Been kicking around the parts box for some time and is gathering dust.

QTY Description
11 BNC panel jack (female)
14 PL-259 to bnc female adapter
1 Narda DC-12.4 ghz 5 watt dummy load termintor (N female)
3 BNC female to N male adapter
7 N female panel jack
1 T adapter N female, N female N male
2 PL-259 to N female adapter
2 SO-239 to N male adapter
2 BNC barrel (female female)
1 BNC barrel (double male)
1 N female to BNC male adapter
1 N male to N female RT angle
1 UHF female push-on to BNC male adapter
3 N bulkhead (double female)
1 T connector N female N female N female
2 BNC T connector (female female)
1 Sage Labs 3 db pad (BNC female BNC male)
1 Sage Labs 6 db pad (BNC female BNC male)

Offer $ or trade for ??? Boatanchor Heathkit TX/RX or 813 tubes/sockets, 4CX250 tubes/sockets, etc.

Doug, N4IJ
N4IJ@aol.com or dsnowden@ncdc.noaa.gov

I read the latter address email more often.

# 1803. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-12 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33f19aca.8008411@news.capital.net>
Source record: 91860
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Mon, 11 Aug 1997 23:40:48 GMT, w6uv@wco.com (Jerry Gardner) wrote:

>On Sat, 09 Aug 1997 16:45:07 GMT, orion@xyzcapital.net wrote:

>>I have an MFJ Receiver Antenna Tuner / Preamplifier Model # MFJ 959B
>>connected to my Kenwood R-1000 SW receiver. I would strongly recommend
>>this tunner. It does an excellent job for me. The tuner helps a lot on
>>bands that the antenna is not resonant on. Brings the signals up 3 or
>>4 S units on the meter sometimes. The preamp is adjustable from the
>>front panel, so very weak signals can be amplified. It also has an
>>attenuator which is handy when strong signals overwhelm the receiver.
>>On the rear panel, it has connectors for two receivers and two
>>antennas, and a jack for 12 volts DC to power the unit. Cost from MFJ
>>is $99.00. It's well worth the money.
>
>
>Save your money and put it to better use. An "antenna tuner" is practically
>worthless for shortwave listening. Sure, it seems to bring signals up 3-4 S
>units, but it's also bringing the noise up 3-4 S units as well, and
>signal-to-noise ratio is really what determines what you can and cannot hear.

You are absolutely wrong. The tuner DOES work. It does an excellent
job on bands that the antenna is not resonant on. My antenna is cut
for the 41 meter shortwave broadcast band. On this band, yes, the
tuner does very little. (The preamp does bring in the weak signals,
however and the attenuator is usefull for the too strong signals.) I
listen on frequencies from 160 to 10 meters, and this is where the
tuner is outstanding. It DOES bring up the signal strength 3 or 4 S
units. It DOES NOT bring the noise up.

>Modern receivers have plenty of gain. As long as the antenna brings in enough
>signal so that it's above the receiver's noise floor, antenna tuners and
>preamps can do more harm than good. I wonder about the quality of the preamp
>in the MFJ. Probably far inferior to the front end of your Kenwood.

Wrong again. Using the preamp, I can hear signals that were not
readable without the preamp.

>I suggest that you see this for yourself by doing A-B tests with the tuner in
>and out of the line. At the most, the tuner is acting as a rather poor
>preselector, which is too bad since most receivers these days lack selectivity
>more than they lack sensitivity.

I did extensive "A-B" tests when I received this unit. There is a
large performance gain with the unit.

>Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of
>(w6uv at wco dot com) | a kamikaze pilot on his 37th mission.

You seem to be one of those people who say "Oh, that won't work!" in
the face of evidence that it does work. Therefore, I conclude you
don't know what you're talking about.

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

# 1804. Mod,s for the Kenwood TM V7 A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: roger lafontaine <rolef@vianet.on.ca>
Message-ID: <5sr2ue$8sf@myth.vianet.on.ca>
Source record: 91772

Looking for the mod,s on this radio and the cross-band features ect....

rolef@ vianet.on.ca

# 1805. Re: Need source of drive belts for auto tune

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: wa2eaw@aol.com
Message-ID: <19970813022600.WAA19425@ladder01.news.aol.com>
Source record: 91773

>I'm looking for a source of the belts

Paul;
In the past when I had to replace hard to find belts I went to the stores that sell vacuume belts.(took the broken belt with me). If that did not solve my problem go to a large plumbing supply house and check out "O"rings. If that fails take an old inner tube and cut what you need. Been there and done it. It may not l;ook pretty but it works.
WA2EAW...Bob

# 1806. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Glenn McAllister <delta@dy.co.nz>
Message-ID: <33F134CD.F4A@dy.co.nz>
Source record: 91774

philip de cadenet wrote:
>
> I'm not having much luck here in the UK tracking down a source of 50V
> alternators/generators so if someone works in this field (no pun
> intended) or you can suggest a company with some contact information I'd
> greatly appreciate it.
> I'm after BIG current.
>

Well, I've got a complete generator here, free for removal. Its 286KW
3 phase, 240/400V. The field winding DC gen souds like just what
youre after : 50V at 70+A. The diesel is the hard part to shift :
the whole thing measures 5.5m long by 2m high by 1.5m wide. Bound to
be over 12 metric ton all up, if not more. Free for removal!

Oh, By the way, its in New Zealand!

--
The Internet Callout Service (Wellington)
http://dy.co.nz/~delta/dy.htm
( Glenn McAllister ph 025 432 883 pager 026 365 0482 )
mailto:delta@dy.co.nz

# 1807. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33f172e1.0@newshost.pcug.org.au>
Source record: 91775
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

fireman@netrover.com (Jean-Pierre Magnan) wrote:

>Now, according to the latest posts in the various ham NG, a J-pole is a
>lousy antenna. I had planned to build one sometimes this month. Now I'm
>not just sure I should. I heard about dipoles doing a better job. Is
>this true and where, on the Internet, can I get plans to do this ? Is
>there other omnidirectionnal antennas that can be built on a thight
>budget ?
>

The J-pole should be a little better than a dipole. The only one I ever
built worked very well.

For a quick dipole, get some RG58 coax and strip off the outer jacket up
to 48cm from the end of the cable. Then make a small hole in the exposed
braid near where the outer jacket starts. Bend the cable and pull out the
inner conductor. end the braid back along the coax. Hang the antenna
up somewhere by the end of the inner conductor. Your dipole's finished.

73,

Peter VK1PK

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 1808. Re: Looking for single frequency transmitter plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33f17379.0@newshost.pcug.org.au>
Source record: 91776

Johan Denoyer <qbdata@webexpert.net> wrote:
>Hi, everyone i'm looking for transmitter plans for a single channel. It
>would be for packet use. I would be using it for APRS. If you have any
>idea where i can find such thing please tell me.
>

Johan - before we can help, please provide more detail as to what you
actually want - eg what band (HF or VHF?), about what power (which
depends on your required transmitting range), etc. Also, what is APRS?

73,

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 1809. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5ss14n$pql$1@news.belwue.de>
Source record: 91777
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>The J-pole should be a little better than a dipole.

Not True. This is folklore spread by those selling j-poles.
In the real world the best simple omnidirectional vertical antenna
is a ground plane, e.g. mounted on a flange socket.

Moritz

# 1810. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970813154701.LAA04266@ladder02.news.aol.com>
Source record: 91778

>philip de cadenet wrote:
>>
>> I'm not having much luck here in the UK tracking down a source of 50V
>> alternators/generators so if someone works in this field (no pun
>> intended) or you can suggest a company with some contact information
I'd
>> greatly appreciate it.
>> I'm after BIG current.
>>
Know of a case where a guy used a regular automotive alternator to do
this. He had to build a custom regulator for it. Talk about big current
he used the damned thing for welding among other things. Think this is
not uncommon, someone out there should know how to do it.

# 1811. Ceramic Insulators needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Paul Helbert <phelbert@rica.net>
Message-ID: <33F1BB14.23C623C7@rica.net>
Source record: 91779

Please get out your rulers and look in your junk boxes.

I need two or three ceramic insulators 1 3/4 inch x 1/2 inch cylindrical. They normally have holes in the ends tapped for either #6 or #8 x 32 screws. ( I need these to support the rear of a band switch in a hf amp.)

Alternatively: does anyone know of a source of such insulators...even new ones?

Thanks,

Paul Helbert, Wv3j

# 1812. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: dk3410@gnc.net
Message-ID: <5ssank$5u3@niven.ksc.nasa.gov>
Source record: 91780

Look up a Zepp Match or Zepp (Zepplin) Antenna in your various Reference books

# 1813. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33f1ac20.643587@news.atl.bellsouth.net>
Source record: 91781
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On 13 Aug 97 08:40:01 GMT, Peter Parker <parkerp@pcug.org.au> wrote:
>fireman@netrover.com (Jean-Pierre Magnan) wrote:
>
>>Now, according to the latest posts in the various ham NG, a J-pole is a
>>lousy antenna. I had planned to build one sometimes this month. Now I'm
>>not just sure I should. I heard about dipoles doing a better job. Is
>>this true and where, on the Internet, can I get plans to do this ? Is
>>there other omnidirectionnal antennas that can be built on a thight
>>budget ?
>>
>
>The J-pole should be a little better than a dipole. The only one I ever
>built worked very well.
>
>For a quick dipole, get some RG58 coax and strip off the outer jacket up
>to 48cm from the end of the cable. Then make a small hole in the exposed
>braid near where the outer jacket starts. Bend the cable and pull out the
>inner conductor. end the braid back along the coax. Hang the antenna
>up somewhere by the end of the inner conductor. Your dipole's finished.

There's a neater way to do this, Peter. After you strip off the outer
insulation, push back on the braid. It will loosen like a chinese finger
trap. Now you can turn it inside out like a sock, *rolling* it back over
the cable until it forms a 1/4-wave sleeve below the exposed inner
conductor. This forms a sleeve dipole which offers decoupling of
the feedline from antenna currents while your approach does not.
Form a small loop in the end of the inner, attach a heavy bit of twine,
and you have an antenna you can hoist into the nearest tree. This sleeve
dipole works at least as well as a J-pole, and is simpler to construct. The
only material needed is a length of coax.

Note that you'll have to cut back more than a quarterwave of the outer
insulation to wind up with a quarterwave braid sleeve, so you'll have to
trim the exposed inner down to a quarterwave to finish it off. A bit
of experimentation with the cable you are using will show you where to
cut the outer insulation so that you wind up with a quarterwave sleeve.
You can overwrap the sleeve with electrical tape to make a finished
antenna that can tolerate handling and the weather. Or you can enclose
the whole thing in a length of heat shrink tubing, that's what I do.

With a bit of practice, you can crank one of these out in less than 5 minutes.

Gary
Gary Coffman KE4ZV | You Make It | Email:

Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 1814. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ssu5q$nb3@hpcvsnz.cv.hp.com>
Source record: 91782

Robert Lay (w9dmk@crosslink.net) wrote:
: How much would you like to bet that your voltmeter is in error? What does
: your voltmeter measure when you put it across your car battery with the
: motor not running? If it says anything other than 12.6 volts, then perhaps
: your voltmeter isn't in calibration.

I sure agree that a calibration check is a good idea, but I'd not use a
car battery! Lead-acid batteries have a well-known voltage-versus-charge
curve, and the voltage depends heavily on the charge. A fully charged
"12V" car battery that's been left idle for a while (off the charger)
could easily hit 13 volts. (I use my voltmeter to tell me how much charge
is left in my trailer battery...)

That begs the question, what is a good stanadard? Maybe a fresh
alkaline or lithium cell checked against a known-good meter??
(Maybe a "9V" alkaline battery to get close to the desired 12 volts.)

--
Cheers,
Tom
tomb@lsid.hp.com

## 1815. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: jpbinc@aol.com
Message-ID: <19970813193501.PAA11614@ladder01.news.aol.com>
Source record: 91783

```
jest a test
```

# 1816. Needed: Modem chip to decode EAS/SAME signals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: dmoisan@shore.net
Message-ID: <33f204bd.24558958@news.shore.net>
Source record: 91784
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc,rec.radio.amateur.digital.misc

I'm designing an interface to retrofit my old NOAA Weather alerting radio to receive the new digital EAS/SAME signal. This is a 521 bps AFSK signal that you may have heard recently if you monitor NOAA weather radio.

I need a modem chip, commercially available, that's programmable for that odd 521 bps rate. Once I get a data stream (parallel or even serial), from there it should be easy to feed it to a microcontroller so that the information from the EAS/SAME alert would be displayed on an LCD, and the CPU would turn on the radio when the transmitted alert location matched the user's.

Any avenues I should follow? I'm good with microcontrollers, not so good with modems (even less good with DSP's). Any ideas much appreciated!

73's, Dave

| David Moisan, N1KGH Email: dmoisan@shore.net |
| WWW: http://www.shore.net/~dmoisan n1kgh@amsat.org |
| Invisible Disabilities Page: |
| http://www.shore.net/~dmoisan/invisible_disability.html |
| GE Superradio FAQ: |
| http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html |

# 1817. Re: FS: Icom IC-3AT and 4AT $75 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: JagCat@fremontnet.com
Message-ID: <33f1d8ca.1761664@news.ida.net>
Source record: 91785
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.scanner,rec.ham-radio.swap,misc.survivalism,rec.radio.amateur.homebrew

Please advise if you still have these for sale. Appreciate it.

On Wed, 30 Jul 1997 10:41:34 -0800, ghopper_@_eskimo.com (Grant
Hopper) wrote:

>For sale:
>
>Icom IC-3AT and IC-4AT
>The scouts didn't want 'em so, their loss is your gain.
>
>Includes radio, antenna, battery and manual. Each unit $75.00 plus shipping.
>Radios are in good condition, batteries are not.
>E-mail me for more details.
>
>G. Hopper
>KB7WSD
>ghopper@eskimo.com
>
>--
>G.F. Hopper
>ghopper@eskimo.com KB7WSD
>Remove the anti-spam _ to reply
>
>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
>This E-Mail address is NOT-FORSALE or use for JUNK-EMail without the
>EXPRESSED WRITTEN PERMISSION of the owner of the above E-Mail Address.
>*******************************WARNING*********************************
>By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
> meets the definition of a telephone fax machine. By Sec.227(b)
> (1)(C), it is unlawful to send any unsolicited advertisement to
> such equipment, punishable by action to recover actual monetary
> loss, or $500, whichever is greater, for EACH violation.
>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

---

Mr. President -
I confess that I do not entirely approve of this Constitution at present, but Sir, I am not sure that I will never approve it: for having lived long, I have experienced many instances of being obliged by better information or fuller consideration, to change opinions even on important subjects, which I once thought right, but found to be otherwise....
....In these sentiments, Sir, I agree to this Constitution,with all its faults, if they are such; because I think a general government necessary for us, and there is no form of goverment but what may be a blessing to the people if well administered; and I believe

further that this is likely to be well administered for a course of years, and can only end in depotism as other forms of have done before it, when the people shall become so corrupted as to need despotic government....

Benjamin Franklin

# 1818. Re: HF antenna like G5RV etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33f21b67.0@newshost.pcug.org.au>
Source record: 91786
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

James Patterson <PattersJ@ecid.cig.mot.com> wrote:
>Does anyone know of a site describing how to make a mult banded HF
>longwire for transmitting between 80m and 10m?
>--

James - Have a look at Novice Notes Online (URL below), and go to the links section. Under 'Antennas' there's a couple of sites that should provide the info you need.

73,

Peter VK1PK

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____

# 1819. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Dave Lee <dave.lee@zetnet.co.uk>
Message-ID: <19970813204626707 65@zetnet.co.uk>
Source record: 91787

In message <5ss14n$pql$1@news.belwue.de>
moritz@ipers1.e-technik.uni-stuttgart.de () writes:

> >The J-pole should be a little better than a dipole.

> Not True. This is folklore spread by those selling j-poles.
> In the real world the best simple omnidirectional vertical antenna
> is a ground plane, e.g. mounted on a flange socket.

> Moritz

Some time ago I found on the web, plans by KI7ZD for a colinear
(half over half) version of the j-pole(it's constuction was mostly
copper pluming parts). This may explain the confusion as it should
have some gain over a dipole.
Dave

# 1820. Re: HF antenna like G5RV etc?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Malcolm Bell <malcolm.bell@lineone.net>
Message-ID: <01bca834$ec953b20$623e63c3@eozfbrwg>
Source record: 91788
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

This is good advice. Basically there are no 'magic' antennas - whatever any supplier claims - there are simply ways of making them work in different places and in different ways! I find it quite amazing that a) there is so much 'hype' about an antenna like the G5RV and b) that so many people are willing to dish out upwards of 30 - 40 quid to buy so called 'ready-made' (even high power) G5RVs, windoms and the like!

Incidentally, when I first became interested in radio one of my mentors was Louis Varney, G5RV himself. The G5RV antenna was designed simply to give good performance on 14MHz - its 3 half-waves in phase and therefore has good broadside gain if fed carefully (so as not to disturb the balance). 21 MHz didn't exist as an amatuer band, and the additional resonances just follow from simple maths!

G5RV always uses an antenna tuner with his G5RV (!) which comprises the usual 102' top section with about 50 ft of 450 ohm ladder feeder straight to the shack - ie no dodgy bits of coax or ferrite baluns in strategic places. When I last saw the ATU it was a super duper jobbie with plug-in coils for each band.

So follow Walt's (and Louis's) advice - erect as big a doublet as you can get away with, feed it with open wire feeder, and tune it with an ATU. Its worked for me for the last 25 years!

73

G4CXT

# 1821. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Heffner <mheffner@altair.ucdavis.edu>
Message-ID: <33F228AD.FD5@altair.ucdavis.edu>
Source record: 91789

I am somewhat new to radio design, so I have question about crystals and overtones. I would like to build a LO with a freq in the 2m freq band. Since this is in the 146MHz range I would like to use an overtone oscillator. I have looked in catalogs (such as Digi-key) and I have found xtals that list the fundamental freq, but not the overtone. Also the selection is rather poor. My question is where do I find xtals with a selection that covers the freq bands in small steps, and lists the overtone freq of the xtals?

Thanks for any help.

Mike KF6FPW

## 1822. other NGs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: "Ed Mathes, RPA-C" <emathes@servtech.com>
Message-ID: <33F2A83E.3030@servtech.com>
Source record: 91790

Does anyone know the names of other radio related newsgroups? I am
specifically looking for anything with digital
coms...RTTY/FAX/ASCII/etc.
--
Edward J. Mathes, RPA-C
Internal Medicine
emathes@servtech.com
TO REPLY, ROMOVE THE no.spam FROM MY RETURN ADDRESS
---
Opinions above are mine and mine alone.
Opinions above are NOT medical advice.
If you don't like these opinions, make up some of your own.
---
"Politics should be limited in its scope to war, protection of property,
and the occasional precautionary beheading of a member of the ruling
class."
-P.J. O'Rourke
---

# 1823. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <S6xuBXAHgg8zEwUP@two-way.demon.co.uk>
Source record: 91791

>> I'm not having much luck here in the UK tracking down a source of 50V
>> alternators/generators so if someone works in this field (no pun
>> intended) or you can suggest a company with some contact information I'd
>> greatly appreciate it.
>> I'm after BIG current.
>>
>
>Well, I've got a complete generator here, free for removal. Its 286KW
>3 phase, 240/400V. The field winding DC gen souds like just what
>youre after : 50V at 70+A. The diesel is the hard part to shift :
>the whole thing measures 5.5m long by 2m high by 1.5m wide. Bound to
>be over 12 metric ton all up, if not more. Free for removal!
>
>Oh, By the way, its in New Zealand!
Hi Glen,
Sure sounds like it's built like a battleship!
But I need a alternator/genny givving 200A, and no, I aint coming to NZ.
[grin]

Phil G4ZOW/M

# 1824. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33f1809d.38282230@news.erols.com>
Source record: 91792

On 12 Aug 1997 23:15:28 GMT, "Robert Lay" <w9dmk@crosslink.net> wrote:

>How much would you like to bet that your voltmeter is in error? What does
>your voltmeter measure when you put it across your car battery with the
>motor not running? If it says anything other than 12.6 volts, then perhaps
>your voltmeter isn't in calibration.
>
>73 de w9dmk
>
>
Yes, I considered that. With the kind of test gear that I use hear
(Old EiIco scope, Heath sig generator, etc.) this is always a
possibility. But I got the same readings from both my VOM and from the
Heath VTVM that I recently calibrated. Meter inaccuracy may be part
of the problem, but I think the regulator was just on the low side of
the tolerance range.

73 Bill N2CQR

# 1825. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33f1814e.38458594@news.erols.com>
Source record: 91793

Thanks to all the FB help that I got from hams on the net I was able to resolve the problem. I put two diodes in series between the regulator's ground terminal and ground. This raised the output voltage to just under 12 volts.

The regulator is still running a bit hot. I put some additional heat sink protection on it but I still want to cool things down a bit. I'm considering trying to take some turns off the transformer secondary to get the input voltage to the regulator closer to an optimal value.

Thanks!

>

# 1826. FS 50ea 1.25" rack mt Chassis w5/12v pwr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: tonys2@aol.com
Message-ID: <19970813090601.FAA19444@ladder02.news.aol.com>
Source record: 91794

Wired for AC cord with std fuse assy and Power General
325ACM power module 5v 4a 12v +/- .2a .
Lot price $1000. Rear panel loaded with 8+ BNC Conn
Tony
Alex Va

# 1827. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <33f17623.6633841@news.lin.foa.se>
Source record: 91795

I missed the first part of this thread due to summer vaccation but I find the discussion interesting. I have always considered overtone crystals to operate in serise mode, i.e. one can usually replace the crystal with a low ohmic resistor to check the oscillator (this is not always possible).

My question to the audience is: What is the best oscillator ?

Using a crystal controlled oscillator the prime factor is of course stability. Designing one off does mean I do not have to worry about a few extra component as long as the performance is good.

I have used the Butler overtone lately (as suggested by Randall Rhea/ Eagleware and R J Matthys) and the output is very near the series resonance of the crystal and thus I do not need to pull the crystal. Introducing inductors and/or capacitors to vary the frequency means the stability will degrade due to component change.

Using inductors and capacitors to control the exact frequency gives me trouble with microphonics and vaiation over time and temperature.

Should I order crystals off the wanted frequency and try to pull the to the desired frequency? Or specify a certain load capacitance?

I will try to use a mmic with diode limiting to see what performace it will give. Maybe this will be the best of two worlds, good performace and a low parts count (giving high stability).

Any comments or suggestions???

Lasse SM5GLC

On Sat, 09 Aug 1997 08:12:34 -0500, you wrote:

>John M. Franke wrote:
>>
>> There is a difference between third overtone and third harmonic. The
>> third overtone of the crystal is not exactly equal to the third
>> harmonic.
>
>Overtone crystals always operate in a series-resonant mode, which is
>different than the third harmonic of the fundamental parallel resonant
>mode.
>
>Bill W0IYH

"William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>John M. Franke wrote:
>>
>> There is a difference between third overtone and third harmonic. The
>> third overtone of the crystal is not exactly equal to the third
>> harmonic.
>
>Overtone crystals always operate in a series-resonant mode, which is
>different than the third harmonic of the fundamental parallel resonant
>mode.
>
>Bill W0IYH

# 1828. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <33F1D1C0.4CC7@apollo.wes.army.mil>
Source record: 91796
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

You obviously have never had a tuner in line, or you were too stupid to read the instructions or you would have HEARD a HUGE difference in the signal over no tuner. You have been spreading your ignorance on this subject for a long time. Don't you think it about time you give it a try instead of spouting inexperionced idioms from that vacuum between your ears?

Butch KF5DE

# 1829. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: mmss@mmss.sdi.agate.net
Message-ID: <33f1beab.1441616@news.agate.net>
Source record: 91797

europa@primenet.com wrote:

>I have heard of people using spent photographic developing solution for
>silver plating. This method also results in a very thin layer since once
>the copper surface is gone, there is no more electrochemical reaction.
>You'd think that it would only get one molecular layer thick, but who
>knows.

I have used this method on several high power (1 kW to 1.5 kW) 144 MHz amplifier plate circuits. It works very well, and while the silver layer is rather thin, it is not *that* thin. It looked very good and the efficiency / power output of the amplifiers increased sharply (the plate lines were bare copper and brass before plating). This method is electroplating of a sort, since you do use an electrical current to deposit the silver.

Grab the February 1985 issue of ham radio mag and check out the article. Do exactly as it says. From my own experience, there are two cardinal rules:

1) Make sure the surface to be plated is absolutely clean before you start plating (and definitely make sure you don't get fingerprints on it after cleaning)!!!

2) Rinse the parts thoroughly after plating! The solution is very caustic and will corrode your prized circuits if you don't get all of it washed off. Just run cold water over them for 5 to 10 minutes and all will be well.

## 1830. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Robert Lay <w9dmk@crosslink.net>
Message-ID: <01bca7d3$9fa28ea0$8656f6ce@w9dmk.crosslink.net>
Source record: 91798

On second thought, it's the hypo that will contain the silver washed out of the emulsion after the developing process is complete - not the developer, per se.
Sorry, if I mislead you on that. It's been several years since my darkroom was turned into a ham shack - Hi.
73 de w9dmk

# 1831. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: w6uv@wco.com
Message-ID: <33f21d2d.159290998@news.wco.com>
Source record: 91799
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Wed, 13 Aug 1997 10:24:48 -0500, Butch Magee <butch@apollo.wes.army.mil>
wrote:

>You obviously have never had a tuner in line, or you were too stupid to
>read the instructions or you would have HEARD a HUGE difference in the
>signal over no tuner. You have been spreading your ignorance on this
>subject for a long time. Don't you think it about time you give it a
>try instead of spouting inexperionced idioms from that vacuum between
>your ears?

Sure, I've used tuners, but gave up on them when I found they didn't make a
bit of difference in a signal's SNR. Sure, they make a perceived difference in
signal strength, but I can do the same thing by turning up the volume on my
receiver--more signal ...and more noise.

I've been spreading my ignorance on this subject for a long time, huh? Hardly.
This is my first post on this topic, and my first post to
rec.radio.amateur.antenna for several years.

--
Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of
(w6uv at wco dot com) | a kamikaze pilot on his 37th mission.

# 1832. Re: yagis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Andrew Eaton <aeaton@ns.sympatico.ca>
Message-ID: <5st4vd$43$1@news1symp.sympatico.ca>
Source record: 91800
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Brian Willis wrote in article <33EE27AC.7666@one.net>...

>I have been searching for the measurements for a 4 to 6 element yagi for
>2m or 70cm. I haven't come up with anything. If someone out there
>could point me in the direction of measurements, the equations, or a
>piece of software it would be a big help.
>
>thanks!
>
>Brian Willis
>KC8EGY
>
>bgwillis@one.net
>kc8egy@qsl.net

ok here goes from Radio Handbook 23 rd ed.
A 2m Beam 4 element , all ele are 16" apart with the ref=40" , DE=38",
Dir=36 and last Dir=36" also.All are 1/4" aluminum tubing with a T match
feed system 15" long across center of driven element with 2-
30pf var caps for matching. For 50 co-ax use a 1/2 wave balun or feed with
300 ohm line.Center frq of 146Mhz Good luck.

# 1833. Re: Need source of drive belts for auto tune

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Paul Helbert <phelbert@rica.net>
Message-ID: <33F1B986.8FEBDF9C@rica.net>
Source record: 91801

Thanks for all who replied. I found the little timing belts at a local bearings and transmissions place. Had I not had this option locally, McMaster Carr is a best bet as is Motion Industries.

73, Paul, Wv3j

Wa2eaw wrote:

> >I'm looking for a source of the belts
> 
> Paul;
> In the past when I had to replace hard to find belts I went to the
> stores
> that sell vacuume belts.(took the broken belt with me). If that did
> not
> solve my problem go to a large plumbing supply house and check out
> "O"rings. If that fails take an old inner tube and cut what you need.
> Been
> there and done it. It may not l;ook pretty but it works.
> WA2EAW...Bob

# 1834. Re: Needed: Modem chip to decode EAS/SAME signals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: John Miles <jmiles@digitalanvil.NoSpamHere.com>
Message-ID: <33F22FD9.41D7@digitalanvil.NoSpamHere.com>
Source record: 91802
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc,rec.radio.amateur.digital.misc

David Moisan wrote:
>
> I'm designing an interface to retrofit my old NOAA Weather alerting
> radio to receive the new digital EAS/SAME signal. This is a 521 bps
> AFSK signal that you may have heard recently if you monitor NOAA
> weather radio.
>
> I need a modem chip, commercially available, that's programmable for
> that odd 521 bps rate. Once I get a data stream (parallel or even
> serial), from there it should be easy to feed it to a microcontroller
> so that the information from the EAS/SAME alert would be displayed on
> an LCD, and the CPU would turn on the radio when the transmitted alert
> location matched the user's.
>
> Any avenues I should follow? I'm good with microcontrollers, not so
> good with modems (even less good with DSP's). Any ideas much
> appreciated!
>
> 73's, Dave
>
> | David Moisan, N1KGH Email: dmoisan@shore.net |
> | WWW: http://www.shore.net/~dmoisan n1kgh@amsat.org |
> | Invisible Disabilities Page: |
> | http://www.shore.net/~dmoisan/invisible_disability.html |
> | GE Superradio FAQ: |
> | http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html |

At 521 bps, it would make more sense to just build a simple RC
mark/space filter and interface it directly to an I/O port on the
microcontroller. You should be able to 'demodulate' it in software,
with no need for a modem chip.

That being said, you could also use the old Motorola MC14412 (?) 0-600
bps modem chip, if it's still being made. I used to run a homebrew
14412-based modem on my Apple II at 300 bps. (Frankly, that probably
could've been done in software as well, even on a 1 MHz 6502.)

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 1835. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: w0sxi@iti2.net
Message-ID: <33f23d2d.32074227@news.iti2.net>
Source record: 91803
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

moritz@ipers1.e-technik.uni-stuttgart.de () wrote:

>>The J-pole should be a little better than a dipole.
>
>Not True. This is folklore spread by those selling j-poles.
>In the real world the best simple omnidirectional vertical antenna
>is a ground plane, e.g. mounted on a flange socket.
>
>Moritz
>

Moritz,
I think you're wrong, but you have a right to your opinion. I, personally, would use a J-pole antenna any day of the week over a 1/4 wave verticle. I've built and used both. I still custom build and use aluminum J-pole antennas.

73
Bill de W0SXI

# 1836. Re: 11 volts from 12 volt regulator?/ Vrms vs. Vpeak

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001308972301500001@news.primenet.com>
Source record: 91804

:
:To start, 1.414 times 18 volts RMS equals about 24 volts DC. The
:difference between 12 and 24, or 12 volts, is dropped across the
:regulator. Power dissipated would be output current times 12, or 12 watts
:for 1 Amp load current. This may exceed the regulator's ratings, and
:would explain an unusually high temperature. However, if there is any
:noticeable rise in temperature when there is NO load current, then you
:have a defective regulator.

24V DC is no-load current. In that case little or no current is being drawn from the load, so no heat dissipation. Depending on the internal resistance of the transformer secondary, and the filter cap value, the cap voltage should start to approach (Vrms- 2 diode drops) under heavy load. I've seen formulas in books for giving an exact calculation. So dissipation is going to be approaching 6W at the regulator current of 1A.

:
:Getting 11.1 volts output is poor, but may just be the result of being on
:the low side of tolerance. If everything else checks out OK, you might
:try connecting a rectifier diode between the common terminal of the
:regulator, and ground. Result would be 11.1 plus 0.7, or 11.8 Volts
:output. Two in series would raise it to 12.5 Volts. If this doesn't
:appear to work, then try connecting an additional 1K resistor between the
:output terminal and the regulator's common terminal, to ensure that the
:diodes are forward biased.
:
:73, Fred, K4DII

For maximum ripple suppression, any time a network is inserted between the ground lead and real ground, a filter cap of 10-100uF should be put in parallel with the network. This goes for the LM317 as well as the 78xx series.

However, then there is a possibility of device damage if the input to the regulator is shorted, since cap energy is routed thru the regulator. Then you need to put a couple of extra diodes in to shunt the cap energy around the regulator. See Nat Semi Linear databook.

Rob.

# 1837. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: w6uv@wco.com
Message-ID: <33f21ed2.159711713@news.wco.com>
Source record: 91805
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 12 Aug 1997 17:18:10 GMT, orion@xyzcapital.net wrote:

>You are absolutely wrong. The tuner DOES work. It does an excellent
>job on bands that the antenna is not resonant on. My antenna is cut
>for the 41 meter shortwave broadcast band. On this band, yes, the
>tuner does very little. (The preamp does bring in the weak signals,
>however and the attenuator is usefull for the too strong signals.) I
>listen on frequencies from 160 to 10 meters, and this is where the
>tuner is outstanding. It DOES bring up the signal strength 3 or 4 S
>units. It DOES NOT bring the noise up.

OK, explain to me how the tuner can bring the desired signal up 3-4 S units,
but not bring the noise level up at the same time.

>>Modern receivers have plenty of gain. As long as the antenna brings in enough
>>signal so that it's above the receiver's noise floor, antenna tuners and
>>preamps can do more harm than good. I wonder about the quality of the preamp
>>in the MFJ. Probably far inferior to the front end of your Kenwood.
>
>Wrong again. Using the preamp, I can hear signals that were not
>readable without the preamp.

Then your receiver doesn't have adequate gain or you have a lousy antenna. As
I said, most modern receivers are not lacking in gain. All you really need in
an antenna is one that will bring the desired signals up above the noise floor
of your receiver. Note that this does not address gain antennas, which
increase signal strength but sacrifice directional coverage.

>I did extensive "A-B" tests when I received this unit. There is a
>large performance gain with the unit.

Performance gain measured how? By increased signal strength? This is just a
red herring, and the reason why so many antenna tuners are sold. The real
measure of a device, such as an antenna tuner, is if/how it increases the
signal-to-noise ratio.

There's always the possibility that your tuner is acting as a rudimentary
preselector and filtering out signals that are causing cross-modulation,
intermod, etc., which is what may be the cause of the performance gains you're
hearing.

>You seem to be one of those people who say "Oh, that won't work!" in
>the face of evidence that it does work. Therefore, I conclude you
>don't know what you're talking about.

And you probably believe that "make money fast" pyramid schemes work...
TANSTAAFL.

--
Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of
(w6uv at wco dot com) | a kamikaze pilot on his 37th mission.

# 1838. Re: Needed: Modem chip to decode EAS/SAME signals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-13 00:00:00 UTC
From: Dana Gould <NOSPAMdgould@bev.etn.com>
Message-ID: <01bca82a$1bcf6240$4ce06e97@pc3527.bev.etn.com>
Source record: 91806
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc,rec.radio.amateur.digital.misc

David Moisan <dmoisan@shore.net> wrote in article
<33f204bd.24558958@news.shore.net>...
> I'm designing an interface to retrofit my old NOAA Weather alerting
> radio to receive the new digital EAS/SAME signal. This is a 521 bps
> AFSK signal that you may have heard recently if you monitor NOAA
> weather radio.
>
> I need a modem chip, commercially available, that's programmable for
> that odd 521 bps rate. Once I get a data stream (parallel or even
> serial), from there it should be easy to feed it to a microcontroller
> so that the information from the EAS/SAME alert would be displayed on
> an LCD, and the CPU would turn on the radio when the transmitted alert
> location matched the user's.
>
> Any avenues I should follow? I'm good with microcontrollers, not so
> good with modems (even less good with DSP's). Any ideas much
> appreciated!
>
> 73's, Dave

I don't think you're going to find a modem chip to handle that (though I'm not absolutely sure) and a DSP is way overkill (though pretty cool), but AFSK is fairly easy to decode (just think RTTY).

Check out the ARRL handbook and back issues of QST and 73, and you'll find plenty of RTTY AFSK demodulators from the simple to the complex that you could adapt for your project, though you will probably have to tweak the tone frequencies a bit.

--
Dana Gould
NOSPAMdgould@bev.etn.com

# 1839. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: cjNOSPAM@hth.com
Message-ID: <33f2fdb5.334900154@news.buller.se>
Source record: 91711
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

Regards,

/Christer

[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
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* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
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# 1840. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <33F332D6.110C@boeing.com>
Source record: 91712

pavel.reberc@guest.arnes.si wrote:
>
> wrightj@planetc.com wrote:
>
> >How does a homebrewer plate thru holes in making oc boards?
> >I have a X-Y table used to draw the art work on both sides of
> >the pc board and drill them. Then how do you go about plating
> >thru the holes?
>
> For amateur projets you can simply solder components on both sides of
> PCB, i did it many times.
>
> 73, Pavle s57ra
I lost the beginning of this thread.
Try searching for plated through holes or PTH on the web. I had a
bookmark giving detailed instructions at one time, but can't find it
now.
Ralph

# 1841. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <5t028s$87v$1@vixen.cso.uiuc.edu>
Source record: 91713

In a previous article, arvid@plea.se (lassie) says:

>
>Robert Lay wrote:
>>
>> How could their be any silver in photographic developing solution? The
>> silver is in the emulsion. If you want silver in your developing solution
>> you have to first develop a hell of a lot of prints or film. OK?
>>
>> 73 de w9dmkYes, that's correct. In a used fix bath there is silver di(tiosulphate).
>The process is:
>After development, when all the exposed silverbromide crystals have been reduced to
>metallic silver (wich is black since it's very fine powder), the prints has to
>be fixated, the unexposed crystals of silverbromide has to be removed. That is done
>by a solution of potassium tiosulphate: AgBr + 2 S203 (2-) ==> Ag(S2O3)2(3-) + Br(-).
>Both of the resulting substances is water soluble, so they end up in the fix bath.
>If the prints shouldn't be fixated, the unexposed crystals will go black as well when
exposed
>to daylight.
>
>I've read that 1 square meter of print paper contains 5-15 gramms of silver.
>The discussion above is of course only valid for black-and-white prints.
>
>greetings // Lars (SM4RZW)
>

Yes, this is correct. The fixing bath (sodium thiosulfate) removes the
remaining silver salts from the paper/film after it has been developed,
leaving the argentic silver on the paper/film. After a bit of use the
fixing solution becomes quite laden with silver salts.

It is usually only necessary to dip a piece of clean copper (cleaned of
oxide) in the solution to silver-plate it. Other materials, such as
brass or bronze, may have to be electroplated.

I have been doing this for years.

Zack W9SZ

--

# 1842. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Randy Eubanks <reubanks@nospam.com>
Message-ID: <33F39F12.B5BB4A12@nospam.com>
Source record: 91714
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Seems completely on-topic to me! The NOSPAM is to cut out the Junk
E-MAIL

Peter Parker wrote:

> <SNIP>
>
> What a hypocrite! He says he doesn't like spam himself, but spams all
> the
> newsgroups!
>
> --
> _____________________________________________________
> Peter Parker
>
> E-mail: parkerp@pcug.org.au
> Phone: (06) 285 1004 (ah)
> Amateur Radio: VK1PK
>
> Home Page: http://www.pcug.org.au/~parkerp/
> The home of Novice Notes Online and the VK QRP Web Page.
> _____________________________________________________

# 1843. Re: ferrite slug?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Cecil Moore <cecil_a_moore@ccm.ch.intel.com>
Message-ID: <33F389B7.5CA1@ccm.ch.intel.com>
Source record: 91715
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,alt.radio.pirate

Paul DiSciascio wrote:
> I have the wire, but I have been unable to find anything made of
> ferrite, let alone something that might make a decent core. Any ideas?

http://www.bytemark.com/amidon/index.htm

73, Cecil, W6RCA, OOTC

# 1844. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33f335ba.14364428@news.atl.bellsouth.net>
Source record: 91716
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Wed, 13 Aug 1997 20:52:25 GMT, w6uv@wco.com (Jerry Gardner) wrote:

>On Wed, 13 Aug 1997 10:24:48 -0500, Butch Magee <butch@apollo.wes.army.mil>
>wrote:
>
>>You obviously have never had a tuner in line, or you were too stupid to
>>read the instructions or you would have HEARD a HUGE difference in the
>>signal over no tuner. You have been spreading your ignorance on this
>>subject for a long time. Don't you think it about time you give it a
>>try instead of spouting inexperionced idioms from that vacuum between
>>your ears?
>
>Sure, I've used tuners, but gave up on them when I found they didn't make a
>bit of difference in a signal's SNR. Sure, they make a perceived difference in
>signal strength, but I can do the same thing by turning up the volume on my
>receiver--more signal ...and more noise.

Jerry's right. It would be a poor HF receiver indeed which would benefit from
a preamp. Any reasonable HF receiver is limited by atmospheric noise, not
internal noise, and a preamp will amplify that equally with the signal, thus the
SNR will not be improved. The preselection may sometimes be of benefit,
but any competent receiver already has plenty of gain. (Now on VHF+, an
*antenna* mounted preamp can be very useful, but for HF, forget it, atmospheric
noise dominates.)

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 1845. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: pavel.reberc@guest.arnes.si
Message-ID: <5su7nl$7il$1@kanja.arnes.si>
Source record: 91717

wrightj@planetc.com wrote:

>How does a homebrewer plate thru holes in making oc boards?
>I have a X-Y table used to draw the art work on both sides of
>the pc board and drill them. Then how do you go about plating
>thru the holes?

For amateur projets you can simply solder components on both sides of
PCB, i did it many times.

73, Pavle s57ra

# 1846. Scources for Johnson & Air-Dux

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: ghellyar@chch.planet.org.nz
Message-ID: <871551964.985074@venus.plain.co.nz>
Source record: 91718

Help....Could anyone recommend to me goodmail-order scources for Johnson
Variable capacitors & Air-Dux coil stock..
We here in New Zealand have quite a few problems even trying to purchase the
bare homebrewing necessities.

Thanks & 73's..Geoff Hellyar..ZL3KQ..
EMAIL ghellyar@chch.planet.org.nz.

# 1847. ** FLEA at MIT ** Sunday August 17th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <5stj8i$o9d@senator-bedfellow.MIT.EDU>
Source record: 91719
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

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**********

Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754

**********

# 1848. Scources for Johnson Caps & Air-Dux

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: ghellyar@chch.planet.org.nz
Message-ID: <871551344.492299@venus.plain.co.nz>
Source record: 91720

I am looking for mail order outlets for Johnson Variable Air Caps & Air-Dux coil stock. There is a almost total lack of information here in New Zealand making any homebrewing attempts very tiresome. replying in the news group or emailing me would be OK.

73's Geoff Hellyar ZL3KQ, Christchurch, New Zealand.
EMAIL ghellyar@chch.planet.org.nz

Geoff Hellyar. ZL3KQ. Christchurch
New Zealand.

# 1849. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <33F31C6E.5C57@apollo.wes.army.mil>
Source record: 91721
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jerry,
I hate it when I find myself jumping in a subject that I have convictions and a passion for. Makes me say things that I allways regret. I want to apologize to you for the crude language I used directed at you about tuner/shortwave. Trust me when I say that I'm old enough to know better, but get childish from time to time anyway. Again, my apology to you.

Butch KF5DE

# 1850. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: altavoz <altavo19@mail.idt.net>
Message-ID: <33F33312.C9C@mail.idt.net>
Source record: 91722
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

altavoz:
You are wrong , Bill , a 1/4w with 180 degree radials has
more gain than a J pole .
J poles are rather like Jews/arabs ( religion and BS ) .

_____thread below_____

Moritz,
I think you're wrong, but you have a right to your opinion. I,
personally, would use a J-pole antenna any day of the week over a 1/4
wave verticle. I've built and used both. I still custom build and use
aluminum J-pole antennas.

73
Bill de W0SXI

# 1851. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: lassie <arvid@plea.se>
Message-ID: <33F342B6.46D@plea.se>
Source record: 91723

Robert Lay wrote:
>
> How could their be any silver in photographic developing solution? The
> silver is in the emulsion. If you want silver in your developing solution
> you have to first develop a hell of a lot of prints or film. OK?
>
> 73 de w9dmkYes, that's correct. In a used fix bath there is silver di(tiosulphate).
The process is:
After development, when all the exposed silverbromide crystals have been reduced to metallic silver (wich is black since it's very fine powder), the prints has to be fixated, the unexposed crystals of silverbromide has to be removed. That is done by a solution of potassium tiosulphate: AgBr + 2 S203 (2-) ==> Ag(S2O3)2(3-) + Br(-).
Both of the resulting substances is water soluble, so they end up in the fix bath.
If the prints shouldn't be fixated, the unexposed crystals will go black as well when exposed
to daylight.

I've read that 1 square meter of print paper contains 5-15 gramms of silver.
The discussion above is of course only valid for black-and-white prints.

greetings // Lars (SM4RZW)

# 1852. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33f36c48.0@newshost.pcug.org.au>
Source record: 91724
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

cjNOSPAM@hth.com (Christer Johansson) wrote:
>List Of Stamp Applications (L.O.S.A for short)
>==============================================
>
>If you have done something (big or small) with the BASIC Stamp
>[--- cut ---]
>
>
>[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]
>

What a hypocrite! He says he doesn't like spam himself, but spams all the
newsgroups!

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

## 1853. ferrite slug?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Paul DiSciascio <thenut@netaxs.com>
Message-ID: <33F376BC.1523E1D5@netaxs.com>
Source record: 91725
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,alt.radio.pirate

I am building a transmitter, and the schematics/plans that I acquired say to make an inductor by wrapping enamel wire around a ferrite slug. I have the wire, but I have been unable to find anything made of ferrite, let alone something that might make a decent core. Any ideas?

Paul DiSciascio
N3SML

# 1854. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33f31810.939127@news.capital.net>
Source record: 91726
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Wed, 13 Aug 1997 21:18:51 GMT, w6uv@wco.com (Jerry Gardner) wrote:

>
>There's always the possibility that your tuner is acting as a rudimentary
>preselector and filtering out signals that are causing cross-modulation,
>intermod, etc., which is what may be the cause of the performance gains you're
>hearing.
>
>>You seem to be one of those people who say "Oh, that won't work!" in
>>the face of evidence that it does work. Therefore, I conclude you
>>don't know what you're talking about.
>
>And you probably believe that "make money fast" pyramid schemes work...
>TANSTAAFL.
>
>
>--
>Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of
>(w6uv at wco dot com) | a kamikaze pilot on his 37th mission.
Well, I can see there is no way to make you see that the tuner works
and works well. It does what it's advertised to do, and I'm satisfied
with it. I'm not an expert or antenna guru, so I don't have a fancy
explanation. (Perhaps Gary Coffman will comment? I value his opinion,
and I'm sure he could explain this matter so even you could get it.)

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

## 1855. It's fixed, but... (HW-101)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <33F3E02C.51B9@flash.net>
Source record: 91727
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

I picked up an HW 101 at Dayton last year and finally got around to re-tubing it and putting it back on the air. I noticed however that the LSB reception was way out of whack, not having a manual I figured no prob, I'll just tweak the cap/coil/? for the lower side and put it back.

No chance, there are two rocks in the BFO for upper and lower, NO trim cap and no other way to adjust freq. I put a trimmer between the xtal and ground and brought it back into the passband of the IF.

A. Is it typical for old xtals to drift or shift freq?

B. Was this the best way to solve the problem short of replacing the xtal?

73, Tim, ka8ddz

Content-Disposition: inline; filename="!A.HTM"
Content-Base: "file:///C|/NETSCAPE/!A.HTM"

KA8DDZ

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# 1856. Re: ferrite slug?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: "John H." <j..harper@worldnet.att.net>
Message-ID: <33F38553.1CF6@worldnet.att.net>
Source record: 91728
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,alt.radio.pirate

Paul DiSciascio wrote:
>
> I am building a transmitter, and the schematics/plans that I acquired
> say to make an inductor by wrapping enamel wire around a ferrite slug.
> I have the wire, but I have been unable to find anything made of
> ferrite, let alone something that might make a decent core. Any ideas?
>
> Paul DiSciascio
> N3SML

Try Amidon Assc. or RF Parts. Both advertise in QST and/or CQ and 73 Magazine. You might try a web search - I'm pretty sure RF Parts has a web page. I'm curious about how old the schematic for the transmitter is? Most modern gear calls for torroidal inductors as opposed to slugs. Good luck,
--
John Harper Carpe noctum.

# 1857. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19970814212327704 32@zetnet.co.uk>
Source record: 91729

In message <33f1814e.38458594@news.erols.com>
wmeara@erols.com (Bill Meara ) writes:

> Thanks to all the FB help that I got from hams on the net I was able
> to resolve the problem. I put two diodes in series between the
> regulator's ground terminal and ground. This raised the output
> voltage to just under 12 volts.

> The regulator is still running a bit hot. I put some additional heat
> sink protection on it but I still want to cool things down a bit. I'm
> considering trying to take some turns off the transformer secondary to
> get the input voltage to the regulator closer to an optimal value.

> Thanks!

==========
To offload the 7812 device I would suggest you put a 2N3055 or
similar pass transistor in parallel, ensuring (with one resistor )
that at say 2 Amps load the 7812's contribution is 0.5 A. In ARRL
Handbook 1995 , circuits can be found on page 11.17

73 Frank GM0CSZ / KN6WH
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

# 1858. DC-DC Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Norm Melick <henmel@worldnet.att.net>
Message-ID: <33F390FE.5405@worldnet.att.net>
Source record: 91730

I built a variable power supply that uses a digital meter. I'd like to replace the 9V battery used to power the meter with 9 volts off my power supply.

Can anybody direct me to a schematic or article to make a DC-DC converter?

Thanks alot for the BW.

Norm/KF6HSK

# 1859. Re: Ceramic Insulators needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bca845$266b3060$5c95f5ce@wa6vse.fast.net>
Source record: 91807

If you can't find ceramic ones, you might consider fabricating something from Delrin (tm, I think), Nylon, or polycarbonate rod ... all can be machined
with simple tools and are good insulators ... if your application were at very
high UHF or microwave frequencies, you'd have to be concerned about the absorptive properties of the plastic, but at HF, AFAIRemember, all of the materials I mentioned should be OK ... also consider heat issues, as some plastics may soften if the environment is too hot ...

Good luck,

Carl - wa6vse
wa6vse@fast.net

Paul Helbert <phelbert@rica.net> wrote in article
<33F1BB14.23C623C7@rica.net>...
> Please get out your rulers and look in your junk boxes.
>
> I need two or three ceramic insulators 1 3/4 inch x 1/2 inch
> cylindrical. They normally have holes in the ends tapped for either #6
> or #8 x 32 screws. ( I need these to support the rear of a band switch
> in a hf amp.)
>
> Alternatively: does anyone know of a source of such insulators...even
> new ones?
>
> Thanks,
>
> Paul Helbert, Wv3j
>
>

## 1860. F.S. - Tubes, radios, books, misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970814061900.CAA06130@ladder02.news.aol.com>
Source record: 91808

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

# 1861. Re: Needed: Modem chip to decode EAS/SAME signals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <bQBmIEA5dq8zEwWp@pacsat.demon.co.uk>
Source record: 91809
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc,rec.radio.amateur.digital.misc

In article <33f204bd.24558958@news.shore.net>, David Moisan
<dmoisan@shore.net> writes
>I'm designing an interface to retrofit my old NOAA Weather alerting
>radio to receive the new digital EAS/SAME signal. This is a 521 bps
>AFSK signal that you may have heard recently if you monitor NOAA
>weather radio.

Check out CQ VHF recently, they had an article on doing just this. I can
find you a photocopy of the article if you canot get it in the USA.

73 Simon
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 1862. Re: Needed: Modem chip to decode EAS/SAME signals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-14 00:00:00 UTC
From: tomash@airmail.net
Message-ID: <1A406E4C22D72EFD.B4B62C7054C8E11E.3E44727E97F5F4C5@library-proxy.airnews.net>
Source record: 91810

```
>
>> Any avenues I should follow? I'm good with microcontrollers, not so
>> good with modems (even less good with DSP's). Any ideas much
>
```

Hi...I have had a SAME decoder working here since last Jan....just built a simple PLL decoder then did everything in software. I used a 8051 and built a state machine that synch's up to the data stream till it has byte lock then does the SAME msg receipt. Works real well.....here the output is fed into the home automation sysem for alerting the house on severe wx in the local area.
tom a Dallas,Tx.

# 1863. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33F43116.2943@taxes.net>
Source record: 91731
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Peter, he cross-posted to four newsgroups.

The message content was appropriate for all four groups.

He is not guilty of SPAM in its original definition of excessive
cross-posting, or ECP. Since his endeavor is primarily
non-commercial in nature and his cross-posts are on-topic, he is
not guilty of SPAM in its current definition.

I'll bet that you get a lot of unsolicited commercial email (UCE),
which we refer to as SPAM nowadays. You really ought to
SPAMproof your (R)eply-to and your (F)rom, and not put
your valid email address in the body of an article.
It'll help reduce your UCE SPAM-load.

Jim in Texas
Parse my address to send email.

# 1864. Re: It's fixed, but... (HW-101)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001508971011500001@news.primenet.com>
Source record: 91732

In article <33F3E02C.51B9@flash.net>, hynde@flash.net wrote:

:This is a multi-part message in MIME format.
:
:--------------43AD277811CF
:Content-Type: text/plain; charset=us-ascii
:Content-Transfer-Encoding: 7bit
:
:I picked up an HW 101 at Dayton last year and finally got around to
:re-tubing it and putting it back on the air. I noticed however that the
:LSB reception was way out of whack, not having a manual I figured no
:prob, I'll just tweak the cap/coil/? for the lower side and put it back.
:
:No chance, there are two rocks in the BFO for upper and lower, NO trim
:cap and no other way to adjust freq. I put a trimmer between the xtal
:and ground and brought it back into the passband of the IF.
:
:A. Is it typical for old xtals to drift or shift freq?
:
:B. Was this the best way to solve the problem short of replacing the
:xtal?
:
:
:73, Tim, ka8ddz
:
:

I wish I would have thought of that when I had my SB-101, about 23 years ago. At that time, I thought the crystal filter was going bad. But I bet it was just crystal drift.

Rob.

# 1865. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33f1ff14.28596756@news.pipeline.com>
Source record: 91733

BANDWIDTH WASTER, ME, BUT WITH CAUSE:
I ASK EVERYONE WITH ANY INTEREST TO TRANSFER
THIS DOCUMENT TO A WORD PROCESSOR.

Then underline each place where a word may reasnobly be replaced with
some version of one of the following:

CUT TO FIT (including theoretical redesign)

TRY OUT (including any form of computer or breadboard or anything else
meant to allow easy reformation of a circuit.

QUICK AND DIRTY (meaning the pressure the engineers of the Ceasar's
Roman legions were under to get it done with a minimum time and cost, and
that practice has come down to the modern day unchanged.

TOLERANCE (including the words usually, generally, mistake, etc)

I think the blasters and ranters will be shown to be using
CUT TO FIT, TRY OUT, AND REPAIR.

we had cheap, fast low-test-rate design back in the days before
dirt was invented, also. I refer to the '50s not the 70's I was an
old hand at the game by then.

see end also.
Thank you.

"Carl R. Stevenson" <wa6vse@fast.net> wrote:

>Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article
><33f20194.42522935@news.pipeline.com>...
>> "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>>
>> >Bart Rowlett wrote:
>> >>
>> >> Like most engineers I know, the circuits I design
>> >> generally work as designed when first prototyped.
>>
>> GENERALLY? Lou.
>
>Yes, generally ... sometimes people, being people, make mistakes ...
>in the case of modern design techniques, it is usually an error of omission
>or an inaccurate specification from the requirements definition phase ...
>
>> >The best of all worlds is an optimum mix of design, simulation and
>> >experimentation. Invariably, I find that at least one loop-around

>> >through this cycle is needed because of unforseen discrepancies and
>> >deficiencies that show up in the experimental phase. This loop-around
>> >process is very enlightening and it leads to something that doesn't just
>> >"work", but works much better than on the first go-around. There is a
>> >school of thought that the breadboard stage is no longer needed. I do
>> >not believe that for one moment.
>
>It is not at all uncommon in modern design to go from computer design and
>simulation to production-ready hardware without a "traditional" (there's
>that word again ... the more I hear it, the more I'm convinced it's a synonym
>for "backward ways") breadboard stage ... modern product design/development
>cycles are so abbreviated that the time involved in messing around with
>breadboards (which often are not good models of the final product anyway
>because of layout differences, etc.) is impractical and wasteful ...
>
>>There is indeed a loop back and refit process in most things electronic,
>> and a 1% tolerance is still a tolerance, and IRC, for whom I worked in the
>> '70s, made adjustment devices to allow fitting without rebuilding. They called
>> them trim pots. From the rants I have heard blasting me, I must assume those
>> ENGINEERS no longer use trim pots.
>
>NOT IF WE CAN POSSIBLY AVOID IT ...

Note that they STILL cannot avoid it all the time.

>Good designs can, in many cases, allow for "worst case" component tolerances
>well beyond the specifications of the components used ... it's a matter of taking
>the variations into account in the design in many cases.
>
>And yes, most of us ENGINEERS are under tremendous pressure to eliminate
>ALL "tune at test" adjustments from our designs, because the labor to do
>the tuning and the cost of the variable parts are prohibitively expensive ...
>things like trim pots, variable capacitors, etc. are ONLY used when there is
>NO other way ... in many cases, equipment is made self-calibrating ... or is
>calibrated once by an automated process at the factory and the values are
>stored in on-board, non-volatile memory to be reloaded at each subsequent
>power-up ... design techniques like this have replaced manual tuning
>adjustments in many applications ...
>
>Things have changed dramatically since the '70s ... obviously you haven't
>kept up with the times ... but don't feel "like the Lone Ranger" ... there are tens
>of thousands of other hams who are similarly stuck in a technological time warp
>and, like you, are blissfully ignorant of how far behind they are ... THAT is the
>single largest problem facing ham radio ... and the insistence folks like that
>have on clinging to the code is both a symptom and an exacerbating factor
>in this problem ...
>
>Carl - wa6vse
>wa6vse@fast.net

NEGATIVE.

The single largest problem facing modern ANYONE is the same as ever: The preponderance of naysayers who have no idea what's going on outside their own little foxhole and think that means the world is behind them.

In the backward '70s, I devised a radio set made of '50s technology wedded to WW2 technology, and it transmitted music (admittedly poor quality, but it WAS only a prototype) over a bandwidth of 100 HERTZ.

this summer I mentioned it on these ham newsgroups. I got 97 replies, and ALL BUT 3 of them were naysayers, pointing out the known limits why it can't be done the way I said I had done it. All too polite to call me a liar, of cuss, of cuss, but nonetheless saying it can't be done.

But I did do it, back there in the '70s

Haven't been able to sell it, ain't gonna give it away for some snot nose engineer to sneer at until he/she sees how it works and then try to claim credit for. I been down that road and up that tree, and all I got was ticks.

2 of the remaining 3 replies offered encouragement, an ONLY one gave serious advice, which was all I had asked for in the first place.

BTW, about code, do you have a garden? no wheelbarrow, I suppose? Or shovel? Use electronic gardening only, do you? Old dont mean get rid of.

ciao
Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 1866. Wanted CTCSS decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: Bruno <f5lrg@hol.fr>
Message-ID: <33F3AB08.6DF3@hol.fr>
Source record: 91734

Hello,
I am looking for a CTCSS decoder kit or assebly board.
Do know you where I can find it ?
Thanks.

# 1867. Re: High Performance Receiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001508971022590001@news.primenet.com>
Source record: 91735

In article <19970811214801.RAA11619@ladder01.news.aol.com>,
cwonders4@aol.com (Cwonders4) wrote:

:Has anybody built the High Performance Receiver published
:in the ARRL Handbook 1994 to 1997?
:I have built it and would like to compare notes.
:Any takers?
:
:Sameer
:KF6HST

I looked in the 1997 Handbook in the Index and then in Receiver Projects section and could find no mention of the "High Performance Receiver" There are however discussions about some high performance building blocks, like the Makhinson Front End, and the Horrabin H-Mode mixer.

(Note to anyone reading this message that works on the ARRL Handbook:

The ARRL Handbook has one of the worst indexes of any technical book I've seen. You'd think that now that we're in the computer age, it would be easy to produce one, since many word processors do it automatically. Time and time again I have to leaf thru hundreds of pages to find something that I know is in the book, but can't find it in the index.)

Rob.

# 1868. CALIF MOBILE ANT FS TRIALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: w6kkt@frazmtn.com
Message-ID: <33f45ed8.121087@news.frazmtn.com>
Source record: 91736

75m Mobile Antenna Field strength trials will be held August 17th (Sunday) starting 8:00AM. Frequency 3995. Antenna height(tip to ground) 13.5' max.

Location: Bluff overlooking Pacific ocean , south of Carpenteria, Ca in Santa Barbara County (11.9 miles south of Santa Barbara and 13 miles north of Ventura, Ca.
101 freeway to "Hwy 150, Ojai, Lake Casistas exit. From top of exit ramp turn west to frontage road. Turn left (south) on frontage rd marked "NOT A THROUGH ROAD", continue up the grade of frontage road and onto the dirt path at the end of pavement to the top of the mesa. Drive with care on the dirt surface. The area is quite passable but is un maintained and has ruts, dips etc.

Lodging: Motel 6, Carpenteria, Ca., Santa Barbara, Ventura Etc; 1-800-4MOTEL6

For questions call Wally (WA6JPR) 805-969-9796 or Email: w6kkt@frazmtn.com

Talk in frequency: 3995 & 146.520 simplex

Not only are these mobile "shootouts" fun, but one can learn a great deal about their mobile antenna system performance from them.

73, Jesse, W6KKT

## 1869. Home brew exciter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: rs2bk@aol.com
Message-ID: <19970815211601.RAA06529@ladder02.news.aol.com>
Source record: 91737

Looking for some type of home brew exciter that rack mounts, 160 - 10 (80 - 10 mabe). Something that was put together in the late 40's or into the 50's with an 807 or 6146 in the final, possibly with vfo. .
please e-mail me. Jim

# 1870. Re: High performance...Not the handbook.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33F4D02F.5970@crpl.cedar-rapids.lib.ia.us>
Source record: 91738

```
This is a multi-part message in MIME format.

--------------736B37A84090
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

JohnsonHE wrote:
>
> Hi Rob...Like trying to find the wire tables and only later realizing it's
> under Copper wire tables. Sigh.

A scan of page 1190 of 1997 ARRL Handbook.

--------------736B37A84090
Content-Type: text/plain; charset=iso-8859-1; name="Doc0001.wri"
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline; filename="Doc0001.wri"

{\rtf1\ansi\deff0\deftab720{\fonttbl{\f0\fnil MS Sans Serif;}{\f1\fnil\fc=
harset2 Symbol;}{\f2\fswiss\fprq2 System;}{\f3\fnil Times New Roman;}{\f4=
\fmodern Courier;}}
{\colortbl\red0\green0\blue0;}
\deflang1033\pard\tx3168\plain\f4\fs28 Wire:
\par \pard\tx144\tx3168\plain\f4\fs28 \tab Antenna, strength: \tab 30.3=
0
\par \tab Copperclad steel: \tab 20.7
\par \tab Copperweld: \tab 20.7
\par \pard\tx288\tx3312\plain\f4\fs28 Cutters: 25.4
\par Gauge, Standard vs American:\tab 30.31
\par Hookup color codes:\tab 24.9
\par Inductance of straight:\tab 6.23
\par Litz: \tab 6.18
\par Specifications: 24.8
\par Troubleshooting:\tab 27.6,27.20
\par Wrap:\tab 25.11
\par \pard\plain\f4\fs28 =

\par }
=00
--------------736B37A84090--
```

## 1871. doppler velocity measurement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: Heffner <mheffner@altair.ucdavis.edu>
Message-ID: <33F4F80F.6F4B@altair.ucdavis.edu>
Source record: 91739

I am looking for any information on how to build a reciever that will allow me to measure the doppler shift of a moving cw transmitter. The purpose is to measure the velocity of the transmitter wrt the receiver. I would like to operate in the 2m band. Please e-mail me any references.

Thanks,
Mike KF6FPW

# 1872. Re: High performance...Not the handbook.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33F52119.3D6B@crpl.cedar-rapids.lib.ia.us>
Source record: 91740

JohnsonHE wrote:

>
> I don't bother with MIME'd messages, so not real sure about your comments,
> but reading between the lines, figure it was something about the Cu wire
> tables

My first attempt was garbled, but the second try should be more
readable. I recently bought an HP scanner.

Bill W0IYH

# 1873. Re: High performance...Not the handbook.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33F4D1B5.5FA0@crpl.cedar-rapids.lib.ia.us>
Source record: 91741

```
This is a multi-part message in MIME format.

--------------81E6BE34BC1
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

William E. Sabin wrote:
>
> JohnsonHE wrote:
> >
> > Hi Rob...Like trying to find the wire tables and only later realizing it's
> > under Copper wire tables. Sigh.
>
> A scan of page 1190 of 1997 ARRL Handbook.
>
>

--------------81E6BE34BC1
Content-Type: text/plain; charset=us-ascii; name="hbtext.txt"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="hbtext.txt"

Wire:
Antenna, strength: 30.30
Copperclad steel: 20.7
Copperweld: 20.7
Cutters: 25.4
Gauge, Standard vs American: 30.31
Hookup color codes: 24.9
Inductance of straight: 6.23
Litz: 6.18
Specifications: 24.8
Troubleshooting: 27.6,27.20
Wrap: 25.11

--------------81E6BE34BC1--
```

# 1874. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: Mike - WB0IKT <crucis@sky.net>
Message-ID: <33F47409.644AA5C8@sky.net>
Source record: 91742
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You can also make a quicky 2M ground plane using five pieces of 19" segment cut from coathangers and an SO-239 connector. Solder one 19" wire straight out from the center conductor, solder the ramaining 19" segment at each corner mounting screw-hole, 90 degrees from the center conductor. If you aren't satisfied with the SWR, trim the length of the center conductor wire, and/or bend the wires at each corner to more than 90degree fron the center conductor wire.

Quick, easy, cheap! Had one up all through a winter one year. Worked great!

WB0IKT

Peter Parker wrote:
>
> fireman@netrover.com (Jean-Pierre Magnan) wrote:
>
> >Now, according to the latest posts in the various ham NG, a J-pole is
> a
> >lousy antenna. I had planned to build one sometimes this month. Now
> I'm
> >not just sure I should. I heard about dipoles doing a better job. Is
> >this true and where, on the Internet, can I get plans to do this ? Is
> >there other omnidirectionnal antennas that can be built on a thight
> >budget ?
> >
>
> The J-pole should be a little better than a dipole. The only one I
> ever
> built worked very well.
>
> For a quick dipole, get some RG58 coax and strip off the outer jacket
> up
> to 48cm from the end of the cable. Then make a small hole in the
> exposed
> braid near where the outer jacket starts. Bend the cable and pull out
> the
> inner conductor. end the braid back along the coax. Hang the antenna
> up somewhere by the end of the inner conductor. Your dipole's
> finished.
>
> 73,
>
> Peter VK1PK

> 
> --
> _____________________________________________________
> Peter Parker
> 
> E-mail: parkerp@pcug.org.au
> Phone: (06) 285 1004 (ah)
> Amateur Radio: VK1PK
> 
> Home Page: http://www.pcug.org.au/~parkerp/
> The home of Novice Notes Online and the VK QRP Web Page.
> _____________________________________________________

--
==========================================================================
Mike Watson, WB0IKT QCWA Mbr# 28651, Mid-Continent Chapter
#35
Raymore, Missouri, USA Grid: EM28st
http://www.sky.net/~crucis E-mail: crucis@sky.net or WB0IKT@juno.com
==========================================================================

## 1875. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: Alan.Peake@dsto.defence.gov.au
Message-ID: <Alan.Peake.62.002ECEA9@dsto.defence.gov.au>
Source record: 91743

>Reminds me of the customer who wanted a 12 volt power supply. When I asked
>him the tolerance, he said "none. Exactly 12 volts." I had to admit that I
>didn't know how to build one of those.

What you could've done was to build one and adjust the output for 12.00 +/-
0.005 and show the customer the output on a 3-1/2 digit DVM and say "There
you are! 12 Volts exactly!"

Alan

## 1876. Ham Database/Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: Jason <kb5urq@earthlink.net>
Message-ID: <33F53137.64E1@earthlink.net>
Source record: 91744

What is the best ham database to use on the internet. I'm looking for one which has variable fields of search, like City, State, Zip Code, etc.

Also, does anyone have a list of ham radio newsgroups?

Thanks for the info.

Jason Dugas

# 1877. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <+B5VPNAlK78zEwiW@two-way.demon.co.uk>
Source record: 91745

>>> I'm not having much luck here in the UK tracking down a source of 50V
>>> alternators/generators so if someone works in this field (no pun
>>> intended) or you can suggest a company with some contact information
>I'd
>>> greatly appreciate it.
>>> I'm after BIG current.
>>>
>Know of a case where a guy used a regular automotive alternator to do
>this. He had to build a custom regulator for it. Talk about big current
>he used the damned thing for welding among other things. Think this is
>not uncommon, someone out there should know how to do it.

Thanks for the info. I've heard of this but feel that at the current
level that I'm after I really have to track down a proper 48V
alternator.
Lestek in the US are sending me their current catologue but I may have
to strap two units together.
Now I'd like to find someone who knows something about PTO's off the
prop on military vehicles, I don't fancy snapping the crank when I key
the mic.

Phil

# 1878. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: onat@turbine.kuee.kyoto-u.ac.jp
Message-ID: <5t139s$3fe@kuee2.kuee.kyoto-u.ac.jp>
Source record: 91746
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

In Peter Parker's opinion;

: cjNOSPAM@hth.com (Christer Johansson) wrote:
: >List Of Stamp Applications (L.O.S.A for short)
: >==============================================
: >
: >If you have done something (big or small) with the BASIC Stamp
: >[--- cut ---]
: >
: >
: >[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]
: >
:
: What a hypocrite! He says he doesn't like spam himself, but spams all the
: newsgroups!
:
: Peter Parker

Ooops!

For the uninitiated; LOSA is not a Usenet spam; it is a list of applications of the "Stamp" microcontroller card. On the contrary, quite useful and inspirational piece of work IMHO.

This message seems to be posted to all the related newsgroups, which is the appropriate thing to do (crossposting is better than posting seperately to each group.)

| Ahmet ONAT Kyoto Univ. Japan |
| E-mail : onat@kuee.kyoto-u.ac.jp |
| WWW page : http://turbine.kuee.kyoto-u.ac.jp/staff/onat.html |
| My 6 leg walker, RC airplanes & more in home page |

Land mines kill civilians in peacetime! Support total ban.

# 1879. Re: It's fixed, but... (HW-101)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <6rbemaAU7B9zEwpV@pacsat.demon.co.uk>
Source record: 91747

In article <33F3E02C.51B9@flash.net>, ka8ddz <hynde@flash.net> writes
>
>A. Is it typical for old xtals to drift or shift freq?
>
Yes, quite possible, called 'ageing' and sometimes can be qutre severe.

>B. Was this the best way to solve the problem short of replacing the
>xtal?
Did it work! Sounds good to me! Just keep an eye on it and see what
happens, if you're worried order a new rock! Won't be that expensive!

73 Simon

>

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 1880. Re: Long Live Cut and Try (was Re: Front end of DC RX)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33f308e6.31110234@news.pipeline.com>
Source record: 91748

Mark Little <markl@dove.net.au> wrote:

>Amateur Radio is big enough to accomodate every interest. How sad that
>amateurs seem to feel that only people who share their interests are the
>"true amateurs". It reminds me of religion where each sect thinks it is
>the only true holder of the faith and that everyone else is wrong and on
>a path to hell - The truth is that they are all probably wrong (at least
>to some degree) ;-)
>
>Mark.

And then comes someone like this, who is inarguably RIGHT.
Sir, I salute you. No sarcasm, I am sincere.
A reasonable ost after all the childish slanging is a real
breath of fresh air.

Thank you.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 1881. re: High performance...Not the handbook.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970815201500.QAA25053@ladder01.news.aol.com>
Source record: 91749

Hi Rob...Like trying to find the wire tables and only later realizing it's under Copper wire tables. Sigh.

W4ZCB

## 1882. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-15 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970815160101.MAA09775@ladder01.news.aol.com>
Source record: 91750

What you may be looking for is a portable heavy duty welder. This could crank out the voltage and current you need. Maybe float a bank of lead-acid batteies across it. There could be some problems with regulation here, but nothing that couldn't be worked out.

## 1883. Re: ferrite slug?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmEF0y8M.MpJ@netcom.com>
Source record: 91662
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,alt.radio.pirate

Paul DiSciascio (thenut@netaxs.com) wrote:
: I am building a transmitter, and the schematics/plans that I acquired
: say to make an inductor by wrapping enamel wire around a ferrite slug.
: I have the wire, but I have been unable to find anything made of
: ferrite, let alone something that might make a decent core. Any ideas?

Take a look inside a junk TV set. You will find a fistful of slugs
and ferrite cores.

# 1884. Ham shops in Tennessee

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: ernie@netvision.net.il
Message-ID: <33f616f9.5137301@news.netvision.net.il>
Source record: 91663

Hello
I'm looking for any information on the subject and all will be highly
appreciated.
Thanks in advance de Isaac, 4Z4TL
73

# 1885. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: Jack Taylor <n7oo@goodnet.com>
Message-ID: <Pine.GSO.3.95.970816153202.12978A-100000@goodguy>
Source record: 91664

On Sat, 16 Aug 1997, William E. Sabin wrote:

> KF6IIU wrote:
>
> > 
> > > The Radio Shack 259's were so crappy, they weren't even the right inner
> > > diameter to accept RG8 cable.
>
> They also sell a silver plated version that is more expensive ($3.99),
> part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99 cents),
> part number 278-204. I have used these parts OK.
>
> Bill W0IYH

I've had pretty good success by just using solder flux with the crappy
fittings.

73 de Jack

# 1886. How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: kr4wm@sccoast!.net
Message-ID: <MPG.e6035f4eb4e8e229896af@news.infoave.net>
Source record: 91665

I'm working on a project for a friend, and need to connect two LED's in parallel. When I hook them up, only one lights, the other just sits there. I'm supposing that the one which draws the most current is the only one which will get any current through it, or something like that. Don't need to understand the theory, just tell me what I need to know to get it working- please. We'll discuss why this happens in another message thread- it's Saturday night, and I have to get it back to the owner on Monday morning (hopefully in working condition). No, it's not something I broke. It's a clock with an ambulance on the face, and the ambulance has three LED's for emergency lights. You push a momentary contact switch, and the LED's alternate, i.e. Two parallel LED's light at one time, then go out, and the third light comes on, and they do this back and forth contunially. At one time, it worked like this from the factory (who's out of business). I had to home brew a siren and this light system without the benefit of having the old circuit to look at. This is something I'm rigging up for the owner, who likes flashy stuff. Thanks in advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC

TO REPLY: remove the ! from my address.

# 1887. Re: High performance...Not the handbook.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970816014700.VAA25110@ladder02.news.aol.com>
Source record: 91666

>From: "William E. Sabin" <sabinw@crpl.cedar-rapids.

Hi Bill.

Well now, a number of years ago, I stopped purchasing a new handbook every year after having done so for many years and paying for a new book only to get 5 percent of a new book. The rest of it was in my old handbook. I guess that was the first time I realized that there wasn't any tooth fairy, no real santa claus and ham radio started to look just a tad jaded.

Now I've got a 1991 handbook (purchased) in the shack, and a 1988 handbook (purchased) in the shop, and maybe, if I like the cover of the one next year, (You never get to look inside before you buy them you know!) I'll buy a new 1998 and move the 1991 to the workshop. It's about as frequent as I get anymore.

I'm sure I'll enjoy your contribution to it, and maybe a few of the others who labor so hard to provide a little payback for their hobby of so many years, but at the current price, it had REALLY better be good.

Meanwhile, back at the ranchhouse, in MY copy of the handbook, the index leaves something to be desired.

I don't bother with MIME'd messages, so not real sure about your comments, but reading between the lines, figure it was something about the Cu wire tables

W4ZCB

# 1888. Re: MRF 479 Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: gspencer@stim.stim.tec.tn.us
Message-ID: <1997Aug16.134142.1@stim.stim.tec.tn.us>
Source record: 91667

In article <33F600D2.3F19@his.com>, "James R. Binkley" <w4aos@his.com> writes:
> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.
>
> Thanks Bob w4aos@his.com

You can get the MRF479 for $19.93 from RF Parts (1-800-737-2787)

I hope this helps.

Garry Spencer, WB4JXN

# 1889. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bca9da$ee9f1920$4a90f5ce@wa6vse.fast.net>
Source record: 91751

Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article
<33f1ff14.28596756@news.pipeline.com>...
>
> The single largest problem facing modern ANYONE is the same as ever: The
> preponderance of naysayers who have no idea what's going on outside their

> own little foxhole and think that means the world is behind them.

However, those of us who work at the forefront of technology know of what
we speak when we say that the vast majority of hams are stuck in the 50s
(or 60s at best) technologically speaking ...

> In the backward '70s, I devised a radio set made of '50s technology
wedded
> to WW2 technology, and it transmitted music (admittedly poor quality, but
it WAS
> only a prototype) over a bandwidth of 100 HERTZ.

I can believe that it sounded poor ...

> this summer I mentioned it on these ham newsgroups. I got 97 replies, and
ALL
> BUT 3 of them were naysayers, pointing out the known limits why it can't
be done
> the way I said I had done it. All too polite to call me a liar, of cuss,
of
> cuss, but nonetheless saying it can't be done.
> 2 of the remaining 3 replies offered encouragement, an ONLY one gave
> serious advice, which was all I had asked for in the first place.

I believe if your check back, you'll find that I gave you nothing but some
simple
advice on how to protect your ideas, based on my experience in getting a
couple
of patents ...

I don't recall bad-mouthing you, or your claims of accomplishment, but I do
recall
having serious doubts that you knew what the hell you were talking about
..
(but again, if I recall correctly, I kept them to myself ...)

> But I did do it, back there in the '70s
>
> Haven't been able to sell it, ain't gonna give it away for some snot nose
> engineer to sneer at until he/she sees how it works and then try to claim

> credit for. I been down that road and up that tree, and all I got was
ticks.

If it was worth much, you should have been able to patent it and license it
by now ...
>
> BTW, about code, do you have a garden?

Nope ...

> no wheelbarrow, I suppose?

Nope ...

> Or shovel?

Nope ...

> Use electronic gardening only, do you?

Yup ... all I grow are electronics things ...

>Old dont mean get rid of.

In technology, old=junk=toss it (or sell it if you can find someone to give
you 10 cents a pound to haul it off ) ...

486 machines are getting hard to give away ... 386's are ancient,
out-dated,
and won't run much modern software ... 286s??? The electronic equivalent
of dinosaurs ... XTs??? Primordial slime ...

Yes, in some venues, old DOES mean "get rid of" ...

Carl - wa6vse
wa6vse@fast.net

# 1890. Hot Young Live Video !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: 894904940@90r904904.com
Message-ID: <33f4fd73.0@news.inreach.com>
Source record: 91752

Check out the Hottest New Live Sex Site on the Net !!!

The Worlds most Erotic Young Girls Around UNCENSORED & LIVE !!!

*** Free Samples ***

Visit:

http://www.dirtyteens.com/live

All Models are over the Age of 18 Years of Age or Older.

## 1891. WTB: 25K pot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: bry@REMOVE.mns.net
Message-ID: <33f50b90.1553993@news1.mnsinc.com>
Source record: 91753
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I need a FOUR WATT potentiometer (large-ish!) for the drive control in
my Valiant. It is 25 K-ohms panel pot with the standard 1/4" shaft
about 3/8" to 1/2" long, the type that a regular knob will go on.

Anyone got one?

NB: delete out the "REMOVE" from my e-mail address
or reply here.

Thanks - Bry, AF4K

# 1892. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>
Source record: 91754

KF6IIU wrote:

>
> The Radio Shack 259's were so crappy, they weren't even the right inner
> diameter to accept RG8 cable.

They also sell a silver plated version that is more expensive ($3.99),
part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99 cents),
part number 278-204. I have used these parts OK.

Bill W0IYH

# 1893. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: Sid Boyce <szb50@amdahl.com>
Message-ID: <33F4F48F.AAC291E6@amdahl.com>
Source record: 91755

Bill Meara wrote:
>
> I just put the finishing touches on my (supposedly!) 12 VDC QRP
> station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
> VDC voltage regulator.
>
> Problem is that the output voltage is only about 11.1 volts.
>
> Has anyone seen this problem before? What do you think, bad
> component?
>
> I also notice that the regulator gets quite hot. I put a fairly large
> heat sink on it and I don't seem to get to the thermal shut down point
> (even when pulling around 1 amp through it.)
>
> Any suggestions?
>
> Thanks, 73 Bill N2CQR
Looks like it to me, with that sort of input voltage, you should get
12V out no trouble, very like the regulator is out of spec.
Regards
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375
---
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

# 1894. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: Hans Attersjo <hattersj@nospam.eso.org>
Message-ID: <33F5C795.2DE7@nospam.eso.org>
Source record: 91756
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Peter Parker wrote:
> cjNOSPAM@hth.com (Christer Johansson) wrote:
> >List Of Stamp Applications (L.O.S.A for short)
> >==========================================
> >[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]
> What a hypocrite! He says he doesn't like spam himself, but spams all the
> newsgroups!

This is not spamming! It is useful information for a lot of people
involved in computer control and also home automation.

--

Hans Attersjo
ESO, la Silla
Chile
Remove the nospam from my email address.

# 1895. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970816153801.LAA24862@ladder01.news.aol.com>
Source record: 91757

>
>Bill Meara wrote:
>>
>> I just put the finishing touches on my (supposedly!) 12 VDC QRP
>> station power supply. Circuit is VERY simple: 18 volt (2 Amp)
>> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
>> VDC voltage regulator.
>>
>> Problem is that the output voltage is only about 11.1 volts.
>>
>> Has anyone seen this problem before? What do you think, bad
>> component?
>>
>> I also notice that the regulator gets quite hot. I put a fairly large
>> heat sink on it and I don't seem to get to the thermal shut down point
>> (even when pulling around 1 amp through it.)
>>
>> Any suggestions?
>>
>> Thanks, 73 Bill N2CQR
> Looks like it to me, with that sort of input voltage, you should
get
>12V out no trouble, very like the regulator is out of spec.
>Regards
>--
>... Sid Boyce...Amdahl(UK)...44-121 422 0375
> ----------------------------------
>Any opinions expressed above are mine and do not necessarily represent
> the opinions or policies of Amdahl Corporation.
>
>
Whats the input voltage to the regulator . Sounds like it could be on the
high side causing the regulator to dissipate a lot more power than it was
designed. A lot of times a 18volt xfmr will actually put out 20 volts or
more. Also just how much power are you running out of your TX 4or 5 watts
can easily use up your 1 amp. Radio shack parts speak for themselves. When
I use a 3 legged regulator I prefer the ones in a TO-3 case. Seems to
have less problems with them. Also use some bypass caps on the input and
output of the reg. If you are working the reg near its limit s I'd suggest
going to a 3 amp device

# 1896. Re: ferrite slug?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: Chuck Harrington <paketpet@gate.net>
Message-ID: <33F5C651.751B@gate.net>
Source record: 91758
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,alt.radio.pirate

Paul DiSciascio wrote:
>
> I am building a transmitter, and the schematics/plans that I acquired
> say to make an inductor by wrapping enamel wire around a ferrite slug.
> I have the wire, but I have been unable to find anything made of
> ferrite, let alone something that might make a decent core. Any ideas?
>
> Paul DiSciascio
> N3SML

Goto the site http://www.bytemark.com for Amidon products.

--
Visual PacketPeT - Terminal Software For All hardware TNCs!
Visit WEB SITE - http://www.gate.net/~paketpet
DOWNLOAD - ftp://ftp.gate.net/pub/users/paketpet/vpaket32.zip
EMAIL - paketpet@gate.net

# 1897. MRF 479 Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: "James R. Binkley" <w4aos@his.com>
Message-ID: <33F600D2.3F19@his.com>
Source record: 91759

Does anyone know where I can get an MRF 479 transistor, or its equivalent. I need one for a portable transciever I have, and don't find this transistor listed in any of my catalogs.

Thanks Bob w4aos@his.com

# 1898. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-16 00:00:00 UTC
From: markem@primenet.com
Message-ID: <5t515c$s7@nntp02.primenet.com>
Source record: 91760

Most of the mail order connector/cable outfits have teflon/silver PL-259's for $1.00-1.50 each depending on qty, even cheaper if you buy lots of 10. The silver plated adapters go for 25 - 30 cents each. The silver-plated 259's are MUCH easier to solder and if you're using the adapter for RG-58, they'll suck the solder right in and give a great connection to the cable. Of course, my old Weller 350W gun helps a little too...

73... Mark AA7TA

In article <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>,
sabinw@crpl.cedar-rapids.lib.ia.us wrote:
>KF6IIU wrote:
>
>>
>> The Radio Shack 259's were so crappy, they weren't even the right inner
>> diameter to accept RG8 cable.
>
>They also sell a silver plated version that is more expensive ($3.99),
>part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99 cents),
>part number 278-204. I have used these parts OK.
>
>Bill W0IYH

# 1899. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: Mark@delete.this.nlcc.demon.co.uk
Message-ID: <871777472snz@nlcc.demon.co.uk>
Source record: 91668
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

In article <33f36c48.0@newshost.pcug.org.au>
parkerp@pcug.org.au "Peter Parker" writes:

> cjNOSPAM@hth.com (Christer Johansson) wrote:
> >List Of Stamp Applications (L.O.S.A for short)
> >==========================================
> >
> >If you have done something (big or small) with the BASIC Stamp
> >[--- cut ---]
> >
> >
> >[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]
> >
>
> What a hypocrite! He says he doesn't like spam himself, but spams all the
> newsgroups!

I think an apology to Mr. cj(at)aitch.tee.aitch(dot)com might be
appropriate, _if_ you could oblige, Mr., er...

\/\/\/\/\/\/\/\/\/\/ SPAM THIS ADDRESS go on, spam it!
parkerp@pcug.org.au
/\/\/\/\/\/\/\/\/\/\ SPAM THIS ADDRESS go on, spam it!

# 1900. Re: Front end of DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <33ff4a6a.12205213@news.pipeline.com>
Source record: 91669

"Carl R. Stevenson" <wa6vse@fast.net> wrote:

>Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article
><33f1ff14.28596756@news.pipeline.com>...
>>
>> The single largest problem facing modern ANYONE is the same as ever: The
>> preponderance of naysayers who have no idea what's going on outside their
>> own little foxhole and think that means the world is behind them.
>
>However, those of us who work at the forefront of technology know of what
>we speak when we say that the vast majority of hams are stuck in the 50s
>(or 60s at best) technologically speaking ...

YES!!
The vast majority of EVERY field is stuck in the past.
It is part of what I was saying.

>> In the backward '70s, I devised a radio set made of '50s technology
>>wedded to WW2 technology, and it transmitted music (admittedly poor
>>quality, but it WAS only a prototype) over a bandwidth of 100 HERTZ.
>
>I can believe that it sounded poor ...
>
>> this summer I mentioned it on these ham newsgroups. I got 97 replies, and
>>ALL BUT 3 of them were naysayers, pointing out the known limits why it can't
>>be done the way I said I had done it. All too polite to call me a liar, of cuss,
>> of cuss, but nonetheless saying it can't be done.
>> 2 of the remaining 3 replies offered encouragement, an ONLY one gave
>> serious advice, which was all I had asked for in the first place.
>
>I believe if your check back, you'll find that I gave you nothing but some
>simple advice on how to protect your ideas, based on my experience in getting a
>couple of patents ...
>
>I don't recall bad-mouthing you, or your claims of accomplishment, but I do
>recall having serious doubts that you knew what the hell you were talking about
>..
>(but again, if I recall correctly, I kept them to myself ...)
>
>> But I did do it, back there in the '70s
>>
>> Haven't been able to sell it, ain't gonna give it away for some snot nose
>> engineer to sneer at until he/she sees how it works and then try to claim
>> credit for. I been down that road and up that tree, and all I got was
>>ticks.

>
>If it was worth much, you should have been able to patent it and license it
>by now ...
>>
>> BTW, about code, do you have a garden?
>
>Nope ...
>
>> no wheelbarrow, I suppose?
>
>Nope ...
>
>> Or shovel?
>
>Nope ...
>
>> Use electronic gardening only, do you?
>
>Yup ... all I grow are electronics things ...
>
>>Old don't mean get rid of.
>
>In technology, old=junk=toss it (or sell it if you can find someone to give
>you 10 cents a pound to haul it off ) ...
>
>486 machines are getting hard to give away ... 386's are ancient,
>out-dated, and won't run much modern software ... 286s??? The electronic equivalent
>of dinosaurs ... XTs??? Primordial slime ...
>
>Yes, in some venues, old DOES mean "get rid of" ...
>
>Carl - wa6vse
>wa6vse@fast.net

I started to answer this para by para, and then came to the peroration.
486 he says is hard to give away, etc, and 386 is worse, and so on
Let Then Eat Cake, said the queen.

With that he shows how he is divorced from rfeality.

The flea markets are loaded with 8088 machines that sell well for about
150 bucks and get people started on computing who haven't BEEN to
college to learn the show.

This is the same kinda guy who says if you aint't got the latest and greatest
you are kidding yourself, while all around him, others do it better and cheaper.

In one place, he says it must have been poor quality radio, and in another, he
says he didn't badmouth me, and in another he says he didn't think I knew
what I was talking about.

Hoo, boy.

Ciao.

Lou Hinshaw
Next thing for me to do is be kind to sorts like this, but mostly myself, and quit wasting time on this NG.

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 1901. Re: Needed: Modem chip to decode EAS/SAME signals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: dwentz@accessus.net
Message-ID: <5t6qta$9q6$1@news.accessus.net>
Source record: 91670
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.misc,rec.radio.amateur.digital.misc

There is nothing avalable at this time. I have some info from NOAA, and the odd rates where chosen so nobody could hack the thing easly. I am planing on building a unit also, and have been looking at some of the older RTTY stuff to get the job done. This is not the best way to do it, the parts count will be a bit high, but size is not a consern of mine at this time.

73's de KB9JJA/Dale

In article <33f204bd.24558958@news.shore.net>, dmoisan@shore.net says...
>
>I'm designing an interface to retrofit my old NOAA Weather alerting
>radio to receive the new digital EAS/SAME signal. This is a 521 bps
>AFSK signal that you may have heard recently if you monitor NOAA
>weather radio.
>
>I need a modem chip, commercially available, that's programmable for
>that odd 521 bps rate. Once I get a data stream (parallel or even
>serial), from there it should be easy to feed it to a microcontroller
>so that the information from the EAS/SAME alert would be displayed on
>an LCD, and the CPU would turn on the radio when the transmitted alert
>location matched the user's.
>
>Any avenues I should follow? I'm good with microcontrollers, not so
>good with modems (even less good with DSP's). Any ideas much
>appreciated!
>
>73's, Dave
>
>| David Moisan, N1KGH Email: dmoisan@shore.net |
>| WWW: http://www.shore.net/~dmoisan n1kgh@amsat.org |
>| Invisible Disabilities Page: |
>| http://www.shore.net/~dmoisan/invisible_disability.html |
>| GE Superradio FAQ: |
>| http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html |
>

# 1902. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5t6vdt$8ts_001@leeds.ac.uk>
Source record: 91671

In article <33F228AD.FD5@altair.ucdavis.edu>,
Heffner <mheffner@altair.ucdavis.edu> wrote:
>I am somewhat new to radio design, so I have question about crystals
>and overtones. I would like to build a LO with a freq in the 2m freq
>band. Since this is in the 146MHz range I would like to use an overtone
>oscillator. I have looked in catalogs (such as Digi-key) and I have
>found xtals that list the fundamental freq, but not the overtone. Also
>the selection is rather poor. My question is where do I find xtals with
>a selection that covers the freq bands in small steps, and lists the
>overtone freq of the xtals?
>
>Thanks for any help.
>
>Mike KF6FPW

Don't talk to me about 2m xtals! :-) I've been trying to get a UKW Berichte transverter design to work for the past fortnight and the LO (116MHz crystal series resonant with a grounded gate JFET) doesn't want to osciallate, I've tried everything (including hooking the xtal up to an HP8753D Vector Network Analyser (300kHz - 6GHz!) to make sure that the xtal is working). I've just got my license about a fortnight ago but I still haven't been on air...

Re your questions however: fundemental mode xtals can be operated in their overtone mode BUT they won't operate on the exact odd multiple (thus their overtone freq. won't be specified). You are probably better off using a standard xtal and multiplying it by say 18 or so, this allows a reasonable tuning range of 100kHz at the desired frequency. I'm in the UK so sending you the address of UK suppliers won't be much use I'm afraid.

73 and good luck de Laurens M1CCO

(wow, this is the first time I've used my callsign in a posting!)

# 1903. Re: Ham-Homebrew Digest V97 #459

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: jobson@directcon.NET
Message-ID: <33F7051F.D49563C5@directcon.net>
Source record: 91672
Body handling: HTML body converted to readable text

Ham-Homebrew Mailing List and Newsgroup wrote:

> Ham-Homebrew Digest Sat, 16 Aug 97 Volume 97 : Issue
> 459
>
> Today's Topics:
> 11 volts from 12 volt regulator? (2 msgs)
> 12V portable electronic Cooler/warmers
> Crystals and overtones (2 msgs)
> Double Sided PC Boards
> F.S. - Tubes, radios, books, misc...
> Front end of DC RX
> Ham Database/Newsgroups
> Ham shops in Tennessee
> High performance...Not the handbook. (2 msgs)
> How do you connect LED's in parallel?
> MRF 479 Needed
> Need CRYSTAL SET plans
> PL259 Attachment to COAX Cable (3 msgs)
> Wanted - Copy of Article: Ham Radio Feb 85
> WTB: 25K pot
>
> Send Replies or notes for publication to:
> Send subscription requests to:
> Problems you can't solve otherwise to brian@ucsd.edu.
>
> Archives of past issues of the Ham-Homebrew Digest are available
> (by FTP only) from ftp.UCSD.Edu in directory
> "mailarchives/ham-homebrew".
>
> We trust that readers are intelligent enough to realize that all text
> herein consists of personal comments and does not represent the
> official
> policies or positions of any party. Your mileage may vary. So there.
>
> ----------------------------------------------------------------------
>
> Date: 16 Aug 1997 15:38:53 GMT
> From: hamm4fun@aol.com (Hamm4fun)
> Subject: 11 volts from 12 volt regulator?
>
> >
> >Bill Meara wrote:

> >>
> >> I just put the finishing touches on my (supposedly!) 12 VDC QRP
> >> station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> >> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812
> 12
> >> VDC voltage regulator.
> >>
> >> Problem is that the output voltage is only about 11.1 volts.
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> >> Has anyone seen this problem before? What do you think, bad
> >> component?
> >>
> >> I also notice that the regulator gets quite hot. I put a fairly
> large
> >> heat sink on it and I don't seem to get to the thermal shut down
> point
> >> (even when pulling around 1 amp through it.)
> >>
> >> Any suggestions?
> >>
> >> Thanks, 73 Bill N2CQR
> > Looks like it to me, with that sort of input voltage, you
> should
> get
> >12V out no trouble, very like the regulator is out of spec.
> >Regards
> >--
> >... Sid Boyce...Amdahl(UK)...44-121 422 0375
> > ----------------------------------
> >Any opinions expressed above are mine and do not necessarily
> represent
> > the opinions or policies of Amdahl Corporation.
> >
> >
> Whats the input voltage to the regulator . Sounds like it could be on
> the
> high side causing the regulator to dissipate a lot more power than it
> was
> designed. A lot of times a 18volt xfmr will actually put out 20 volts
> or
> more. Also just how much power are you running out of your TX 4or 5
> watts
> can easily use up your 1 amp. Radio shack parts speak for themselves.
> When
> I use a 3 legged regulator I prefer the ones in a TO-3 case. Seems to
>
> have less problems with them. Also use some bypass caps on the input
> and
> output of the reg. If you are working the reg near its limit s I'd
> suggest

> going to a 3 amp device
>
> ------------------------------
>
> Date: Sat, 16 Aug 1997 00:30:07 GMT
> From: Sid Boyce
> Subject: 11 volts from 12 volt regulator?
>
> Bill Meara wrote:
> >
> > I just put the finishing touches on my (supposedly!) 12 VDC QRP
> > station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> > tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812
> 12
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> point
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> >
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> 12V out no trouble, very like the regulator is out of spec.
> Regards
> --
> ... Sid Boyce...Amdahl(UK)...44-121 422 0375
> ----------------------------------
> Any opinions expressed above are mine and do not necessarily represent
>
> the opinions or policies of Amdahl Corporation.
>
> ------------------------------
>
> Date: 16 Aug 1997 04:09:01 GMT
> From: Vedant
> Subject: 12V portable electronic Cooler/warmers
>
> Hello,
>
> Visit www.koolatron.com to look at all the amazing products including

> solid state thermoelectric portable cooler/warmers and solid state
> water coolers. Best Saving! Big Savings!!!
>
> Happy Shopping!!
>
> Koolatron
>
> ------------------------------
>
> Date: Fri, 15 Aug 1997 10:33:02
> From: Alan.Peake@dsto.defence.gov.au (Alan Peake)
> Subject: Crystals and overtones
>
> >Reminds me of the customer who wanted a 12 volt power supply. When I
> asked
> >him the tolerance, he said "none. Exactly 12 volts." I had to admit
> that I
> >didn't know how to build one of those.
>
> What you could've done was to build one and adjust the output for
> 12.00 +/-
> 0.005 and show the customer the output on a 3-1/2 digit DVM and say
> "There
> you are! 12 Volts exactly!"
>
> Alan
>
> ------------------------------
>
> Date: Mon, 11 Aug 1997 08:39:00 -0400
> From: Joseph M Zawodny
> Subject: Crystals and overtones
>
> Kelvin Charlson wrote:
> >
> > Hi
> >
> > I have just built a 6 meter reciever and want to tune the local
> oscillator
> > in. The easiest and cheapest way I know how to do this is to build a
>
> > crystal oscillator.
> >
> > Because an approx 50 MHz crystal is expensive ie $20, is it possible
> to say
> > use a 17.73 MHz crystal and use its third overtone ie around 53 MHz.
> As
> > this crystal is only a few dollars.
> >
> > I have a siimple schematic for a crystal osillator, but do you have

> to do
> > anything special to the circuit to make sure you get the third
> overtone. Or
> > do you get it anyway once the crystal is operating and no high pass
> filters
> > are added to the circuit.
> >
> > I hope this makes some sense because I am only new at this stuff
> >
> > Kelvin
> >
> > kelvin@netspace.net.au
>
> Just go to DigiKey ( http://www.digikey.com ) and by a 50.000MHz sine
> wave oscillator for 2 or 3 bucks. I doubt whether you could tweak
> the third harmonic down 3MHz from 53 to 50 anyway.
>
> KO4LW
>
> --
> ------ To Reply, Please remove the .nospam from addresses below ------
>
> Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
> NASA Langley Research Center KO4LW.nospam@amsat.org
>
> E-mail: J.M.nospam.Zawodny@LaRC.NASA.gov
> zawodny.nospam@exis.net
> (757) 864-2681 (757) 864-2671 FAX
> http://wwwp.exis.net/~zawodny
>
> ------------------------------
>
> Date: Mon, 11 Aug 1997 08:29:36 -0400
> From: Dave Potter
> Subject: Double Sided PC Boards
>
> wrightj@planetc.com wrote:
> >
> > How does a homebrewer plate thru holes in making oc boards?
> > I have a X-Y table used to draw the art work on both sides of
> > the pc board and drill them. Then how do you go about plating
> > thru the holes?
>
> I don't know how I would do it at home. In a board shop, they do what
> is
> called electroless plating, basically dipping the board in a solution
> or
> suspension of fine copper particles before it is etched but after it
> is
> drilled. The copper particles adhere lightly to the surfaces of the

> board, including the shafts of the holes. Takes some specific
> chemistry
> in the solution to make that work, but it does work. The boards are
> then
> plated with copper, more copper, that is, and the holes end up with
> half
> an ounce or so of copper plated into them. The next step is to clean
> off
> the resist that had been screened or photoplotted on the board. Under
> the resist, the copper is thinner. Etching will remove all the
> previously resist-covered copper but only half the bare copper areas
> that had been thickened by the plating. The board is done.
>
> good luck.
>
> 73
>
> Dave
> K1MBO
>
> ------------------------------
>
> Date: 14 Aug 1997 06:19:23 GMT
> From: rog42@aol.com (Rog42)
> Subject: F.S. - Tubes, radios, books, misc...
>
> FOR SALE: Tubes, books and radios including Hallicrafters,
> Hammarlund,
> and Philco. Schematics for many older radios and TV's - just $3
> delivered. Tube manuals, Tube substitution books, Service manuals,
> Radio
> magazines, much more from the 30's to the 70's. Now over 1600
> different
> tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
> latest offerings on RADIO list - #810-T.
>
> ------------------------------
>
> Date: Sun, 17 Aug 1997 04:23:02 GMT
> From: aruder@pipeline.com (Annette or Lou Hinshaw)
> Subject: Front end of DC RX
>
> "Carl R. Stevenson" wrote:
>
> >Annette or Lou Hinshaw wrote in article
> ><33f1ff14.28596756@news.pipeline.com>...
> >>
> >> The single largest problem facing modern ANYONE is the same as
> ever: The
> >> preponderance of naysayers who have no idea what's going on outside

> their
> >> own little foxhole and think that means the world is behind them.
> >
> >However, those of us who work at the forefront of technology know of
> what
> >we speak when we say that the vast majority of hams are stuck in the
> 50s
> >(or 60s at best) technologically speaking ...
>
> YES!!
> The vast majority of EVERY field is stuck in the past.
> It is part of what I was saying.
>
> >> In the backward '70s, I devised a radio set made of '50s technology
>
> >>wedded to WW2 technology, and it transmitted music (admittedly poor
> >>quality, but it WAS only a prototype) over a bandwidth of 100 HERTZ.
>
> >
> >I can believe that it sounded poor ...
> >
> >> this summer I mentioned it on these ham newsgroups. I got 97
> replies, and
> >>ALL BUT 3 of them were naysayers, pointing out the known limits why
> it can't
> >>be done the way I said I had done it. All too polite to call me a
> liar, of cuss,
> >> of cuss, but nonetheless saying it can't be done.
> >> 2 of the remaining 3 replies offered encouragement, an ONLY one
> gave
> >> serious advice, which was all I had asked for in the first place.
> >
> >I believe if your check back, you'll find that I gave you nothing but
> some
> >simple advice on how to protect your ideas, based on my experience in
> getting a
> >couple of patents ...
> >
> >I don't recall bad-mouthing you, or your claims of accomplishment,
> but I do
> >recall having serious doubts that you knew what the hell you were
> talking about
> >..
> >(but again, if I recall correctly, I kept them to myself ...)
> >
> >> But I did do it, back there in the '70s
> >>
> >> Haven't been able to sell it, ain't gonna give it away for some
> snot nose
> >> engineer to sneer at until he/she sees how it works and then try to

> claim
> >> credit for. I been down that road and up that tree, and all I got
> was
> >>ticks.
> >
> >If it was worth much, you should have been able to patent it and
> license it
> >by now ...
> >>
> >> BTW, about code, do you have a garden?
> >
> >Nope ...
> >
> >> no wheelbarrow, I suppose?
> >
> >Nope ...
> >
> >> Or shovel?
> >
> >Nope ...
> >
> >> Use electronic gardening only, do you?
> >
> >Yup ... all I grow are electronics things ...
> >
> >>Old don't mean get rid of.
> >
> >In technology, old=junk=toss it (or sell it if you can find someone
> to give
> >you 10 cents a pound to haul it off ) ...
> >
> >486 machines are getting hard to give away ... 386's are ancient,
> >out-dated, and won't run much modern software ... 286s??? The
> electronic equivalent
> >of dinosaurs ... XTs??? Primordial slime ...
> >
> >Yes, in some venues, old DOES mean "get rid of" ...
> >
> >Carl - wa6vse
> >wa6vse@fast.net
>
> I started to answer this para by para, and then came to the
> peroration.
> 486 he says is hard to give away, etc, and 386 is worse, and so on
> Let Then Eat Cake, said the queen.
>
> With that he shows how he is divorced from rfeality.
>
> The flea markets are loaded with 8088 machines that sell well for
> about

> 150 bucks and get people started on computing who haven't BEEN to
> college to learn the show.
>
> This is the same kinda guy who says if you aint't got the latest and
> greatest
> you are kidding yourself, while all around him, others do it better
> and cheaper.
>
> In one place, he says it must have been poor quality radio, and in
> another, he
> says he didn't badmouth me, and in another he says he didn't think I
> knew
> what I was talking about.
>
> Hoo, boy.
>
> Ciao.
>
> Lou Hinshaw
> Next thing for me to do is be kind to sorts like this, but mostly
> myself, and
> quit wasting time on this NG.
>
> Prolific inventor,
> Lousy Salesman,
> Incompetent businessman.
> (Typical of the Breed)
> Tulsa OK, USA
>
> ------------------------------
>
> Date: Fri, 15 Aug 1997 23:48:55 -0500
> From: Jason
> Subject: Ham Database/Newsgroups
>
> What is the best ham database to use on the internet. I'm looking for
>
> one which has variable fields of search, like City, State, Zip Code,
> etc.
>
> Also, does anyone have a list of ham radio newsgroups?
>
> Thanks for the info.
>
> Jason Dugas
>
> ------------------------------
>
> Date: Sat, 16 Aug 1997 21:10:37 GMT
> From: ernie@netvision.net.il (ernie)

> Subject: Ham shops in Tennessee
>
> Hello
> I'm looking for any information on the subject and all will be highly
> appreciated.
> Thanks in advance de Isaac, 4Z4TL
> 73
>
> ------------------------------
>
> Date: Fri, 15 Aug 1997 16:54:55 -0500
> From: "William E. Sabin"
> Subject: High performance...Not the handbook.
>
> This is a multi-part message in MIME format.
>
> --------------736B37A84090
> Content-Type: text/plain; charset=us-ascii
> Content-Transfer-Encoding: 7bit
>
> JohnsonHE wrote:
> >
> > Hi Rob...Like trying to find the wire tables and only later
> realizing it's
> > under Copper wire tables. Sigh.
>
> A scan of page 1190 of 1997 ARRL Handbook.
>
> --------------736B37A84090
> Content-Type: text/plain; charset=iso-8859-1; name="Doc0001.wri"
> Content-Transfer-Encoding: quoted-printable
> Content-Disposition: inline; filename="Doc0001.wri"
>
> {\rtf1\ansi\deff0\deftab720{\fonttbl{\f0\fnil MS Sans
> Serif;}{\f1\fnil\fc=
> harset2 Symbol;}{\f2\fswiss\fprq2 System;}{\f3\fnil Times New
> Roman;}{\f4=
> \fmodern Courier;}}
> {\colortbl\red0\green0\blue0;}
> \deflang1033\pard\tx3168\plain\f4\fs28 Wire:
> \par \pard\tx144\tx3168\plain\f4\fs28 \tab Antenna, strength: \tab
> 30.3=
> 0
> \par \tab Copperclad steel: \tab 20.7
> \par \tab Copperweld: \tab 20.7
> \par \pard\tx288\tx3312\plain\f4\fs28 Cutters: 25.4
> \par Gauge, Standard vs American:\tab 30.31
> \par Hookup color codes:\tab 24.9
> \par Inductance of straight:\tab 6.23
> \par Litz: \tab 6.18

> \par Specifications: 24.8
> \par Troubleshooting:\tab 27.6,27.20
> \par Wrap:\tab 25.11
> \par \pard\plain\f4\fs28 =
>
> \par }
> =00
> --------------736B37A84090--
>
> ------------------------------
>
> Date: 16 Aug 1997 01:47:49 GMT
> From: johnsonhe@aol.com (JohnsonHE)
> Subject: High performance...Not the handbook.
>
> >From: "William E. Sabin"
> Hi Bill.
>
> Well now, a number of years ago, I stopped purchasing a new handbook
> every
> year after having done so for many years and paying for a new book
> only to
> get 5 percent of a new book. The rest of it was in my old handbook. I
> guess that was the first time I realized that there wasn't any tooth
> fairy, no real santa claus and ham radio started to look just a tad
> jaded.
>
> Now I've got a 1991 handbook (purchased) in the shack, and a 1988
> handbook
> (purchased) in the shop, and maybe, if I like the cover of the one
> next
> year, (You never get to look inside before you buy them you know!)
> I'll
> buy a new 1998 and move the 1991 to the workshop. It's about as
> frequent
> as I get anymore.
>
> I'm sure I'll enjoy your contribution to it, and maybe a few of the
> others
> who labor so hard to provide a little payback for their hobby of so
> many
> years, but at the current price, it had REALLY better be good.
>
> Meanwhile, back at the ranchhouse, in MY copy of the handbook, the
> index
> leaves something to be desired.
>
> I don't bother with MIME'd messages, so not real sure about your
> comments,
> but reading between the lines, figure it was something about the Cu

> wire
> tables
>
> W4ZCB
>
> ------------------------------
>
> Date: Sat, 16 Aug 1997 23:11:37 -0400
> From: kr4wm@sccoast!.net (Web Williams)
> Subject: How do you connect LED's in parallel?
>
> I'm working on a project for a friend, and need to connect two LED's
> in
> parallel. When I hook them up, only one lights, the other just sits
> there. I'm supposing that the one which draws the most current is the
> only one which will get any current through it, or something like
> that.
> Don't need to understand the theory, just tell me what I need to know
> to
> get it working- please. We'll discuss why this happens in another
> message
> thread- it's Saturday night, and I have to get it back to the owner on
>
> Monday morning (hopefully in working condition). No, it's not
> something I
> broke. It's a clock with an ambulance on the face, and the ambulance
> has
> three LED's for emergency lights. You push a momentary contact switch,
>
> and the LED's alternate, i.e. Two parallel LED's light at one time,
> then
> go out, and the third light comes on, and they do this back and forth
> contunially. At one time, it worked like this from the factory (who's
> out
> of business). I had to home brew a siren and this light system
> without the benefit of having the old circuit to look at. This is
> something I'm rigging up for the owner, who likes flashy stuff. Thanks
> in
> advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC
>
> TO REPLY: remove the ! from my address.
>
> ------------------------------
>
> Date: Sat, 16 Aug 1997 12:34:42 -0700
> From: "James R. Binkley"
> Subject: MRF 479 Needed
>
> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't

> find this transistor listed in any of my catalogs.
>
> Thanks Bob w4aos@his.com
>
> ------------------------------
>
> Date: Sun, 10 Aug 1997 20:27:17 -0700
> From: AC6V
> Subject: Need CRYSTAL SET plans
>
> N9KC wrote:
> >
> > Hi All,
> >
> > Need plans to build a simple CRYSTAL SET from readily available
> parts.
> > Have a teenager in the neighborhood who needs help.
> >
> > We live close to an AM tower (KOA in Denver), so this should be a
> piece of
> > cake.
> >
> > Reply to N9KC@aol.com
> >
> > Thanks!!!
> >
> > Lou
> -----
> Hi Lou -- try URL:
> http://www.midnightscience.com/
> For The Xtal Set Society
> --
> 73
> Rod in San Diego
> --
> AC6V's HAM AND DX REFERENCE GUIDE
> 60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
> Main Page: http://pw2.netcom.com/~ac6v/index.html
> Master Index: http://pw2.netcom.com/~ac6v/pageas.html
> lack the right sound(?), smell(?), something undefinable(?), and the
> Dow-Keys were de rigeur in the timeframe :-)
>
> Grant
>
> nq5t@gte.net
> http://home1.gte.net/nq5t
>
> ------------------------------
>
> Date: Sat, 16 Aug 1997 05:32:13 -0500

> From: "William E. Sabin"
> Subject: PL259 Attachment to COAX Cable
>
> KF6IIU wrote:
>
> >
> > The Radio Shack 259's were so crappy, they weren't even the right
> inner
> > diameter to accept RG8 cable.
>
> They also sell a silver plated version that is more expensive ($3.99),
>
> part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> cents),
> part number 278-204. I have used these parts OK.
>
> Bill W0IYH
>
> ----------
>
> Date: 16 Aug 1997 13:05:00 -0700
> From: markem@primenet.com (M. Monninger)
> Subject: PL259 Attachment to COAX Cable
>
> Most of the mail order connector/cable outfits have teflon/silver
> PL-259's for
> $1.00-1.50 each depending on qty, even cheaper if you buy lots of 10.
> The
> silver plated adapters go for 25 - 30 cents each. The silver-plated
> 259's are
> MUCH easier to solder and if you're using the adapter for RG-58,
> they'll suck
> the solder right in and give a great connection to the cable. Of
> course, my
> old Weller 350W gun helps a little too...
>
> 73... Mark AA7TA
>
> In article <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>,
> sabinw@crpl.cedar-rapids.lib.ia.us wrote:
> >KF6IIU wrote:
> >
> >>
> >> The Radio Shack 259's were so crappy, they weren't even the right
> inner
> >> diameter to accept RG8 cable.
> >
> >They also sell a silver plated version that is more expensive
> ($3.99),
> >part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99

> cents),
> >part number 278-204. I have used these parts OK.
> >
> >Bill W0IYH
>
> ------------------------------
>
> Date: Sat, 16 Aug 1997 15:34:30 -0700
> From: Jack Taylor
> Subject: PL259 Attachment to COAX Cable
>
> On Sat, 16 Aug 1997, William E. Sabin wrote:
>
> > KF6IIU wrote:
> > >
> > > >
> > > > The Radio Shack 259's were so crappy, they weren't even the right
> inner
> > > > diameter to accept RG8 cable.
> > >
> > > They also sell a silver plated version that is more expensive
> ($3.99),
> > > part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> cents),
> > > part number 278-204. I have used these parts OK.
> > >
> > > Bill W0IYH
>
> I've had pretty good success by just using solder flux with the crappy
>
> fittings.
>
> 73 de Jack
>
> ------------------------------
>
> Date: Sun, 10 Aug 1997 15:53:48 +0100
> From: Simon Lewis
> Subject: Wanted - Copy of Article: Ham Radio Feb 85
>
> wanted
> ------
>
> Photocopy of article on hombrew silver plating - Ham Radio Feb 85
>
> Any help appreciated
>
> 73 Simon
>
> +------------------------------------------------------------------+

> 
> | Simon Lewis GM4PLM Editor - EMN |
> 
> | European Microwave News - Supporting Microwave Radio Across Europe |
> 
> | Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
> 
> +--------------------------------------------------------------------+
> 
> ------------------------------
> 
> Date: Sat, 16 Aug 1997 02:10:22 GMT
> From: bry@REMOVE.mns.net (Bry)
> Subject: WTB: 25K pot
> 
> I need a FOUR WATT potentiometer (large-ish!) for the drive control in
> 
> my Valiant. It is 25 K-ohms panel pot with the standard 1/4" shaft
> about 3/8" to 1/2" long, the type that a regular knob will go on.
> 
> Anyone got one?
> 
> NB: delete out the "REMOVE" from my e-mail address
> or reply here.
> 
> Thanks - Bry, AF4K
> PLEASE DON'T SEND ME ANYMORE NEWSGROUPS LETTERS MY HUSBAND PASSED ON
> AUGUST 10, 1997

THANK YOUMRS JONES

> ------------------------------
> 
> End of Ham-Homebrew Digest V97 #459
> ******************************

Ham-Homebrew Mailing List and Newsgroup wrote:

Ham-Homebrew Digest
Sat, 16 Aug 97 Volume 97 : Issue
459

Today's Topics:

11 volts from 12 volt regulator? (2 msgs)

12V portable electronic Cooler/warmers

Crystals and overtones (2 msgs)

Double Sided PC Boards

F.S. - Tubes, radios, books, misc...

Front end of DC RX

Ham Database/Newsgroups

Ham shops in Tennessee

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How do you connect LED's in parallel?

MRF 479 Needed

Need CRYSTAL SET plans

PL259 Attachment to COAX Cable (3 msgs)

Wanted - Copy of Article: Ham Radio Feb 85

WTB: 25K pot

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>

Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available

(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text

herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary.
So there.

Date: 16 Aug 1997 15:38:53 GMT

From: hamm4fun@aol.com (Hamm4fun)

Subject: 11 volts from 12 volt regulator?

>

>Bill Meara wrote:

>>

>> I just put the finishing touches on my (supposedly!) 12 VDC QRP

>> station power supply. Circuit is VERY simple:
18 volt (2 Amp)

>> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812
12

>> VDC voltage regulator.

>>

>> Problem is that the output voltage is only about 11.1 volts.

>>

>> Has anyone seen this problem before? What do you think, bad

>> component?

>>

>> I also notice that the regulator gets quite hot. I put a fairly
large

>> heat sink on it and I don't seem to get to the thermal shut down
point

>> (even when pulling around 1 amp through it.)

>>

>> Any suggestions?

>>

>> Thanks, 73 Bill
N2CQR

> Looks like it to me, with that
sort of input voltage, you should

get

>12V out no trouble, very like the regulator is out of spec.

>Regards

>--

>... Sid Boyce...Amdahl(UK)...44-121 422 0375

>

>Any opinions expressed above are mine and do not necessarily represent

> the opinions or policies of Amdahl Corporation.

>

>

Whats the input voltage to the regulator . Sounds like it could be
on the

high side causing the regulator to dissipate a lot more power than
it was

designed. A lot of times a 18volt xfmr will actually put out 20 volts
or

more. Also just how much power are you running out of your TX
4or 5 watts

can easily use up your 1 amp. Radio shack parts speak for themselves.
When

I use a 3 legged regulator I prefer the ones in a TO-3 case.
Seems to

have less problems with them. Also use some bypass caps on the input
and

output of the reg. If you are working the reg near its limit s I'd
suggest

going to a 3 amp device

Date: Sat, 16 Aug 1997 00:30:07 GMT

From: Sid Boyce <szb50@amdahl.com>

Subject: 11 volts from 12 volt regulator?

Bill Meara wrote:

>

> I just put the finishing touches on my (supposedly!) 12 VDC QRP

> station power supply. Circuit is VERY simple:
18 volt (2 Amp)

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12V out no trouble, very like the regulator is out of spec.

Regards

--

... Sid Boyce...Amdahl(UK)...44-121 422 0375

Any opinions expressed above are mine and do not necessarily represent

the opinions or policies of Amdahl Corporation.

Date: 16 Aug 1997 04:09:01 GMT

From: Vedant<sales@koolatron.com>

Subject: 12V portable electronic Cooler/warmers

Hello,

Visit www.koolatron.com to look at all the amazing products including
solid state thermoelectric portable cooler/warmers and solid state water
coolers. Best Saving! Big Savings!!!

Happy Shopping!!

Koolatron

Date: Fri, 15 Aug 1997 10:33:02

From: Alan.Peake@dsto.defence.gov.au (Alan Peake)

Subject: Crystals and overtones

>Reminds me of the customer who wanted a 12 volt power supply. When
I asked

>him the tolerance, he said "none. Exactly 12 volts." I had to admit
that I

>didn't know how to build one of those.

What you could've done was to build one and adjust the output for 12.00
+/-

0.005 and show the customer the output on a 3-1/2 digit DVM and say
"There

you are! 12 Volts exactly!"

Alan

Date: Mon, 11 Aug 1997 08:39:00 -0400

From: Joseph M Zawodny <J.M.nospam.Zawodny@LaRC.NASA.gov>

Subject: Crystals and overtones

Kelvin Charlson wrote:

>

> Hi

>

> I have just built a 6 meter reciever and want to tune the local oscillator

> in. The easiest and cheapest way I know how to do this is to build
a

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>

> Because an approx 50 MHz crystal is expensive ie $20, is it possible
to say

> use a 17.73 MHz crystal and use its third overtone ie around 53 MHz.
As

> this crystal is only a few dollars.

>

> I have a siimple schematic for a crystal osillator, but do you have
to do

> anything special to the circuit to make sure you get the third overtone.
Or

> do you get it anyway once the crystal is operating and no high pass
filters

> are added to the circuit.

>

> I hope this makes some sense because I am only new at this stuff

>

> Kelvin

>

> kelvin@netspace.net.au

Just go to DigiKey ( http://www.digikey.com
) and by a 50.000MHz sine

wave oscillator for 2 or 3 bucks. I doubt whether you could tweak

the third harmonic down 3MHz from 53 to 50 anyway.

KO4LW

--

------ To Reply, Please remove the .nospam from addresses below ------

Work: Dr. Joseph M. Zawodny
Play: Joe Zawodny

NASA Langley Research Center
KO4LW.nospam@amsat.org

E-mail: J.M.nospam.Zawodny@LaRC.NASA.gov
zawodny.nospam@exis.net

(757) 864-2681 (757) 864-2671
FAX http://wwwp.exis.net/~zawodny

Date: Mon, 11 Aug 1997 08:29:36 -0400

From: Dave Potter <dpotter@bbn.com>

Subject: Double Sided PC Boards

wrightj@planetc.com wrote:

>

> How does a homebrewer plate thru holes in making oc boards?

> I have a X-Y table used to draw the art work on both sides of

> the pc board and drill them. Then how do you go about plating

> thru the holes?

I don't know how I would do it at home. In a board shop, they do what
is

called electroless plating, basically dipping the board in a solution
or

suspension of fine copper particles before it is etched but after it
is

drilled. The copper particles adhere lightly to the surfaces of the

board, including the shafts of the holes. Takes some specific chemistry

in the solution to make that work, but it does work. The boards are
then

plated with copper, more copper, that is, and the holes end up with half

an ounce or so of copper plated into them. The next step is to clean off

the resist that had been screened or photoplotted on the board. Under

the resist, the copper is thinner. Etching will remove all the

previously resist-covered copper but only half the bare copper areas

that had been thickened by the plating. The board is done.

good luck.

73

Dave

K1MBO

Date: 14 Aug 1997 06:19:23 GMT

From: rog42@aol.com (Rog42)

Subject: F.S. - Tubes, radios, books, misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,

and Philco. Schematics for many older radios and TV's - just $3

delivered. Tube manuals, Tube substitution books, Service manuals, Radio

magazines, much more from the 30's to the 70's. Now over 1600 different

tube types in stock - Contact Rog42@aol.com for an E-mail copy of my

latest offerings on RADIO list - #810-T.

Date: Sun, 17 Aug 1997 04:23:02 GMT

From: aruder@pipeline.com (Annette or Lou Hinshaw)

Subject: Front end of DC RX

"Carl R. Stevenson" <wa6vse@fast.net> wrote:

>Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article

><33f1ff14.28596756@news.pipeline.com>...

>>

>> The single largest problem facing modern ANYONE is the same as ever:
The

>> preponderance of naysayers who have no idea what's going on outside
their

>> own little foxhole and think that means the world is behind them.

>

>However, those of us who work at the forefront of technology know
of what

>we speak when we say that the vast majority of hams are stuck in the
50s

>(or 60s at best) technologically speaking ...

YES!!

The vast majority of EVERY field is stuck in the past.

It is part of what I was saying.

>> In the backward '70s, I devised a radio set made of '50s technology

>>wedded to WW2 technology, and it transmitted music (admittedly poor

>>quality, but it WAS only a prototype) over a bandwidth of 100 HERTZ.

>

>I can believe that it sounded poor ...

>

>> this summer I mentioned it on these ham newsgroups. I got 97 replies,
and

>>ALL BUT 3 of them were naysayers, pointing out the known limits why
it can't

>>be done the way I said I had done it. All too polite to call
me a liar, of cuss,

>> of cuss, but nonetheless saying it can't be done.

>> 2 of the remaining 3 replies offered encouragement, an ONLY one
gave

>> serious advice, which was all I had asked for in the first
place.

>

>I believe if your check back, you'll find that I gave you nothing
but some

>simple advice on how to protect your ideas, based on my experience in getting a

>couple of patents ...

>

>I don't recall bad-mouthing you, or your claims of accomplishment, but I do

>recall having serious doubts that you knew what the hell you were talking about

>..

>(but again, if I recall correctly, I kept them to myself ...)

>

>> But I did do it, back there in the '70s

>>

>> Haven't been able to sell it, ain't gonna give it away for some snot nose

>> engineer to sneer at until he/she sees how it works and then try to claim

>> credit for. I been down that road and up that tree, and all I got was

>>ticks.

>

>If it was worth much, you should have been able to patent it and license it

>by now ...

>>

>> BTW, about code, do you have a garden?

>

>Nope ...

>

>> no wheelbarrow, I suppose?

>

>Nope ...

>

>> Or shovel?

>

>Nope ...

>

>> Use electronic gardening only, do you?

>

>Yup ... all I grow are electronics things ...

>

>>Old don't mean get rid of.

>

>In technology, old=junk=toss it (or sell it if you can find someone
to give

>you 10 cents a pound to haul it off ) ...

>

>486 machines are getting hard to give away ... 386's are ancient,

>out-dated, and won't run much modern software ... 286s??? The electronic
equivalent

>of dinosaurs ... XTs??? Primordial slime ...

>

>Yes, in some venues, old DOES mean "get rid of" ...

>

>Carl - wa6vse

>wa6vse@fast.net

I started to answer this para by para, and then came to the peroration.

486 he says is hard to give away, etc, and 386 is worse, and so on

Let Then Eat Cake, said the queen.

With that he shows how he is divorced from rfeality.

The flea markets are loaded with 8088 machines that sell well for about

150 bucks and get people started on computing who haven't BEEN to

college to learn the show.

This is the same kinda guy who says if you aint't got the latest and
greatest

you are kidding yourself, while all around him, others do it better
and cheaper.

In one place, he says it must have been poor quality radio, and in another,
he

says he didn't badmouth me, and in another he says he didn't
think I knew

what I was talking about.

Hoo, boy.

Ciao.

Lou Hinshaw

Next thing for me to do is be kind to sorts like this, but mostly myself,
and

quit wasting time on this NG.

Prolific inventor,

Lousy Salesman,

Incompetent businessman.

(Typical of the Breed)

Tulsa OK, USA

Date: Fri, 15 Aug 1997 23:48:55 -0500

From: Jason <kb5urq@earthlink.net>

Subject: Ham Database/Newsgroups

What is the best ham database to use on the internet. I'm looking
for

one which has variable fields of search, like City, State, Zip Code,

etc.

Also, does anyone have a list of ham radio newsgroups?

Thanks for the info.

Jason Dugas

Date: Sat, 16 Aug 1997 21:10:37 GMT

From: ernie@netvision.net.il (ernie)

Subject: Ham shops in Tennessee

Hello

I'm looking for any information on the subject and all will be highly

appreciated.

Thanks in advance de Isaac, 4Z4TL

73

Date: Fri, 15 Aug 1997 16:54:55 -0500

From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>

Subject: High performance...Not the handbook.

This is a multi-part message in MIME format.

JohnsonHE wrote:

>

> Hi Rob...Like trying to find the wire tables and only later realizing
it's

> under Copper wire tables. Sigh.

A scan of page 1190 of 1997 ARRL Handbook.

Content-Disposition: inline; filename="Doc0001.wri"

{\rtf1\ansi\deff0\deftab720{\fonttbl{\f0\fnil MS Sans Serif;}{\f1\fnil\fc=

harset2 Symbol;}{\f2\fswiss\fprq2 System;}{\f3\fnil Times New Roman;}{\f4=

\fmodern Courier;}}

{\colortbl\red0\green0\blue0;}

\deflang1033\pard\tx3168\plain\f4\fs28 Wire:

\par \pard\tx144\tx3168\plain\f4\fs28 \tab Antenna, strength:
\tab 30.3=

0

\par \tab Copperclad steel: \tab 20.7

\par \tab Copperweld:
\tab 20.7

\par \pard\tx288\tx3312\plain\f4\fs28 Cutters:
25.4

\par Gauge, Standard vs American:\tab 30.31

\par Hookup color codes:\tab 24.9

\par Inductance of straight:\tab 6.23

\par Litz: \tab 6.18

\par Specifications:
24.8

\par Troubleshooting:\tab 27.6,27.20

\par Wrap:\tab 25.11

\par \pard\plain\f4\fs28 =

\par }

=00

Date: 16 Aug 1997 01:47:49 GMT

From: johnsonhe@aol.com (JohnsonHE)

Subject: High performance...Not the handbook.

>From: "William E. Sabin" <sabinw@crpl.cedar-rapids.

Hi Bill.

Well now, a number of years ago, I stopped purchasing a new handbook every

year after having done so for many years and paying for a new book only to

get 5 percent of a new book. The rest of it was in my old handbook. I

guess that was the first time I realized that there wasn't any tooth

fairy, no real santa claus and ham radio started to look just a tad jaded.

Now I've got a 1991 handbook (purchased) in the shack, and a 1988 handbook

(purchased) in the shop, and maybe, if I like the cover of the one next

year, (You never get to look inside before you buy them you know!) I'll

buy a new 1998 and move the 1991 to the workshop. It's about as frequent

as I get anymore.

I'm sure I'll enjoy your contribution to it, and maybe a few of the others

who labor so hard to provide a little payback for their hobby of so many

years, but at the current price, it had REALLY better be good.

Meanwhile, back at the ranchhouse, in MY copy of the handbook, the index

leaves something to be desired.

I don't bother with MIME'd messages, so not real sure about your comments,

but reading between the lines, figure it was something about the Cu wire

tables

W4ZCB

Date: Sat, 16 Aug 1997 23:11:37 -0400

From: kr4wm@sccoast!.net (Web Williams)

Subject: How do you connect LED's in parallel?

I'm working on a project for a friend, and need to connect two LED's in

parallel. When I hook them up, only one lights, the other just sits

there. I'm supposing that the one which draws the most current is the

only one which will get any current through it, or something like that.

Don't need to understand the theory, just tell me what I need to know to

get it working- please. We'll discuss why this happens in another message

thread- it's Saturday night, and I have to get it back to the owner on

Monday morning (hopefully in working condition). No, it's not something I

broke. It's a clock with an ambulance on the face, and the ambulance has

three LED's for emergency lights. You push a momentary contact switch,

and the LED's alternate, i.e. Two parallel LED's light at one time, then

go out, and the third light comes on, and they do this back and forth

contunially. At one time, it worked like this from the factory (who's out

of business). I had to home brew a siren and this light system

without the benefit of having the old circuit to look at. This is

something I'm rigging up for the owner, who likes flashy stuff. Thanks in

advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC

TO REPLY: remove the ! from my address.

Date: Sat, 16 Aug 1997 12:34:42 -0700

From: "James R. Binkley" <w4aos@his.com>

Subject: MRF 479 Needed

Does anyone know where I can get an MRF 479 transistor, or its

equivalent. I need one for a portable transciever I have, and
don't

find this transistor listed in any of my catalogs.

Thanks Bob w4aos@his.com

Date: Sun, 10 Aug 1997 20:27:17 -0700

From: AC6V <ac6v@ix.netcom.com>

Subject: Need CRYSTAL SET plans

N9KC wrote:

>

> Hi All,

>

> Need plans to build a simple CRYSTAL SET from readily available
parts.

> Have a teenager in the neighborhood who needs help.

>

> We live close to an AM tower (KOA in Denver), so this should be a
piece of

> cake.

>

> Reply to N9KC@aol.com

>

> Thanks!!!

>

> Lou

---

Hi Lou -- try URL:

http://www.midnightscience.com/

For The Xtal Set Society

--

73

Rod in San Diego

--

AC6V's HAM AND DX REFERENCE GUIDE

60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO

Main Page: http://pw2.netcom.com/~ac6v/index.html

Master Index: http://pw2.netcom.com/~ac6v/pageas.html

lack the right sound(?), smell(?), something undefinable(?), and the

Dow-Keys were de rigeur in the timeframe :-)

Grant

nq5t@gte.net

http://home1.gte.net/nq5t

Date: Sat, 16 Aug 1997 05:32:13 -0500

From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>

Subject: PL259 Attachment to COAX Cable

KF6IIU wrote:

>

> The Radio Shack 259's were so crappy, they weren't even the right
inner

> diameter to accept RG8 cable.

They also sell a silver plated version that is more expensive ($3.99),

part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99 cents),

part number 278-204. I have used these parts OK.

Bill W0IYH

Date: 16 Aug 1997 13:05:00 -0700

From: markem@primenet.com (M. Monninger)

Subject: PL259 Attachment to COAX Cable

Most of the mail order connector/cable outfits have teflon/silver PL-259's
for

$1.00-1.50 each depending on qty, even cheaper if you buy lots of 10.
The

silver plated adapters go for 25 - 30 cents each. The silver-plated 259's are

MUCH easier to solder and if you're using the adapter for RG-58, they'll suck

the solder right in and give a great connection to the cable. Of course, my

old Weller 350W gun helps a little too...

73... Mark AA7TA

In article <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>,

sabinw@crpl.cedar-rapids.lib.ia.us wrote:

>KF6IIU wrote:

>

>>

>> The Radio Shack 259's were so crappy, they weren't even the right inner

>> diameter to accept RG8 cable.

>

>They also sell a silver plated version that is more expensive ($3.99),

>part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99 cents),

>part number 278-204. I have used these parts OK.

>

>Bill W0IYH

Date: Sat, 16 Aug 1997 15:34:30 -0700

From: Jack Taylor <n7oo@goodnet.com>

Subject: PL259 Attachment to COAX Cable

On Sat, 16 Aug 1997, William E. Sabin wrote:

> KF6IIU wrote:

>

> >

> > The Radio Shack 259's were so crappy, they weren't even the right inner

> > diameter to accept RG8 cable.

>

> They also sell a silver plated version that is more expensive ($3.99),

> part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99 cents),

> part number 278-204. I have used these parts OK.

>

> Bill W0IYH

I've had pretty good success by just using solder flux with the crappy

fittings.

73 de Jack

Date: Sun, 10 Aug 1997 15:53:48 +0100

From: Simon Lewis <pacsat@pacsat.demon.co.uk>

Subject: Wanted - Copy of Article: Ham Radio Feb 85

wanted

---

Photocopy of article on hombrew silver plating - Ham Radio Feb 85

Any help appreciated

73 Simon

+---------------------------------------------------------------------+

|
Simon Lewis GM4PLM Editor - EMN
|

| European Microwave News - Supporting Microwave Radio Across Europe
|

| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk
|

+---------------------------------------------------------------------+

Date: Sat, 16 Aug 1997 02:10:22 GMT

From: bry@REMOVE.mns.net (Bry)

Subject: WTB: 25K pot

I need a FOUR WATT potentiometer (large-ish!) for the drive control in

my Valiant. It is 25 K-ohms panel pot with the standard 1/4" shaft

about 3/8" to 1/2" long, the type that a regular knob will go on.

Anyone got one?

NB: delete out the "REMOVE" from my e-mail address

or reply here.

Thanks - Bry, AF4K

PLEASE DON'T SEND ME ANYMORE NEWSGROUPS LETTERS MY HUSBAND PASSED
ON AUGUST 10, 1997

THANK YOUMRS JONES

End of Ham-Homebrew Digest V97 #459

******************************

# 1904. A Regen RX that beats your Kilobuck RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: "P. Singh" <singhpk@exit109.com>
Message-ID: <33F6CE5D.13EC@exit109.com>
Source record: 91673

Recently I made a Regen RX and was truly amazed by its
performance. This baby can receive anything from QRP
HAM CW or SSB stations on 80M or 40M to Megawatt Broadcast
stations WHEN SET UP and OPERATED PROPERLY.
It has very smooth , stable, noise free regen control.

IT also has audio AGC etc.

This RX was built due to the frustating performance of the
ten-tec 9 band SW kit. That kit has a very bad and noisy
regen control which is very edgy and NOISY. Also the varactor
tuning and RF AMP make it still more noisy.

This receiver is CUT above that one and is a lot simpler.

Its circuit follows :

```
|---|
------- REGEN---R7----------- R6 ------POS 6 V DC
ANT |L2 | |GND | _|_ |
------------------| D1 _ _C5 R5
IN | R3 _|_ _|_ |--------|---------||--- To LM386
| |_|D GND GND R4 | | Audio AMP
---------R2--->|__S_Q1__| |___|___|/Q2 |
| | | | | | | |\ |
| | | | C3 | _|_
_|_ L1 | R1 C2 | -|- C4
_ _C1 | --- | | | |
| | --- C6 | | | |
|----------|----------------------------------NEG 0 VDC(GND)
|
GND
```

Component List

C1= 90 PF variable Cap with gear reduction (available from DANS)
( try anything from 50 PF to 365 pF)

L1= 8 uH (40 Turns on RED Iron Toroid T-50-2)
L2= 3-4 turn link on the ( try different number of turns,
less=better)

R2= 47 OHMS
R1= 10K OHMS
R3= 100 OHM
REGEN = 5K OHM pot, the center terminal goes to L2,
one end goes to ground, the other end to R6-C5

C2= 0.01UF
C3= 10UF electrolytic
R4= 560K OHM
R5= 6.8K OHM
R6= 3.3K OHM
R7= 3.3K OHM

C5= 100UF Electrolytic
D1= RED LED
C4= 0.01 UF

C6= 100UF electrolytic

Q1= J305(J310, MPF102)
Q2= 2N2222A(2N3904)

Debugging hints:-
Reverse connections to L2 if you cant make it oscilate
by using the REGEN control.

A faint plop can be heard when the receiver goes into
oscilation. It works best at the threshold of oscilations.

The threshold of oscilation should be smooth (not be very edgy)
and should be free of all the Potentimeter NOISE, as it is
bypassed by a large electrolytic (100UF).

If selectivity is POOR, reduce coupling to the point of connecting
ANT to GROUND or totally disconnecting it.
The loss of signal can be more than compenstated by (careful)
adjustment of REGEN control.

For weak signal reception, the ANT was connected to DRAIN of
Q1 J305 FET. This was more than sensitive enough to work very well
a few feet (10FT) of wire thrown out of the aprtment window into
a small tree.

The Coverage can be changed by changing L1/C1.
The turns ratio of L2/L1 should be less than 1:10 for best
performance.
With a L1= 40T on T50-2 and C1= 90PF, the receiver covers
5 MHZ to 12 MHZ with smooth REGEN and very good performance.
Shunting C1 with a CAP of 120 PF NPO allows you to cover
3.5 MHZ to 5 MHZ with much more smoother tuning and stabilty.

The performance of this receiver has me truly amazed. It has
almost forced me to think about what (great) results can be
obtained with very little .

The audio amp using LM386 and having audio AGC can be posted
on request. This uses LM386, transistor 2n3904, 2 diodes IN4148
and a few R/C.

YOU ARE REQUESTED/ENCOURAGED to QUESTION everything and find the
result by experimentation.

Happy homebrewing and experimentation.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 1905. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: orion@xyzcapital.net
Message-ID: <33f90688.1438454@news.capital.net>
Source record: 91674
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Thu, 14 Aug 1997 16:48:01 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>On Wed, 13 Aug 1997 20:52:25 GMT, w6uv@wco.com (Jerry Gardner) wrote:

>>Sure, I've used tuners, but gave up on them when I found they didn't make a
>>bit of difference in a signal's SNR. Sure, they make a perceived difference in
>>signal strength, but I can do the same thing by turning up the volume on my
>>receiver--more signal ...and more noise.
>
>Jerry's right. It would be a poor HF receiver indeed which would benefit from
>a preamp. Any reasonable HF receiver is limited by atmospheric noise, not
>internal noise, and a preamp will amplify that equally with the signal, thus the
>SNR will not be improved. The preselection may sometimes be of benefit,
>but any competent receiver already has plenty of gain. (Now on VHF+, an
>*antenna* mounted preamp can be very useful, but for HF, forget it, atmospheric
>noise dominates.)
>
>Gary
>Gary Coffman KE4ZV

Thanks for your comments, Gary. As I said, I respect your opinion.
Maybe the Kenwood R-1000 is not that good? It's the first modern SW
radio I've owned. The tuner and preamp do seem to work. I have heard
weak signals with the preamp on that I couldn't hear without it. Also
the tuner seems to help the signal strength on bands that the antenna
isn't resonant on.

--
Butch N2YMJ

To reply,
delete the xyz
from my address.

# 1906. WX-SAT receiver from FM radio - Would this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <33F7039A.34C8@ix.netcom.com>
Source record: 91675

I am interested in trying out some of the weather sats, but not interested enough to invest a ton of money. I have read recently that the sats of interest operate around 137 MHz wideband FM. None of my ham receivers have a wideband option, so I wondered if the following might work.

I would intend to create a simple 30 MHz oscillator fed into a mixer circuit of some sort, with the other input to the mixer being the received signal from the antenna. The output would then be fed to a conventional consumer-type FM receiver, tuned around 107 MHz.

Could anybody comment whether something this simple could work? Has anyone tried something similar? Is my design philosophy out in left field?

--
73 de Jim, KD1YV
http://www.qsl.net/kd1yv/
http://pw1.netcom.com/~jimkd1yv/hamily.html

# 1907. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5t72n9$1di@cletus.bright.net>
Source record: 91676

Use another current limiting resistor from the voltage source to the second Led

Norm N8RGR

# 1908. Re: Ham-Homebrew Digest V97 #461

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: jobson@directcon.NET
Message-ID: <33F71A65.7A15F24F@directcon.net>
Source record: 91677
Body handling: HTML body converted to readable text

PLEASE UNSCRIBE THIS NEWLETTER, MY HUSBAND HAS LEFT THIS LIFE AND WONT
BE RETURNING...IT ONLY HURTS TO GET THESE NEWLETTERS....THANK YOU
DEBRA JONES

-Homebrew Mailing List and Newsgroup wrote:

> Ham-Homebrew Digest Sun, 17 Aug 97 Volume 97 : Issue
> 461
>
> Today's Topics:
> Ham-Homebrew Digest V97 #459
> Needed: Modem chip to decode EAS/SAME signals
>
> Send Replies or notes for publication to:
> Send subscription requests to:
> Problems you can't solve otherwise to brian@ucsd.edu.
>
> Archives of past issues of the Ham-Homebrew Digest are available
> (by FTP only) from ftp.UCSD.Edu in directory
> "mailarchives/ham-homebrew".
>
> We trust that readers are intelligent enough to realize that all text
> herein consists of personal comments and does not represent the
> official
> policies or positions of any party. Your mileage may vary. So there.
>
> ----------------------------------------------------------------------
>
> Date: 17 Aug 97 14:05:22 GMT
> From: jobson@directcon.NET (Debra Jones)
> Subject: Ham-Homebrew Digest V97 #459
>
> --------------8F1C67A468385F2DFA2794C6
> Content-Type: text/plain; charset=us-ascii
> Content-Transfer-Encoding: 7bit
>
> Ham-Homebrew Mailing List and Newsgroup wrote:
>
> > Ham-Homebrew Digest Sat, 16 Aug 97 Volume 97 : Issue
> > 459
> > >
> > Today's Topics:
> > 11 volts from 12 volt regulator? (2 msgs)
> > 12V portable electronic Cooler/warmers

> > Crystals and overtones (2 msgs)
> > Double Sided PC Boards
> > F.S. - Tubes, radios, books, misc...
> > Front end of DC RX
> > Ham Database/Newsgroups
> > Ham shops in Tennessee
> > High performance...Not the handbook. (2 msgs)
> > How do you connect LED's in parallel?
> > MRF 479 Needed
> > Need CRYSTAL SET plans
> > PL259 Attachment to COAX Cable (3 msgs)
> > Wanted - Copy of Article: Ham Radio Feb 85
> > WTB: 25K pot
> >
> > Send Replies or notes for publication to:
> > Send subscription requests to:
> > Problems you can't solve otherwise to brian@ucsd.edu.
> >
> > Archives of past issues of the Ham-Homebrew Digest are available
> > (by FTP only) from ftp.UCSD.Edu in directory
> > "mailarchives/ham-homebrew".
> >
> > We trust that readers are intelligent enough to realize that all
> text
> > herein consists of personal comments and does not represent the
> > official
> > policies or positions of any party. Your mileage may vary. So
> there.
> >
> >
> ------------------------------------------------------------------------
>
> >
> > Date: 16 Aug 1997 15:38:53 GMT
> > From: hamm4fun@aol.com (Hamm4fun)
> > Subject: 11 volts from 12 volt regulator?
> >
> > >
> > >Bill Meara wrote:
> > >>
> > >> I just put the finishing touches on my (supposedly!) 12 VDC QRP
> > >> station power supply. Circuit is VERY simple: 18 volt (2
> Amp)
> > >> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack
> 7812
> > > 12
> > >> VDC voltage regulator.
> > >>
> > >> Problem is that the output voltage is only about 11.1 volts.
> > >>

> > >> Has anyone seen this problem before? What do you think, bad
> > >> component?
> > >>
> > >> I also notice that the regulator gets quite hot. I put a fairly
> > large
> > >> heat sink on it and I don't seem to get to the thermal shut down
> > point
> > >> (even when pulling around 1 amp through it.)
> > >>
> > >> Any suggestions?
> > >>
> > >> Thanks, 73 Bill N2CQR
> > > Looks like it to me, with that sort of input voltage, you
> > should
> > get
> > >12V out no trouble, very like the regulator is out of spec.
> > >Regards
> > >--
> > >... Sid Boyce...Amdahl(UK)...44-121 422 0375
> > > ----------------------------------
> > >Any opinions expressed above are mine and do not necessarily
> > represent
> > > the opinions or policies of Amdahl Corporation.
> > >
> > >
> > Whats the input voltage to the regulator . Sounds like it could be
> on
> > the
> > high side causing the regulator to dissipate a lot more power than
> it
> > was
> > designed. A lot of times a 18volt xfmr will actually put out 20
> volts
> > or
> > more. Also just how much power are you running out of your TX 4or 5
>
> > watts
> > can easily use up your 1 amp. Radio shack parts speak for
> themselves.
> > When
> > I use a 3 legged regulator I prefer the ones in a TO-3 case. Seems
> to
> >
> > have less problems with them. Also use some bypass caps on the input
>
> > and
> > output of the reg. If you are working the reg near its limit s I'd
> > suggest
> > going to a 3 amp device
> >

> > ------------------------------
> >
> > Date: Sat, 16 Aug 1997 00:30:07 GMT
> > From: Sid Boyce
> > Subject: 11 volts from 12 volt regulator?
> >
> > Bill Meara wrote:
> > >
> > > I just put the finishing touches on my (supposedly!) 12 VDC QRP
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> >
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> > > VDC voltage regulator.
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> > >
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> > > (even when pulling around 1 amp through it.)
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> > Regards
> > --
> > ... Sid Boyce...Amdahl(UK)...44-121 422 0375
> > ----------------------------------
> > Any opinions expressed above are mine and do not necessarily
> represent
> >
> > the opinions or policies of Amdahl Corporation.
> >
> > ------------------------------
> >
> > Date: 16 Aug 1997 04:09:01 GMT
> > From: Vedant
> > Subject: 12V portable electronic Cooler/warmers
> >
> > Hello,
> >

> > Visit www.koolatron.com to look at all the amazing products
> including
> > solid state thermoelectric portable cooler/warmers and solid state
> > water coolers. Best Saving! Big Savings!!!
> >
> > Happy Shopping!!
> >
> > Koolatron
> >
> > ------------------------------
> >
> > Date: Fri, 15 Aug 1997 10:33:02
> > From: Alan.Peake@dsto.defence.gov.au (Alan Peake)
> > Subject: Crystals and overtones
> >
> > >Reminds me of the customer who wanted a 12 volt power supply. When
> I
> > asked
> > >him the tolerance, he said "none. Exactly 12 volts." I had to admit
>
> > that I
> > >didn't know how to build one of those.
> >
> > What you could've done was to build one and adjust the output for
> > 12.00 +/-
> > 0.005 and show the customer the output on a 3-1/2 digit DVM and say
> > "There
> > you are! 12 Volts exactly!"
> >
> > Alan
> >
> > ------------------------------
> >
> > Date: Mon, 11 Aug 1997 08:39:00 -0400
> > From: Joseph M Zawodny
> > Subject: Crystals and overtones
> >
> > Kelvin Charlson wrote:
> > >
> > > Hi
> > >
> > > I have just built a 6 meter reciever and want to tune the local
> > oscillator
> > > in. The easiest and cheapest way I know how to do this is to build
> a
> > >
> > > crystal oscillator.
> > >
> > > Because an approx 50 MHz crystal is expensive ie $20, is it
> possible

> > to say
> > > use a 17.73 MHz crystal and use its third overtone ie around 53
> MHz.
> > As
> > > this crystal is only a few dollars.
> > >
> > > I have a siimple schematic for a crystal osillator, but do you
> have
> > to do
> > > anything special to the circuit to make sure you get the third
> > overtone. Or
> > > do you get it anyway once the crystal is operating and no high
> pass
> > filters
> > > are added to the circuit.
> > >
> > > I hope this makes some sense because I am only new at this stuff
> > >
> > > Kelvin
> > >
> > > kelvin@netspace.net.au
> >
> > Just go to DigiKey ( http://www.digikey.com ) and by a 50.000MHz
> sine
> > wave oscillator for 2 or 3 bucks. I doubt whether you could tweak
> > the third harmonic down 3MHz from 53 to 50 anyway.
> >
> > KO4LW
> >
> > --
> > ------ To Reply, Please remove the .nospam from addresses below
> ------
> >
> > Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
> > NASA Langley Research Center
> KO4LW.nospam@amsat.org
> >
> > E-mail: J.M.nospam.Zawodny@LaRC.NASA.gov
> > zawodny.nospam@exis.net
> > (757) 864-2681 (757) 864-2671 FAX
> > http://wwwp.exis.net/~zawodny
> >
> > ------------------------------
> >
> > Date: Mon, 11 Aug 1997 08:29:36 -0400
> > From: Dave Potter
> > Subject: Double Sided PC Boards
> >
> > wrightj@planetc.com wrote:
> > >

> > > How does a homebrewer plate thru holes in making oc boards?
> > > I have a X-Y table used to draw the art work on both sides of
> > > the pc board and drill them. Then how do you go about plating
> > > thru the holes?
> >
> > I don't know how I would do it at home. In a board shop, they do
> what
> > is
> > called electroless plating, basically dipping the board in a
> solution
> > or
> > suspension of fine copper particles before it is etched but after it
>
> > is
> > drilled. The copper particles adhere lightly to the surfaces of the
> > board, including the shafts of the holes. Takes some specific
> > chemistry
> > in the solution to make that work, but it does work. The boards are
> > then
> > plated with copper, more copper, that is, and the holes end up with
> > half
> > an ounce or so of copper plated into them. The next step is to clean
>
> > off
> > the resist that had been screened or photoplotted on the board.
> Under
> > the resist, the copper is thinner. Etching will remove all the
> > previously resist-covered copper but only half the bare copper areas
>
> > that had been thickened by the plating. The board is done.
> >
> > good luck.
> >
> > 73
> >
> > Dave
> > K1MBO
> >
> > ------------------------------
> >
> > Date: 14 Aug 1997 06:19:23 GMT
> > From: rog42@aol.com (Rog42)
> > Subject: F.S. - Tubes, radios, books, misc...
> >
> > FOR SALE: Tubes, books and radios including Hallicrafters,
> > Hammarlund,
> > and Philco. Schematics for many older radios and TV's - just $3
> > delivered. Tube manuals, Tube substitution books, Service manuals,
> > Radio
> > magazines, much more from the 30's to the 70's. Now over 1600

> > different
> > tube types in stock - Contact Rog42@aol.com for an E-mail copy of
> my
> > latest offerings on RADIO list - #810-T.
> >
> > ------------------------------
> >
> > Date: Sun, 17 Aug 1997 04:23:02 GMT
> > From: aruder@pipeline.com (Annette or Lou Hinshaw)
> > Subject: Front end of DC RX
> >
> > "Carl R. Stevenson" wrote:
> >
> > >Annette or Lou Hinshaw wrote in article
> > ><33f1ff14.28596756@news.pipeline.com>...
> > >>
> > >> The single largest problem facing modern ANYONE is the same as
> > ever: The
> > >> preponderance of naysayers who have no idea what's going on
> outside
> > their
> > >> own little foxhole and think that means the world is behind them.
> >
> > > >
> > > >However, those of us who work at the forefront of technology know
> of
> > what
> > > >we speak when we say that the vast majority of hams are stuck in
> the
> > 50s
> > > >(or 60s at best) technologically speaking ...
> > >
> > > YES!!
> > > The vast majority of EVERY field is stuck in the past.
> > > It is part of what I was saying.
> > >
> > > >> In the backward '70s, I devised a radio set made of '50s
> technology
> > >
> > > >>wedded to WW2 technology, and it transmitted music (admittedly
> poor
> > > >>quality, but it WAS only a prototype) over a bandwidth of 100
> HERTZ.
> > >
> > > > >
> > > >I can believe that it sounded poor ...
> > > >
> > > >> this summer I mentioned it on these ham newsgroups. I got 97
> > replies, and
> > > >>ALL BUT 3 of them were naysayers, pointing out the known limits

> why
> > it can't
> > >>be done the way I said I had done it. All too polite to call me a
>
> > liar, of cuss,
> > >> of cuss, but nonetheless saying it can't be done.
> > >> 2 of the remaining 3 replies offered encouragement, an ONLY one
> > gave
> > >> serious advice, which was all I had asked for in the first
> place.
> > >
> > >I believe if your check back, you'll find that I gave you nothing
> but
> > some
> > >simple advice on how to protect your ideas, based on my experience
> in
> > getting a
> > >couple of patents ...
> > >
> > >I don't recall bad-mouthing you, or your claims of accomplishment,
> > but I do
> > >recall having serious doubts that you knew what the hell you were
> > talking about
> > >..
> > >(but again, if I recall correctly, I kept them to myself ...)
> > >
> > >> But I did do it, back there in the '70s
> > >>
> > >> Haven't been able to sell it, ain't gonna give it away for some
> > snot nose
> > >> engineer to sneer at until he/she sees how it works and then try
> to
> > claim
> > >> credit for. I been down that road and up that tree, and all I got
>
> > was
> > >>ticks.
> > >
> > >If it was worth much, you should have been able to patent it and
> > license it
> > >by now ...
> > >>
> > >> BTW, about code, do you have a garden?
> > >
> > >Nope ...
> > >
> > >> no wheelbarrow, I suppose?
> > >
> > >Nope ...
> > >

> > >> Or shovel?
> > >
> > >Nope ...
> > >
> > >> Use electronic gardening only, do you?
> > >
> > >Yup ... all I grow are electronics things ...
> > >
> > >>Old don't mean get rid of.
> > >
> > >In technology, old=junk=toss it (or sell it if you can find someone
>
> > to give
> > >you 10 cents a pound to haul it off ) ...
> > >
> > >486 machines are getting hard to give away ... 386's are ancient,
> > >out-dated, and won't run much modern software ... 286s??? The
> > electronic equivalent
> > >of dinosaurs ... XTs??? Primordial slime ...
> > >
> > >Yes, in some venues, old DOES mean "get rid of" ...
> > >
> > >Carl - wa6vse
> > >wa6vse@fast.net
> >
> > I started to answer this para by para, and then came to the
> > peroration.
> > 486 he says is hard to give away, etc, and 386 is worse, and so on
> > Let Then Eat Cake, said the queen.
> >
> > With that he shows how he is divorced from rfeality.
> >
> > The flea markets are loaded with 8088 machines that sell well for
> > about
> > 150 bucks and get people started on computing who haven't BEEN to
> > college to learn the show.
> >
> > This is the same kinda guy who says if you aint't got the latest and
>
> > greatest
> > you are kidding yourself, while all around him, others do it better
> > and cheaper.
> >
> > In one place, he says it must have been poor quality radio, and in
> > another, he
> > says he didn't badmouth me, and in another he says he didn't think
> I
> > knew
> > what I was talking about.
> >

> > Hoo, boy.
> >
> > Ciao.
> >
> > Lou Hinshaw
> > Next thing for me to do is be kind to sorts like this, but mostly
> > myself, and
> > quit wasting time on this NG.
> >
> > Prolific inventor,
> > Lousy Salesman,
> > Incompetent businessman.
> > (Typical of the Breed)
> > Tulsa OK, USA
> >
> > ------------------------------
> >
> > Date: Fri, 15 Aug 1997 23:48:55 -0500
> > From: Jason
> > Subject: Ham Database/Newsgroups
> >
> > What is the best ham database to use on the internet. I'm looking
> for
> >
> > one which has variable fields of search, like City, State, Zip Code,
>
> > etc.
> >
> > Also, does anyone have a list of ham radio newsgroups?
> >
> > Thanks for the info.
> >
> > Jason Dugas
> >
> > ------------------------------
> >
> > Date: Sat, 16 Aug 1997 21:10:37 GMT
> > From: ernie@netvision.net.il (ernie)
> > Subject: Ham shops in Tennessee
> >
> > Hello
> > I'm looking for any information on the subject and all will be
> highly
> > appreciated.
> > Thanks in advance de Isaac, 4Z4TL
> > 73
> >
> > ------------------------------
> >
> > Date: Fri, 15 Aug 1997 16:54:55 -0500

```
> > From: "William E. Sabin"
> > Subject: High performance...Not the handbook.
> >
> > This is a multi-part message in MIME format.
> >
> > --------------736B37A84090
> > Content-Type: text/plain; charset=us-ascii
> > Content-Transfer-Encoding: 7bit
> >
> > JohnsonHE wrote:
> > >
> > > Hi Rob...Like trying to find the wire tables and only later
> > realizing it's
> > > under Copper wire tables. Sigh.
> >
> > A scan of page 1190 of 1997 ARRL Handbook.
> >
> > --------------736B37A84090
> > Content-Type: text/plain; charset=iso-8859-1; name="Doc0001.wri"
> > Content-Transfer-Encoding: quoted-printable
> > Content-Disposition: inline; filename="Doc0001.wri"
> >
> > {\rtf1\ansi\deff0\deftab720{\fonttbl{\f0\fnil MS Sans
> > Serif;}{\f1\fnil\fc=
> > harset2 Symbol;}{\f2\fswiss\fprq2 System;}{\f3\fnil Times New
> > Roman;}{\f4=
> > \fmodern Courier;}}
> > {\colortbl\red0\green0\blue0;}
> > \deflang1033\pard\tx3168\plain\f4\fs28 Wire:
> > \par \pard\tx144\tx3168\plain\f4\fs28 \tab Antenna, strength: \tab
>
> > 30.3=
> > 0
> > \par \tab Copperclad steel: \tab 20.7
> > \par \tab Copperweld: \tab 20.7
> > \par \pard\tx288\tx3312\plain\f4\fs28 Cutters: 25.4
> > \par Gauge, Standard vs American:\tab 30.31
> > \par Hookup color codes:\tab 24.9
> > \par Inductance of straight:\tab 6.23
> > \par Litz: \tab 6.18
> > \par Specifications: 24.8
> > \par Troubleshooting:\tab 27.6,27.20
> > \par Wrap:\tab 25.11
> > \par \pard\plain\f4\fs28 =
> >
> > \par }
> > =00
> > --------------736B37A84090--
> >
> > ------------------------------
```

> >
> > Date: 16 Aug 1997 01:47:49 GMT
> > From: johnsonhe@aol.com (JohnsonHE)
> > Subject: High performance...Not the handbook.
> >
> > >From: "William E. Sabin" >
> > Hi Bill.
> >
> > Well now, a number of years ago, I stopped purchasing a new handbook
>
> > every
> > year after having done so for many years and paying for a new book
> > only to
> > get 5 percent of a new book. The rest of it was in my old handbook.
> I
> > guess that was the first time I realized that there wasn't any tooth
>
> > fairy, no real santa claus and ham radio started to look just a tad
> > jaded.
> >
> > Now I've got a 1991 handbook (purchased) in the shack, and a 1988
> > handbook
> > (purchased) in the shop, and maybe, if I like the cover of the one
> > next
> > year, (You never get to look inside before you buy them you know!)
> > I'll
> > buy a new 1998 and move the 1991 to the workshop. It's about as
> > frequent
> > as I get anymore.
> >
> > I'm sure I'll enjoy your contribution to it, and maybe a few of the
> > others
> > who labor so hard to provide a little payback for their hobby of so
> > many
> > years, but at the current price, it had REALLY better be good.
> >
> > Meanwhile, back at the ranchhouse, in MY copy of the handbook, the
> > index
> > leaves something to be desired.
> >
> > I don't bother with MIME'd messages, so not real sure about your
> > comments,
> > but reading between the lines, figure it was something about the Cu
> > wire
> > tables
> >
> > W4ZCB
> >
> > ------------------------------
> >

> > Date: Sat, 16 Aug 1997 23:11:37 -0400
> > From: kr4wm@sccoast!.net (Web Williams)
> > Subject: How do you connect LED's in parallel?
> >
> > I'm working on a project for a friend, and need to connect two LED's
>
> > in
> > parallel. When I hook them up, only one lights, the other just sits
> > there. I'm supposing that the one which draws the most current is
> the
> > only one which will get any current through it, or something like
> > that.
> > Don't need to understand the theory, just tell me what I need to
> know
> > to
> > get it working- please. We'll discuss why this happens in another
> > message
> > thread- it's Saturday night, and I have to get it back to the owner
> on
> >
> > Monday morning (hopefully in working condition). No, it's not
> > something I
> > broke. It's a clock with an ambulance on the face, and the ambulance
>
> > has
> > three LED's for emergency lights. You push a momentary contact
> switch,
> >
> > and the LED's alternate, i.e. Two parallel LED's light at one time,
> > then
> > go out, and the third light comes on, and they do this back and
> forth
> > contunially. At one time, it worked like this from the factory
> (who's
> > out
> > of business). I had to home brew a siren and this light system
> > without the benefit of having the old circuit to look at. This is
> > something I'm rigging up for the owner, who likes flashy stuff.
> Thanks
> > in
> > advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC
> >
> > TO REPLY: remove the ! from my address.
> >
> > ------------------------------
> >
> > Date: Sat, 16 Aug 1997 12:34:42 -0700
> > From: "James R. Binkley"
> > Subject: MRF 479 Needed
> >

> > Does anyone know where I can get an MRF 479 transistor, or its
> > equivalent. I need one for a portable transciever I have, and don't
>
> > find this transistor listed in any of my catalogs.
> >
> > Thanks Bob w4aos@his.com
> >
> > ------------------------------
> >
> > Date: Sun, 10 Aug 1997 20:27:17 -0700
> > From: AC6V
> > Subject: Need CRYSTAL SET plans
> >
> > N9KC wrote:
> > > >
> > > > Hi All,
> > > >
> > > > Need plans to build a simple CRYSTAL SET from readily available
> > parts.
> > > > Have a teenager in the neighborhood who needs help.
> > > >
> > > > We live close to an AM tower (KOA in Denver), so this should be a
> > piece of
> > > > cake.
> > > >
> > > > Reply to N9KC@aol.com
> > > >
> > > > Thanks!!!
> > > >
> > > > Lou
> > > -----
> > Hi Lou -- try URL:
> > http://www.midnightscience.com/
> > For The Xtal Set Society
> > --
> > 73
> > Rod in San Diego
> > --
> > AC6V's HAM AND DX REFERENCE GUIDE
> > 60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
> > Main Page: http://pw2.netcom.com/~ac6v/index.html
> > Master Index: http://pw2.netcom.com/~ac6v/pageas.html
> > lack the right sound(?), smell(?), something undefinable(?), and the
>
> > Dow-Keys were de rigeur in the timeframe :-)
> >
> > Grant
> >
> > nq5t@gte.net
> > http://home1.gte.net/nq5t

> >
> > ------------------------------
> >
> > Date: Sat, 16 Aug 1997 05:32:13 -0500
> > From: "William E. Sabin"
> > Subject: PL259 Attachment to COAX Cable
> >
> > KF6IIU wrote:
> >
> > >
> > > The Radio Shack 259's were so crappy, they weren't even the right
> > inner
> > > diameter to accept RG8 cable.
> >
> > They also sell a silver plated version that is more expensive
> ($3.99),
> >
> > part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> > cents),
> > part number 278-204. I have used these parts OK.
> >
> > Bill W0IYH
> >
> > ------------------------------
> >
> > Date: 16 Aug 1997 13:05:00 -0700
> > From: markem@primenet.com (M. Monninger)
> > Subject: PL259 Attachment to COAX Cable
> >
> > Most of the mail order connector/cable outfits have teflon/silver
> > PL-259's for
> > $1.00-1.50 each depending on qty, even cheaper if you buy lots of
> 10.
> > The
> > silver plated adapters go for 25 - 30 cents each. The silver-plated
> > 259's are
> > MUCH easier to solder and if you're using the adapter for RG-58,
> > they'll suck
> > the solder right in and give a great connection to the cable. Of
> > course, my
> > old Weller 350W gun helps a little too...
> >
> > 73... Mark AA7TA
> >
> > In article <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>,
> > sabinw@crpl.cedar-rapids.lib.ia.us wrote:
> > >KF6IIU wrote:
> > >
> > >>
> > >> The Radio Shack 259's were so crappy, they weren't even the right

>
> > inner
> > >> diameter to accept RG8 cable.
> > >
> > >They also sell a silver plated version that is more expensive
> > ($3.99),
> > >part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> > cents),
> > >part number 278-204. I have used these parts OK.
> > >
> > >Bill W0IYH
> >
> > ------------------------------
> >
> > Date: Sat, 16 Aug 1997 15:34:30 -0700
> > From: Jack Taylor
> > Subject: PL259 Attachment to COAX Cable
> >
> > On Sat, 16 Aug 1997, William E. Sabin wrote:
> >
> > > KF6IIU wrote:
> > >
> > > >
> > > > The Radio Shack 259's were so crappy, they weren't even the
> right
> > inner
> > > > diameter to accept RG8 cable.
> > >
> > > They also sell a silver plated version that is more expensive
> > ($3.99),
> > > part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> > cents),
> > > part number 278-204. I have used these parts OK.
> > >
> > > Bill W0IYH
> >
> > I've had pretty good success by just using solder flux with the
> crappy
> >
> > fittings.
> >
> > 73 de Jack
> >
> > ------------------------------
> >
> > Date: Sun, 10 Aug 1997 15:53:48 +0100
> > From: Simon Lewis
> > Subject: Wanted - Copy of Article: Ham Radio Feb 85
> >
> > wanted

> > ------
> >
> > Photocopy of article on hombrew silver plating - Ham Radio Feb 85
> >
> > Any help appreciated
> >
> > 73 Simon
> >
> >
> +----------------------------------------------------------------------+
>
> >
> > | Simon Lewis GM4PLM Editor - EMN
> |
> >
> > | European Microwave News - Supporting Microwave Radio Across Europe
> |
> >
> > | Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk
> |
> >
> >
> +----------------------------------------------------------------------+
>
> >
> > ------------------------------
> >
> > Date: Sat, 16 Aug 1997 02:10:22 GMT
> > From: bry@REMOVE.mns.net (Bry)
> > Subject: WTB: 25K pot
> >
> > I need a FOUR WATT potentiometer (large-ish!) for the drive control
> in
> >
> > my Valiant. It is 25 K-ohms panel pot with the standard 1/4" shaft
> > about 3/8" to 1/2" long, the type that a regular knob will go on.
> >
> > Anyone got one?
> >
> > NB: delete out the "REMOVE" from my e-mail address
> > or reply here.
> >
> > Thanks - Bry, AF4K
> > PLEASE DON'T SEND ME ANYMORE NEWSGROUPS LETTERS MY HUSBAND PASSED ON
>
> > AUGUST 10, 1997
>
> THANK YOUMRS JONES
>
> > ------------------------------

> >
> > End of Ham-Homebrew Digest V97 #459
> > ******************************
>
> --------------8F1C67A468385F2DFA2794C6
> Content-Type: text/html; charset=us-ascii
> Content-Transfer-Encoding: 7bit
>
>
> Ham-Homebrew Mailing List and Newsgroup wrote:
>
Ham-Homebrew
> Digest
> Sat, 16 Aug 97 Volume 97 :
> Issue
> 459
>
>
Today's Topics:
>
&n
> sp;
> 11 volts from 12 volt regulator? (2 msgs)
>
&
> bsp;
> 12V portable electronic Cooler/warmers
>
&nbs
> ;
>
> Crystals and overtones (2 msgs)
>
&nb
> p;
>
> Double Sided PC Boards
>

> nbsp;
>
> F.S. - Tubes, radios, books, misc...
>
&n
> sp;
>
> Front end of DC RX
>
&n
> sp;

>
> Ham Database/Newsgroups
>
&
> bsp;
>
> Ham shops in Tennessee
>

>
> High performance...Not the handbook. (2 msgs)
>

>
> How do you connect LED's in parallel?
>
&nb
> p;
>
> MRF 479 Needed
>
&nbs
> ;
>
> Need CRYSTAL SET plans
>

> nbsp;
> PL259 Attachment to COAX Cable (3 msgs)
>

>
> Wanted - Copy of Article: Ham Radio Feb 85
>
&n
> sp;
>
> WTB: 25K pot
>
>
Send Replies or notes for publication to:
> <Ham-Homebrew@UCSD.Edu>
>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
>
Problems you can't solve otherwise to brian@ucsd.edu.
>
>
Archives of past issues of the Ham-Homebrew Digest are available
>
(by FTP only) from ftp.UCSD.Edu in directory

> "mailarchives/ham-homebrew".
>
>
We trust that readers are intelligent enough to realize that all
> text
>
herein consists of personal comments and does not represent the
> official
>
policies or positions of any party. Your mileage may
> vary.
> So there.
>
-----
> ----------
>
>
Date: 16 Aug 1997 15:38:53 GMT
>
From: hamm4fun@aol.com (Hamm4fun)
>
Subject: 11 volts from 12 volt regulator?
>
>
>
>
>Bill Meara wrote:
>
>>
>
>> I just put the finishing touches on my (supposedly!) 12 VDC QRP
>
>
>> station power supply. Circuit is VERY
> simple:
> 18 volt (2 Amp)
>
>> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack
> 7812
> 12
>
>> VDC voltage regulator.
>
>>
>
>> Problem is that the output voltage is only about 11.1 volts.
>
>>
>
>> Has anyone seen this problem before? What do you think,

> bad
>
>> component?
>
>>
>
>> I also notice that the regulator gets quite hot. I put a
> fairly
> large
>
>> heat sink on it and I don't seem to get to the thermal shut
> down
> point
>
>> (even when pulling around 1 amp through it.)
>
>>
>
>> Any suggestions?
>
>>
>
>> Thanks, 73 Bill
>
> N2CQR
>
> Looks like it to me, with
> that
> sort of input voltage, you should
>
get
>
>12V out no trouble, very like the regulator is out of spec.
>
>Regards
>
>--
>
>... Sid Boyce...Amdahl(UK)...44-121 422 0375
>
> &n
> sp;
> ----------------------------------
>
>Any opinions expressed above are mine and do not necessarily
> represent
>
> the opinions or policies of Amdahl Corporation.
>
>

>
>
>
Whats the input voltage to the regulator . Sounds like it could be
>
> on the
>
high side causing the regulator to dissipate a lot more power than
>
> it was
>
designed. A lot of times a 18volt xfmr will actually put out 20
> volts
> or
>
more. Also just how much power are you running out of your
> TX
> 4or 5 watts
>
can easily use up your 1 amp. Radio shack parts speak for
> themselves.
> When
>
I use a 3 legged regulator I prefer the ones in a TO-3 case.
>
> Seems to
>
have less problems with them. Also use some bypass caps on the
> input
> and
>
output of the reg. If you are working the reg near its limit s I'd
>
> suggest
>
going to a 3 amp device
>
>

>
>
Date: Sat, 16 Aug 1997 00:30:07 GMT
>
From: Sid Boyce <szb50@amdahl.com>
>
Subject: 11 volts from 12 volt regulator?
>
>
Bill Meara wrote:
>

>
>
> I just put the finishing touches on my (supposedly!) 12 VDC QRP
>
> station power supply. Circuit is VERY
> simple:
> 18 volt (2 Amp)
>
> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack
> 7812
> 12
>
> VDC voltage regulator.
>
>
>
> Problem is that the output voltage is only about 11.1 volts.
>
>
>
> Has anyone seen this problem before? What do you think,
> bad
>
> component?
>
>
>
> I also notice that the regulator gets quite hot. I put a
> fairly
> large
>
> heat sink on it and I don't seem to get to the thermal shut down
>
> point
>
> (even when pulling around 1 amp through it.)
>
>
>
> Any suggestions?
>
>
>
> Thanks, 73 Bill
> N2CQR
>
Looks like it to me,
> with
> that sort of input voltage, you should get
>

12V out no trouble, very like the regulator is out of spec.
>
Regards
>
--
>
... Sid Boyce...Amdahl(UK)...44-121 422 0375
>
&n
> sp;
> ----------------------------------
>
Any opinions expressed above are mine and do not necessarily
> represent
>
the opinions or policies of Amdahl Corporation.
>
>

>
>
Date: 16 Aug 1997 04:09:01 GMT
>
From: Vedant<sales@koolatron.com>
>
Subject: 12V portable electronic Cooler/warmers
>
>
Hello,
>
>
Visit www.koolatron.com to look at all the amazing products
> including
> solid state thermoelectric portable cooler/warmers and solid state
> water
> coolers. Best Saving! Big Savings!!!
>
>
Happy Shopping!!
>
>
Koolatron
>
>

>
>
Date: Fri, 15 Aug 1997 10:33:02
>
From: Alan.Peake@dsto.defence.gov.au (Alan Peake)
>

Subject: Crystals and overtones
>
>
>Reminds me of the customer who wanted a 12 volt power supply. When
>
> I asked
>
>him the tolerance, he said "none. Exactly 12 volts." I had to
> admit
> that I
>
>didn't know how to build one of those.
>
>
What you could've done was to build one and adjust the output for
> 12.00
> +/-
>
0.005 and show the customer the output on a 3-1/2 digit DVM and
> say
> "There
>
you are! 12 Volts exactly!"
>
>
Alan
>
>

>
>
Date: Mon, 11 Aug 1997 08:39:00 -0400
>
From: Joseph M Zawodny <J.M.nospam.Zawodny@LaRC.NASA.gov>
>
Subject: Crystals and overtones
>
>
Kelvin Charlson wrote:
>
>
>
> Hi
>
>
>
> I have just built a 6 meter reciever and want to tune the local
> oscillator
>
> in. The easiest and cheapest way I know how to do this is to

> build
> a
>
> crystal oscillator.
>
>
>
> Because an approx 50 MHz crystal is expensive ie $20, is it
> possible
> to say
>
> use a 17.73 MHz crystal and use its third overtone ie around 53
> MHz.
> As
>
> this crystal is only a few dollars.
>
>
>
> I have a siimple schematic for a crystal osillator, but do you
> have
> to do
>
> anything special to the circuit to make sure you get the third
> overtone.
> Or
>
> do you get it anyway once the crystal is operating and no high
> pass
> filters
>
> are added to the circuit.
>
>
>
> I hope this makes some sense because I am only new at this stuff
>
>
>
>
> Kelvin
>
>
>
> kelvin@netspace.net.au
>
>
Just go to DigiKey ( HREF="http://www.digikey.com">http://www.digikey.com
> ) and by a 50.000MHz sine
>

wave oscillator for 2 or 3 bucks. I doubt whether you could
> tweak
>
the third harmonic down 3MHz from 53 to 50 anyway.
>
>
KO4LW
>
>
--
>
------ To Reply, Please remove the .nospam from addresses below
> ------
>
Work: Dr. Joseph M.
> Zawodny
>
> Play: Joe Zawodny
>
NASA Langley Research
> Center
>
> KO4LW.nospam@amsat.org
>
E-mail:
> J.M.nospam.Zawodny@LaRC.NASA.gov
> zawodny.nospam@exis.net
>
(757) 864-2681 (757) 864-2671
>
> FAX HREF="http://wwwp.exis.net/~zawodny">http://wwwp.exis.net/~zawodny
>
>

>
>
Date: Mon, 11 Aug 1997 08:29:36 -0400
>
From: Dave Potter <dpotter@bbn.com>
>
Subject: Double Sided PC Boards
>
>
wrightj@planetc.com wrote:
>
>
>
> How does a homebrewer plate thru holes in making oc boards?
>
> I have a X-Y table used to draw the art work on both sides of

>
> the pc board and drill them. Then how do you go about plating
>
> thru the holes?
>
>
I don't know how I would do it at home. In a board shop, they do
> what
> is
>
called electroless plating, basically dipping the board in a
> solution
> or
>
suspension of fine copper particles before it is etched but after
> it
> is
>
drilled. The copper particles adhere lightly to the surfaces of
> the
>
board, including the shafts of the holes. Takes some specific
> chemistry
>
in the solution to make that work, but it does work. The boards
> are
> then
>
plated with copper, more copper, that is, and the holes end up
> with
> half
>
an ounce or so of copper plated into them. The next step is to
> clean
> off
>
the resist that had been screened or photoplotted on the board.
> Under
>
the resist, the copper is thinner. Etching will remove all the
>
previously resist-covered copper but only half the bare copper
> areas
>
that had been thickened by the plating. The board is done.
>
>
good luck.
>
>

73
>
>
Dave
>
K1MBO
>
>

>
>
Date: 14 Aug 1997 06:19:23 GMT
>
From: rog42@aol.com (Rog42)
>
Subject: F.S. - Tubes, radios, books, misc...
>
>
FOR SALE: Tubes, books and radios including Hallicrafters,
> Hammarlund,
>
and Philco. Schematics for many older radios and TV's - just
>
> $3
>
delivered. Tube manuals, Tube substitution books, Service
> manuals,
> Radio
>
magazines, much more from the 30's to the 70's. Now over
> 1600
> different
>
tube types in stock - Contact Rog42@aol.com for an E-mail
> copy
> of my
>
latest offerings on RADIO list - #810-T.
>
>

>
>
Date: Sun, 17 Aug 1997 04:23:02 GMT
>
From: aruder@pipeline.com (Annette or Lou Hinshaw)
>
Subject: Front end of DC RX
>
>
"Carl R. Stevenson" <wa6vse@fast.net> wrote:

>
>
>Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article
>
><33f1ff14.28596756@news.pipeline.com>...
>
>>
>
>> The single largest problem facing modern ANYONE is the same as
> ever:
> The
>
>> preponderance of naysayers who have no idea what's going on
> outside
> their
>
>> own little foxhole and think that means the world is behind
> them.
>
>
>
>However, those of us who work at the forefront of technology know
>
> of what
>
>we speak when we say that the vast majority of hams are stuck in
> the
> 50s
>
>(or 60s at best) technologically speaking ...
>
>
YES!!
>
The vast majority of EVERY field is stuck in the past.
>
It is part of what I was saying.
>
>
>> In the backward '70s, I devised a radio set made of '50s
> technology
>
>>wedded to WW2 technology, and it transmitted music (admittedly
> poor
>
>>quality, but it WAS only a prototype) over a bandwidth of 100
> HERTZ.
>
>
>

>I can believe that it sounded poor ...
>
>
>
>> this summer I mentioned it on these ham newsgroups. I got 97
> replies,
> and
>
>>ALL BUT 3 of them were naysayers, pointing out the known limits
> why
> it can't
>
>>be done the way I said I had done it. All too polite to
> call
> me a liar, of cuss,
>
>> of cuss, but nonetheless saying it can't be done.
>
>> 2 of the remaining 3 replies offered encouragement, an ONLY one
>
> gave
>
>> serious advice, which was all I had asked for in the
> first
> place.
>
>
>
>I believe if your check back, you'll find that I gave you nothing
>
> but some
>
>simple advice on how to protect your ideas, based on my
> experience
> in getting a
>
>couple of patents ...
>
>
>
>I don't recall bad-mouthing you, or your claims of
> accomplishment,
> but I do
>
>recall having serious doubts that you knew what the hell you were
>
> talking about
>
>..
>

>(but again, if I recall correctly, I kept them to myself
> ...)
>
>
>
>> But I did do it, back there in the '70s
>
>>
>
>> Haven't been able to sell it, ain't gonna give it away for some
>
> snot nose
>
>> engineer to sneer at until he/she sees how it works and then
> try
> to claim
>
>> credit for. I been down that road and up that tree, and all I
> got
> was
>
>>ticks.
>
>
>
>If it was worth much, you should have been able to patent it and
> license
> it
>
>by now ...
>
>>
>
>> BTW, about code, do you have a garden?
>
>
>
>Nope ...
>
>
>
>> no wheelbarrow, I suppose?
>
>
>
>Nope ...
>
>
>
>> Or shovel?

>
>
>
>Nope ...
>
>
>
>> Use electronic gardening only, do you?
>
>
>
>Yup ... all I grow are electronics things ...
>
>
>
>>Old don't mean get rid of.
>
>
>
>In technology, old=junk=toss it (or sell it if you can find
> someone
> to give
>
>you 10 cents a pound to haul it off ) ...
>
>
>
>486 machines are getting hard to give away ... 386's are ancient,
>
>
>out-dated, and won't run much modern software ... 286s??? The
> electronic
> equivalent
>
>of dinosaurs ... XTs??? Primordial slime ...
>
>
>
>Yes, in some venues, old DOES mean "get rid of" ...
>
>
>
>Carl - wa6vse
>
>wa6vse@fast.net
>
>
I started to answer this para by para, and then came to the
> peroration.
>

486 he says is hard to give away, etc, and 386 is worse, and so on
>
>
Let Then Eat Cake, said the queen.
>
>
With that he shows how he is divorced from rfeality.
>
>
The flea markets are loaded with 8088 machines that sell well for
> about
>
150 bucks and get people started on computing who haven't BEEN to
>
college to learn the show.
>
>
This is the same kinda guy who says if you aint't got the latest
> and
> greatest
>
you are kidding yourself, while all around him, others do it
> better
> and cheaper.
>
>
In one place, he says it must have been poor quality radio, and in
> another,
> he
>
says he didn't badmouth me, and in another he says he didn't
>
> think I knew
>
what I was talking about.
>
>
Hoo, boy.
>
>
Ciao.
>
>
Lou Hinshaw
>
Next thing for me to do is be kind to sorts like this, but mostly
> myself,
> and
>
quit wasting time on this NG.

>
>
Prolific inventor,
>
Lousy Salesman,
>
Incompetent businessman.
>
(Typical of the Breed)
>
Tulsa OK, USA
>
>

>
>
Date: Fri, 15 Aug 1997 23:48:55 -0500
>
From: Jason <kb5urq@earthlink.net>
>
Subject: Ham Database/Newsgroups
>
>
What is the best ham database to use on the internet. I'm
> looking
> for
>
one which has variable fields of search, like City, State, Zip
> Code,
>
etc.
>
>
Also, does anyone have a list of ham radio newsgroups?
>
>
Thanks for the info.
>
>
Jason Dugas
>
>

>
>
Date: Sat, 16 Aug 1997 21:10:37 GMT
>
From: ernie@netvision.net.il (ernie)
>
Subject: Ham shops in Tennessee
>

>
Hello
>
I'm looking for any information on the subject and all will be
> highly
>
appreciated.
>
Thanks in advance de Isaac, 4Z4TL
>
73
>
>

>
>
Date: Fri, 15 Aug 1997 16:54:55 -0500
>
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
>
Subject: High performance...Not the handbook.
>
>
This is a multi-part message in MIME format.
>
>

>

>

>
>
JohnsonHE wrote:
>
>
>
> Hi Rob...Like trying to find the wire tables and only later
> realizing
> it's
>
> under Copper wire tables. Sigh.
>
>
A scan of page 1190 of 1997 ARRL Handbook.
>
>

>

>

```
>
Content-Disposition: inline; filename="Doc0001.wri"
>
>
{\rtf1\ansi\deff0\deftab720{\fonttbl{\f0\fnil MS Sans
> Serif;}{\f1\fnil\fc=
>
harset2 Symbol;}{\f2\fswiss\fprq2 System;}{\f3\fnil Times New
> Roman;}{\f4=
>
\fmodern Courier;}}
>
{\colortbl\red0\green0\blue0;}
>
\deflang1033\pard\tx3168\plain\f4\fs28 Wire:
>
\par \pard\tx144\tx3168\plain\f4\fs28 \tab Antenna,
> strength:
> \tab 30.3=
>
0
>
\par \tab Copperclad steel: \tab 20.7
>
\par \tab
> Copperweld:
> \tab 20.7
>
\par \pard\tx288\tx3312\plain\f4\fs28
> Cutters:
>
> 25.4
>
\par Gauge, Standard vs American:\tab 30.31
>
\par Hookup color codes:\tab 24.9
>
\par Inductance of straight:\tab 6.23
>
\par Litz: \tab 6.18
>
\par
> Specifications:
> 24.8
>
\par Troubleshooting:\tab 27.6,27.20
>
\par Wrap:\tab 25.11
>
\par \pard\plain\f4\fs28 =
>
```

>
\par }
>
=00
>

>
>

>
>
Date: 16 Aug 1997 01:47:49 GMT
>
From: johnsonhe@aol.com (JohnsonHE)
>
Subject: High performance...Not the handbook.
>
>
>From: "William E. Sabin" <sabinw@crpl.cedar-rapids.
>
>
Hi Bill.
>
>
Well now, a number of years ago, I stopped purchasing a new
> handbook
> every
>
year after having done so for many years and paying for a new book
>
> only to
>
get 5 percent of a new book. The rest of it was in my old
> handbook.
> I
>
guess that was the first time I realized that there wasn't any
> tooth
>
fairy, no real santa claus and ham radio started to look just a
> tad
> jaded.
>
>
Now I've got a 1991 handbook (purchased) in the shack, and a 1988
> handbook
>
(purchased) in the shop, and maybe, if I like the cover of the one
>
> next
>

year, (You never get to look inside before you buy them you know!)
>
> I'll
>
buy a new 1998 and move the 1991 to the workshop. It's about as
> frequent
>
as I get anymore.
>
>
I'm sure I'll enjoy your contribution to it, and maybe a few of the
>
> others
>
who labor so hard to provide a little payback for their hobby of
> so
> many
>
years, but at the current price, it had REALLY better be good.
>
>
Meanwhile, back at the ranchhouse, in MY copy of the handbook, the
> index
>
leaves something to be desired.
>
>
I don't bother with MIME'd messages, so not real sure about your
> comments,
>
but reading between the lines, figure it was something about the
> Cu
> wire
>
tables
>
>
W4ZCB
>
>

>
>
Date: Sat, 16 Aug 1997 23:11:37 -0400
>
From: kr4wm@sccoast!.net (Web Williams)
>
Subject: How do you connect LED's in parallel?
>
>

I'm working on a project for a friend, and need to connect two
> LED's
> in
>
parallel. When I hook them up, only one lights, the other just
> sits
>
there. I'm supposing that the one which draws the most current is
> the
>
only one which will get any current through it, or something like
> that.
>
Don't need to understand the theory, just tell me what I need to
> know
> to
>
get it working- please. We'll discuss why this happens in another
> message
>
thread- it's Saturday night, and I have to get it back to the
> owner
> on
>
Monday morning (hopefully in working condition). No, it's not
> something
> I
>
broke. It's a clock with an ambulance on the face, and the
> ambulance
> has
>
three LED's for emergency lights. You push a momentary contact
> switch,
>
and the LED's alternate, i.e. Two parallel LED's light at one
> time,
> then
>
go out, and the third light comes on, and they do this back and
> forth
>
contunially. At one time, it worked like this from the factory
> (who's
> out
>
of business). I had to home brew a siren and this light system
>
without the benefit of having the old circuit to look at. This is
>

something I'm rigging up for the owner, who likes flashy stuff.
> Thanks
> in
>
advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC
>
>
TO REPLY: remove the ! from my address.
>
>

>
>
Date: Sat, 16 Aug 1997 12:34:42 -0700
>
From: "James R. Binkley" <w4aos@his.com>
>
Subject: MRF 479 Needed
>
>
Does anyone know where I can get an MRF 479 transistor, or its
>
equivalent. I need one for a portable transciever I have,
> and
> don't
>
find this transistor listed in any of my catalogs.
>
>
Thanks Bob w4aos@his.com
>
>

>
>
Date: Sun, 10 Aug 1997 20:27:17 -0700
>
From: AC6V <ac6v@ix.netcom.com>
>
Subject: Need CRYSTAL SET plans
>
>
N9KC wrote:
>
>
>
> Hi All,
>
>
>
> Need plans to build a simple CRYSTAL SET from readily

> available
> parts.
>
> Have a teenager in the neighborhood who needs help.
>
>
>
> We live close to an AM tower (KOA in Denver), so this should be
> a
> piece of
>
> cake.
>
>
>
> Reply to N9KC@aol.com
>
>
>
> Thanks!!!
>
>
>
> Lou
>
-----
>
Hi Lou -- try URL:
>
HREF="http://www.midnightscience.com/">http://www.midnightscience.com/
>
>
For The Xtal Set Society
>
--
>
73
>
Rod in San Diego
>
--
>
AC6V's HAM AND DX REFERENCE GUIDE
>
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
>
Main Page:
HREF="http://pw2.netcom.com/~ac6v/index.html">http://pw2.netcom.com/~ac6v/index.html
>
>

Master Index:
HREF="http://pw2.netcom.com/~ac6v/pageas.html">http://pw2.netcom.com/~ac6v/pageas.html
>
>
lack the right sound(?), smell(?), something undefinable(?), and
> the
>
Dow-Keys were de rigeur in the timeframe :-)
>
>
Grant
>
>
nq5t@gte.net
>
http://home1.gte.net/nq5t
>
>

>
>
Date: Sat, 16 Aug 1997 05:32:13 -0500
>
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
>
Subject: PL259 Attachment to COAX Cable
>
>
KF6IIU wrote:
>
>
>
>
> The Radio Shack 259's were so crappy, they weren't even the
> right
> inner
>
> diameter to accept RG8 cable.
>
>
They also sell a silver plated version that is more expensive
> ($3.99),
>
part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> cents),
>
part number 278-204. I have used these parts OK.
>
>
Bill W0IYH

>
>

>
>
Date: 16 Aug 1997 13:05:00 -0700
>
From: markem@primenet.com (M. Monninger)
>
Subject: PL259 Attachment to COAX Cable
>
>
Most of the mail order connector/cable outfits have teflon/silver
> PL-259's
> for
>
$1.00-1.50 each depending on qty, even cheaper if you buy lots of
> 10.
> The
>
silver plated adapters go for 25 - 30 cents each. The
> silver-plated
> 259's are
>
MUCH easier to solder and if you're using the adapter for RG-58,
> they'll
> suck
>
the solder right in and give a great connection to the cable. Of
> course,
> my
>
old Weller 350W gun helps a little too...
>
>
73... Mark AA7TA
>
>
In article <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>,
>
sabinw@crpl.cedar-rapids.lib.ia.us wrote:
>
>KF6IIU wrote:
>
>
>
>>
>
>> The Radio Shack 259's were so crappy, they weren't even the
> right

> inner
>
>> diameter to accept RG8 cable.
>
>
>
>They also sell a silver plated version that is more expensive
> ($3.99),
>
>part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> cents),
>
>part number 278-204. I have used these parts OK.
>
>
>
>Bill W0IYH
>
>

>
>
Date: Sat, 16 Aug 1997 15:34:30 -0700
>
From: Jack Taylor <n7oo@goodnet.com>
>
Subject: PL259 Attachment to COAX Cable
>
>
On Sat, 16 Aug 1997, William E. Sabin wrote:
>
>
> KF6IIU wrote:
>
>
>
> >
>
> > The Radio Shack 259's were so crappy, they weren't even the
> right
> inner
>
> > diameter to accept RG8 cable.
>
>
>
> They also sell a silver plated version that is more expensive
> ($3.99),
>
> part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99

>
> cents),
>
> part number 278-204. I have used these parts OK.
>
>
>
> Bill W0IYH
>
>
I've had pretty good success by just using solder flux with the
> crappy
>
fittings.
>
>
73 de Jack
>
>

>
>
Date: Sun, 10 Aug 1997 15:53:48 +0100
>
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
>
Subject: Wanted - Copy of Article: Ham Radio Feb 85
>
>
wanted
>
------
>
>
Photocopy of article on hombrew silver plating - Ham Radio Feb 85
>
>
Any help appreciated
>
>
73 Simon
>
>
+-------
> ------------------------------------------------------------+
>
| &n
> sp;
> Simon Lewis GM4PLM Editor -
> EMN

>
> |
>
| European Microwave News - Supporting Microwave Radio Across
> Europe
> |
>
| Homepage - www.pacsat.demon.co.uk Email
> emn@pacsat.demon.co.uk
> |
> <
> R>+--------------------------------------------------------------------+
>
>

>
>
Date: Sat, 16 Aug 1997 02:10:22 GMT
>
From: bry@REMOVE.mns.net (Bry)
>
Subject: WTB: 25K pot
>
>
I need a FOUR WATT potentiometer (large-ish!) for the drive control
>
> in
>
my Valiant. It is 25 K-ohms panel pot with the standard 1/4" shaft
>
>
about 3/8" to 1/2" long, the type that a regular knob will go on.
>
>
Anyone got one?
>
>
NB: delete out the "REMOVE" from my e-mail address
>
or reply here.
>
>
Thanks - Bry, AF4K
>
PLEASE DON'T SEND ME ANYMORE NEWSGROUPS LETTERS MY HUSBAND
> PASSED
> ON AUGUST 10, 1997

> THANK YOUMRS JONES
>

>
>

>
>
End of Ham-Homebrew Digest V97 #459
>
******************************

>
>
> --------------8F1C67A468385F2DFA2794C6--
>
> ------------------------------
>
> Date: 17 Aug 1997 12:30:34 GMT
> From: dwentz@accessus.net (Dale Wentz)
> Subject: Needed: Modem chip to decode EAS/SAME signals
>
> There is nothing avalable at this time. I have some info from NOAA,
> and the
> odd rates where chosen so nobody could hack the thing easly. I am
> planing on
> building a unit also, and have been looking at some of the older RTTY
> stuff
> to get the job done. This is not the best way to do it, the parts
> count will
> be a bit high, but size is not a consern of mine at this time.
>
> 73's de KB9JJA/Dale
>
> In article <33f204bd.24558958@news.shore.net>, dmoisan@shore.net
> says...
> >
> >I'm designing an interface to retrofit my old NOAA Weather alerting
> >radio to receive the new digital EAS/SAME signal. This is a 521 bps
> >AFSK signal that you may have heard recently if you monitor NOAA
> >weather radio.
> >
> >I need a modem chip, commercially available, that's programmable for
> >that odd 521 bps rate. Once I get a data stream (parallel or even
> >serial), from there it should be easy to feed it to a microcontroller
>
> >so that the information from the EAS/SAME alert would be displayed on
>
> >an LCD, and the CPU would turn on the radio when the transmitted
> alert
> >location matched the user's.
> >
> >Any avenues I should follow? I'm good with microcontrollers, not so
> >good with modems (even less good with DSP's). Any ideas much
> >appreciated!

> >
> >73's, Dave
> >
> >| David Moisan, N1KGH Email:
> dmoisan@shore.net |
> >| WWW: http://www.shore.net/~dmoisan
> n1kgh@amsat.org |
> >| Invisible Disabilities
> Page: |
> >|
> http://www.shore.net/~dmoisan/invisible_disability.html |
>
> >| GE Superradio
> FAQ: |
> >|
> http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html |
>
> >
>
> ------------------------------
>
> End of Ham-Homebrew Digest V97 #461
> ******************************

PLEASE UNSCRIBE THIS NEWLETTER, MY HUSBAND HAS LEFT THIS LIFE AND
WONT BE RETURNING...IT ONLY HURTS TO GET THESE NEWLETTERS....THANK YOU

DEBRA JONES

-Homebrew Mailing List and Newsgroup wrote:

Ham-Homebrew Digest
Sun, 17 Aug 97 Volume 97 : Issue
461

Today's Topics:

Ham-Homebrew Digest V97 #459

Needed: Modem chip to decode EAS/SAME signals

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>

Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available

(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text

herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary.
So there.

Date: 17 Aug 97 14:05:22 GMT

From: jobson@directcon.NET (Debra Jones)

Subject: Ham-Homebrew Digest V97 #459

Ham-Homebrew Mailing List and Newsgroup wrote:

> Ham-Homebrew Digest
Sat, 16 Aug 97 Volume 97 : Issue

> 459

>

> Today's Topics:

>
11 volts from 12 volt regulator? (2 msgs)

>
12V portable electronic Cooler/warmers

>
Crystals and overtones (2 msgs)

>
Double Sided PC Boards

>
F.S. - Tubes, radios, books, misc...

>
Front end of DC RX

>
Ham Database/Newsgroups

>
Ham shops in Tennessee

>
High performance...Not the handbook. (2 msgs)

>
How do you connect LED's in parallel?

>
MRF 479 Needed

>
Need CRYSTAL SET plans

>
PL259 Attachment to COAX Cable (3 msgs)

>
Wanted - Copy of Article: Ham Radio Feb 85

>
WTB: 25K pot

>

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>

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text

> herein consists of personal comments and does not represent the

> official

> policies or positions of any party. Your mileage may vary.
So there.

>

> ------------------------------------------------------------------------

>

> Date: 16 Aug 1997 15:38:53 GMT

> From: hamm4fun@aol.com (Hamm4fun)

> Subject: 11 volts from 12 volt regulator?

>

> >

> >Bill Meara wrote:

> >>

> >> I just put the finishing touches on my (supposedly!) 12 VDC QRP

> >> station power supply. Circuit is VERY simple:
18 volt (2 Amp)

> >> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack
7812

> 12

> >> VDC voltage regulator.

> >>

> >> Problem is that the output voltage is only about 11.1 volts.

> >>

> >> Has anyone seen this problem before? What do you think,
bad

> >> component?

> >>

> >> I also notice that the regulator gets quite hot. I put a
fairly

> large

> >> heat sink on it and I don't seem to get to the thermal shut down

> point

> >> (even when pulling around 1 amp through it.)

> >>

> >> Any suggestions?

> >>

> >> Thanks, 73 Bill
N2CQR

> > Looks like it to me, with that
sort of input voltage, you

> should

> get

> >12V out no trouble, very like the regulator is out of spec.

> >Regards

> >--

> >... Sid Boyce...Amdahl(UK)...44-121 422 0375

> >

> >Any opinions expressed above are mine and do not necessarily

> represent

> > the opinions or policies of Amdahl Corporation.

> >

> >

> Whats the input voltage to the regulator . Sounds like it could be
on

> the

> high side causing the regulator to dissipate a lot more power than
it

> was

> designed. A lot of times a 18volt xfmr will actually put out 20 volts

> or

> more. Also just how much power are you running out of your TX
4or 5

> watts

> can easily use up your 1 amp. Radio shack parts speak for themselves.

> When

> I use a 3 legged regulator I prefer the ones in a TO-3 case.
Seems to

>

> have less problems with them. Also use some bypass caps on the input

> and

> output of the reg. If you are working the reg near its limit s I'd

> suggest

> going to a 3 amp device

>

> ------------------------------

>

> Date: Sat, 16 Aug 1997 00:30:07 GMT

> From: Sid Boyce <szb50@amdahl.com>

> Subject: 11 volts from 12 volt regulator?

>

> Bill Meara wrote:

> >

> > I just put the finishing touches on my (supposedly!) 12 VDC QRP

> > station power supply. Circuit is VERY simple:
18 volt (2 Amp)

> > tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack
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> > VDC voltage regulator.

> >

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> >

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fairly

> large

> > heat sink on it and I don't seem to get to the thermal shut down

> point

> > (even when pulling around 1 amp through it.)

> >

> > Any suggestions?

> >

> > Thanks, 73 Bill
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> should get

> 12V out no trouble, very like the regulator is out of spec.

> Regards

> --

> ... Sid Boyce...Amdahl(UK)...44-121 422 0375

>

> Any opinions expressed above are mine and do not necessarily represent

>

> the opinions or policies of Amdahl Corporation.

>

> ------------------------------

>

> Date: 16 Aug 1997 04:09:01 GMT

> From: Vedant<sales@koolatron.com>

> Subject: 12V portable electronic Cooler/warmers

>

> Hello,

>

> Visit www.koolatron.com to look at all the amazing products including

> solid state thermoelectric portable cooler/warmers and solid state

> water coolers. Best Saving! Big Savings!!!

>

> Happy Shopping!!

>

> Koolatron

>

> ------------------------------

>

> Date: Fri, 15 Aug 1997 10:33:02

> From: Alan.Peake@dsto.defence.gov.au (Alan Peake)

> Subject: Crystals and overtones

>

> >Reminds me of the customer who wanted a 12 volt power supply. When
I

> asked

> >him the tolerance, he said "none. Exactly 12 volts." I had to admit

> that I

> >didn't know how to build one of those.

>

> What you could've done was to build one and adjust the output for

> 12.00 +/-

> 0.005 and show the customer the output on a 3-1/2 digit DVM and say

> "There

> you are! 12 Volts exactly!"

>

> Alan

>

> ------------------------------

>

> Date: Mon, 11 Aug 1997 08:39:00 -0400

> From: Joseph M Zawodny <J.M.nospam.Zawodny@LaRC.NASA.gov>

> Subject: Crystals and overtones

>

> Kelvin Charlson wrote:

> >

> > Hi

> >

> > I have just built a 6 meter reciever and want to tune the local

> oscillator

> > in. The easiest and cheapest way I know how to do this is to build
a

>

> > crystal oscillator.

> >

> > Because an approx 50 MHz crystal is expensive ie $20, is it possible

> to say

> > use a 17.73 MHz crystal and use its third overtone ie around 53
MHz.

> As

> > this crystal is only a few dollars.

> >

> > I have a siimple schematic for a crystal osillator, but do you
have

> to do

> > anything special to the circuit to make sure you get the third

> overtone. Or

> > do you get it anyway once the crystal is operating and no high
pass

> filters

> > are added to the circuit.

> >

> > I hope this makes some sense because I am only new at this stuff

> >

> > Kelvin

> >

> > kelvin@netspace.net.au

>

> Just go to DigiKey ( http://www.digikey.com
) and by a 50.000MHz sine

> wave oscillator for 2 or 3 bucks. I doubt whether you could
tweak

> the third harmonic down 3MHz from 53 to 50 anyway.

>

> KO4LW

>

> --

> ------ To Reply, Please remove the .nospam from addresses below ------

>

> Work: Dr. Joseph M. Zawodny
Play: Joe Zawodny

> NASA Langley Research Center
KO4LW.nospam@amsat.org

>

> E-mail: J.M.nospam.Zawodny@LaRC.NASA.gov

> zawodny.nospam@exis.net

> (757) 864-2681 (757) 864-2671
FAX

> http://wwwp.exis.net/~zawodny

>

> ------------------------------

>

> Date: Mon, 11 Aug 1997 08:29:36 -0400

> From: Dave Potter <dpotter@bbn.com>

> Subject: Double Sided PC Boards

>

> wrightj@planetc.com wrote:

> >

> > How does a homebrewer plate thru holes in making oc boards?

> > I have a X-Y table used to draw the art work on both sides of

> > the pc board and drill them. Then how do you go about plating

> > thru the holes?

>

> I don't know how I would do it at home. In a board shop, they do
what

> is

> called electroless plating, basically dipping the board in a solution

> or

> suspension of fine copper particles before it is etched but after
it

> is

> drilled. The copper particles adhere lightly to the surfaces of the

> board, including the shafts of the holes. Takes some specific

> chemistry

> in the solution to make that work, but it does work. The boards are

> then

> plated with copper, more copper, that is, and the holes end up with

> half

> an ounce or so of copper plated into them. The next step is to clean

> off

> the resist that had been screened or photoplotted on the board. Under

> the resist, the copper is thinner. Etching will remove all the

> previously resist-covered copper but only half the bare copper areas

> that had been thickened by the plating. The board is done.

>

> good luck.

>

> 73

>

> Dave

> K1MBO

>

> ------------------------------

>

> Date: 14 Aug 1997 06:19:23 GMT

> From: rog42@aol.com (Rog42)

> Subject: F.S. - Tubes, radios, books, misc...

>

> FOR SALE: Tubes, books and radios including Hallicrafters,

> Hammarlund,

> and Philco. Schematics for many older radios and TV's - just
$3

> delivered. Tube manuals, Tube substitution books, Service manuals,

> Radio

> magazines, much more from the 30's to the 70's. Now over 1600

> different

> tube types in stock - Contact Rog42@aol.com for an E-mail copy
of my

> latest offerings on RADIO list - #810-T.

>

> ----------

>

> Date: Sun, 17 Aug 1997 04:23:02 GMT

> From: aruder@pipeline.com (Annette or Lou Hinshaw)

> Subject: Front end of DC RX

>

> "Carl R. Stevenson" <wa6vse@fast.net> wrote:

>

> >Annette or Lou Hinshaw <aruder@pipeline.com> wrote in article

> ><33f1ff14.28596756@news.pipeline.com>...

> >>

> >> The single largest problem facing modern ANYONE is the same as

> ever: The

> >> preponderance of naysayers who have no idea what's going on outside

> their

> >> own little foxhole and think that means the world is behind them.

> >

> >However, those of us who work at the forefront of technology know
of

> what

> >we speak when we say that the vast majority of hams are stuck in
the

> 50s

> >(or 60s at best) technologically speaking ...

>

> YES!!

> The vast majority of EVERY field is stuck in the past.

> It is part of what I was saying.

>

> >> In the backward '70s, I devised a radio set made of '50s technology

>

> >>wedded to WW2 technology, and it transmitted music (admittedly
poor

> >>quality, but it WAS only a prototype) over a bandwidth of 100 HERTZ.

>

> >

> >I can believe that it sounded poor ...

> >

> >> this summer I mentioned it on these ham newsgroups. I got 97

> replies, and

> >>ALL BUT 3 of them were naysayers, pointing out the known limits
why

> it can't

> >>be done the way I said I had done it. All too polite to call
me a

> liar, of cuss,

> >> of cuss, but nonetheless saying it can't be done.

> >> 2 of the remaining 3 replies offered encouragement, an ONLY one

> gave

> >> serious advice, which was all I had asked for in the first
place.

> >

> >I believe if your check back, you'll find that I gave you nothing
but

> some

> >simple advice on how to protect your ideas, based on my experience
in

> getting a

> >couple of patents ...

> >

> >I don't recall bad-mouthing you, or your claims of accomplishment,

> but I do

> >recall having serious doubts that you knew what the hell you were

> talking about

> >..

> >(but again, if I recall correctly, I kept them to myself ...)

> >

> >> But I did do it, back there in the '70s

> >>

> >> Haven't been able to sell it, ain't gonna give it away for some

> snot nose

> >> engineer to sneer at until he/she sees how it works and then try
to

> claim

> >> credit for. I been down that road and up that tree, and all I
got

> was

> >>ticks.

> >

> >If it was worth much, you should have been able to patent it and

> license it

> >by now ...

> >>

> >> BTW, about code, do you have a garden?

> >

> >Nope ...

> >

> >> no wheelbarrow, I suppose?

> >

> >Nope ...

> >

> >> Or shovel?

> >

> >Nope ...

> >

> >> Use electronic gardening only, do you?

> >

> >Yup ... all I grow are electronics things ...

> >

> >>Old don't mean get rid of.

> >

> >In technology, old=junk=toss it (or sell it if you can find someone

> to give

> >you 10 cents a pound to haul it off ) ...

> >

> >486 machines are getting hard to give away ... 386's are ancient,

> >out-dated, and won't run much modern software ... 286s??? The

> electronic equivalent

> >of dinosaurs ... XTs??? Primordial slime ...

> >

> >Yes, in some venues, old DOES mean "get rid of" ...

> >

> >Carl - wa6vse

> >wa6vse@fast.net

>

> I started to answer this para by para, and then came to the

> peroration.

> 486 he says is hard to give away, etc, and 386 is worse, and so on

> Let Then Eat Cake, said the queen.

>

> With that he shows how he is divorced from rfeality.

>

> The flea markets are loaded with 8088 machines that sell well for

> about

> 150 bucks and get people started on computing who haven't BEEN to

> college to learn the show.

>

> This is the same kinda guy who says if you aint't got the latest
and

> greatest

> you are kidding yourself, while all around him, others do it better

> and cheaper.

>

> In one place, he says it must have been poor quality radio, and in

> another, he

> says he didn't badmouth me, and in another he says he didn't
think I

> knew

> what I was talking about.

>

> Hoo, boy.

>

> Ciao.

>

> Lou Hinshaw

> Next thing for me to do is be kind to sorts like this, but mostly

> myself, and

> quit wasting time on this NG.

>

> Prolific inventor,

> Lousy Salesman,

> Incompetent businessman.

> (Typical of the Breed)

> Tulsa OK, USA

>

> ------------------------------

>

> Date: Fri, 15 Aug 1997 23:48:55 -0500

> From: Jason <kb5urq@earthlink.net>

> Subject: Ham Database/Newsgroups

>

> What is the best ham database to use on the internet. I'm looking
for

>

> one which has variable fields of search, like City, State, Zip Code,

> etc.

>

> Also, does anyone have a list of ham radio newsgroups?

>

> Thanks for the info.

>

> Jason Dugas

>

> ------------------------------

>

> Date: Sat, 16 Aug 1997 21:10:37 GMT

> From: ernie@netvision.net.il (ernie)

> Subject: Ham shops in Tennessee

>

> Hello

> I'm looking for any information on the subject and all will be highly

> appreciated.

> Thanks in advance de Isaac, 4Z4TL

> 73

>

> ------------------------------

>

> Date: Fri, 15 Aug 1997 16:54:55 -0500

> From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>

> Subject: High performance...Not the handbook.

>

> This is a multi-part message in MIME format.

>

> --------------736B37A84090

> Content-Type: text/plain; charset=us-ascii

> Content-Transfer-Encoding: 7bit

>

> JohnsonHE wrote:

> >

> > Hi Rob...Like trying to find the wire tables and only later

> realizing it's

> > under Copper wire tables. Sigh.

>

> A scan of page 1190 of 1997 ARRL Handbook.

>

> --------------736B37A84090

> Content-Type: text/plain; charset=iso-8859-1; name="Doc0001.wri"

> Content-Transfer-Encoding: quoted-printable

> Content-Disposition: inline; filename="Doc0001.wri"

>

> {\rtf1\ansi\deff0\deftab720{\fonttbl{\f0\fnil MS Sans

> Serif;}{\f1\fnil\fc=

> harset2 Symbol;}{\f2\fswiss\fprq2 System;}{\f3\fnil Times New

> Roman;}{\f4=

> \fmodern Courier;}}

> {\colortbl\red0\green0\blue0;}

> \deflang1033\pard\tx3168\plain\f4\fs28 Wire:

> \par \pard\tx144\tx3168\plain\f4\fs28 \tab Antenna, strength:
\tab

> 30.3=

> 0

> \par \tab Copperclad steel: \tab 20.7

> \par \tab Copperweld:
\tab 20.7

> \par \pard\tx288\tx3312\plain\f4\fs28 Cutters:
25.4

> \par Gauge, Standard vs American:\tab 30.31

> \par Hookup color codes:\tab 24.9

> \par Inductance of straight:\tab 6.23

> \par Litz: \tab 6.18

> \par Specifications:
24.8

> \par Troubleshooting:\tab 27.6,27.20

> \par Wrap:\tab 25.11

> \par \pard\plain\f4\fs28 =

>

> \par }

> =00

> --------------736B37A84090--

>

> ------------------------------

>

> Date: 16 Aug 1997 01:47:49 GMT

> From: johnsonhe@aol.com (JohnsonHE)

> Subject: High performance...Not the handbook.

>

> >From: "William E. Sabin" <sabinw@crpl.cedar-rapids.

>

> Hi Bill.

>

> Well now, a number of years ago, I stopped purchasing a new handbook

> every

> year after having done so for many years and paying for a new book

> only to

> get 5 percent of a new book. The rest of it was in my old handbook.
I

> guess that was the first time I realized that there wasn't any tooth

> fairy, no real santa claus and ham radio started to look just a tad

> jaded.

>

> Now I've got a 1991 handbook (purchased) in the shack, and a 1988

> handbook

> (purchased) in the shop, and maybe, if I like the cover of the one

> next

> year, (You never get to look inside before you buy them you know!)

> I'll

> buy a new 1998 and move the 1991 to the workshop. It's about as

> frequent

> as I get anymore.

>

> I'm sure I'll enjoy your contribution to it, and maybe a few of the

> others

> who labor so hard to provide a little payback for their hobby of
so

> many

> years, but at the current price, it had REALLY better be good.

>

> Meanwhile, back at the ranchhouse, in MY copy of the handbook, the

> index

> leaves something to be desired.

>

> I don't bother with MIME'd messages, so not real sure about your

> comments,

> but reading between the lines, figure it was something about the
Cu

> wire

> tables

>

> W4ZCB

>

> ------------------------------

>

> Date: Sat, 16 Aug 1997 23:11:37 -0400

> From: kr4wm@sccoast!.net (Web Williams)

> Subject: How do you connect LED's in parallel?

>

> I'm working on a project for a friend, and need to connect two LED's

> in

> parallel. When I hook them up, only one lights, the other just sits

> there. I'm supposing that the one which draws the most current is
the

> only one which will get any current through it, or something like

> that.

> Don't need to understand the theory, just tell me what I need to
know

> to

> get it working- please. We'll discuss why this happens in another

> message

> thread- it's Saturday night, and I have to get it back to the owner
on

>

> Monday morning (hopefully in working condition). No, it's not

> something I

> broke. It's a clock with an ambulance on the face, and the ambulance

> has

> three LED's for emergency lights. You push a momentary contact switch,

>

> and the LED's alternate, i.e. Two parallel LED's light at one time,

> then

> go out, and the third light comes on, and they do this back and forth

> contunially. At one time, it worked like this from the factory (who's

> out

> of business). I had to home brew a siren and this light system

> without the benefit of having the old circuit to look at. This is

> something I'm rigging up for the owner, who likes flashy stuff. Thanks

> in

> advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC

>

> TO REPLY: remove the ! from my address.

>

> ----------

>

> Date: Sat, 16 Aug 1997 12:34:42 -0700

> From: "James R. Binkley" <w4aos@his.com>

> Subject: MRF 479 Needed

>

> Does anyone know where I can get an MRF 479 transistor, or its

> equivalent. I need one for a portable transciever I have, and
don't

> find this transistor listed in any of my catalogs.

>

> Thanks Bob w4aos@his.com

>

> ------------------------------

>

> Date: Sun, 10 Aug 1997 20:27:17 -0700

> From: AC6V <ac6v@ix.netcom.com>

> Subject: Need CRYSTAL SET plans

>

> N9KC wrote:

> >

> > Hi All,

> >

> > Need plans to build a simple CRYSTAL SET from readily available

> parts.

> > Have a teenager in the neighborhood who needs help.

> >

> > We live close to an AM tower (KOA in Denver), so this should be
a

> piece of

> > cake.

> >

> > Reply to N9KC@aol.com

> >

> > Thanks!!!

> >

> > Lou

> -----

> Hi Lou -- try URL:

> http://www.midnightscience.com/

> For The Xtal Set Society

> --

> 73

> Rod in San Diego

> --

> AC6V's HAM AND DX REFERENCE GUIDE

> 60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO

> Main Page: http://pw2.netcom.com/~ac6v/index.html

> Master Index: http://pw2.netcom.com/~ac6v/pageas.html

> lack the right sound(?), smell(?), something undefinable(?), and
the

> Dow-Keys were de rigeur in the timeframe :-)

>

> Grant

>

> nq5t@gte.net

> http://home1.gte.net/nq5t

>

> ------------------------------

>

> Date: Sat, 16 Aug 1997 05:32:13 -0500

> From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>

> Subject: PL259 Attachment to COAX Cable

>

> KF6IIU wrote:

>

> >

> > The Radio Shack 259's were so crappy, they weren't even the right

> inner

> > diameter to accept RG8 cable.

>

> They also sell a silver plated version that is more expensive ($3.99),

>

> part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99

> cents),

> part number 278-204. I have used these parts OK.

>

> Bill W0IYH

>

> ----------

>

> Date: 16 Aug 1997 13:05:00 -0700

> From: markem@primenet.com (M. Monninger)

> Subject: PL259 Attachment to COAX Cable

>

> Most of the mail order connector/cable outfits have teflon/silver

> PL-259's for

> $1.00-1.50 each depending on qty, even cheaper if you buy lots of
10.

> The

> silver plated adapters go for 25 - 30 cents each. The silver-plated

> 259's are

> MUCH easier to solder and if you're using the adapter for RG-58,

> they'll suck

> the solder right in and give a great connection to the cable. Of

> course, my

> old Weller 350W gun helps a little too...

>

> 73... Mark AA7TA

>

> In article <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>,

> sabinw@crpl.cedar-rapids.lib.ia.us wrote:

> >KF6IIU wrote:

> >

> >>

> >> The Radio Shack 259's were so crappy, they weren't even the right

> inner

> >> diameter to accept RG8 cable.

> >

> >They also sell a silver plated version that is more expensive

> ($3.99),

> >part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99

> cents),

> >part number 278-204. I have used these parts OK.

> >

> >Bill W0IYH

>

> ------------------------------

>

> Date: Sat, 16 Aug 1997 15:34:30 -0700

> From: Jack Taylor <n7oo@goodnet.com>

> Subject: PL259 Attachment to COAX Cable

>

> On Sat, 16 Aug 1997, William E. Sabin wrote:

>

> > KF6IIU wrote:

> >

> > > >

> > > The Radio Shack 259's were so crappy, they weren't even the right

> inner

> > > diameter to accept RG8 cable.

> >

> > They also sell a silver plated version that is more expensive

> ($3.99),

> > part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99

> cents),

> > part number 278-204. I have used these parts OK.

> >

> > Bill W0IYH

>

> I've had pretty good success by just using solder flux with the crappy

>

> fittings.

>

> 73 de Jack

>

> ------------------------------

>

> Date: Sun, 10 Aug 1997 15:53:48 +0100

> From: Simon Lewis <pacsat@pacsat.demon.co.uk>

> Subject: Wanted - Copy of Article: Ham Radio Feb 85

>

> wanted

> ------

>

> Photocopy of article on hombrew silver plating - Ham Radio Feb 85

>

> Any help appreciated

>

> 73 Simon

>

> +---------------------------------------------------------------------+

>

> |
Simon Lewis GM4PLM Editor - EMN
|

>

> | European Microwave News - Supporting Microwave Radio Across Europe
|

>

> | Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk
|

>

> +---------------------------------------------------------------------+

>

> ------------------------------

>

> Date: Sat, 16 Aug 1997 02:10:22 GMT

> From: bry@REMOVE.mns.net (Bry)

> Subject: WTB: 25K pot

>

> I need a FOUR WATT potentiometer (large-ish!) for the drive control
in

>

> my Valiant. It is 25 K-ohms panel pot with the standard 1/4" shaft

> about 3/8" to 1/2" long, the type that a regular knob will go on.

>

> Anyone got one?

>

> NB: delete out the "REMOVE" from my e-mail address

> or reply here.

>

> Thanks - Bry, AF4K

> PLEASE DON'T SEND ME ANYMORE NEWSGROUPS LETTERS MY HUSBAND PASSED
ON

> AUGUST 10, 1997

THANK YOUMRS JONES

> ------------------------------

>

> End of Ham-Homebrew Digest V97 #459

> ******************************

Ham-Homebrew Mailing List and Newsgroup wrote:

Ham-Homebrew Digest

Sat, 16 Aug 97
Volume 97 : Issue

459

Today's Topics:

11 volts from 12 volt regulator? (2 msgs)

12V portable electronic Cooler/warmers

Crystals and overtones (2 msgs)

Double Sided PC Boards

F.S. - Tubes, radios, books, misc...

Front end of DC RX

Ham Database/Newsgroups

Ham shops in Tennessee

High performance...Not the handbook. (2 msgs)

How do you connect LED's in parallel?

MRF 479 Needed

Need CRYSTAL SET plans

PL259 Attachment to COAX Cable (3 msgs)

Wanted - Copy of Article: Ham Radio Feb 85

WTB: 25K pot

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>

Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available

(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all
text

herein consists of personal comments and does not represent
the official

policies or positions of any party. Your mileage may
vary.

So there.

Date: 16 Aug 1997 15:38:53 GMT

From: hamm4fun@aol.com (Hamm4fun)

Subject: 11 volts from 12 volt regulator?

>

>Bill Meara wrote:

>>

>> I just put the finishing touches on my (supposedly!) 12 VDC
QRP

>> station power supply. Circuit is VERY
simple:

18 volt (2 Amp)

>> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio
Shack 7812

12

>> VDC voltage regulator.

>>

>> Problem is that the output voltage is only about 11.1 volts.

>>

>> Has anyone seen this problem before? What do you
think, bad

>> component?

>>

>> I also notice that the regulator gets quite hot.
I put a fairly

large

>> heat sink on it and I don't seem to get to the thermal shut
down

point

>> (even when pulling around 1 amp through it.)

>>

>> Any suggestions?

>>

>> Thanks, 73
Bill

N2CQR

>
Looks like it to me, with that

sort of input voltage, you should

get

>12V out no trouble, very like the regulator is out of spec.

>Regards

>--

>... Sid Boyce...Amdahl(UK)...44-121 422 0375

>

>Any opinions expressed above are mine and do not necessarily
represent

> the opinions or policies of Amdahl Corporation.

>

>

Whats the input voltage to the regulator . Sounds like it could
be

on the

high side causing the regulator to dissipate a lot more power
than

it was

designed. A lot of times a 18volt xfmr will actually put out
20 volts

or

more. Also just how much power are you running out of your TX

4or 5 watts

can easily use up your 1 amp. Radio shack parts speak for themselves.

When

I use a 3 legged regulator I prefer the ones in a
TO-3 case.

Seems to

have less problems with them. Also use some bypass caps on the
input

and

output of the reg. If you are working the reg near its limit
s I'd

suggest

going to a 3 amp device

Date: Sat, 16 Aug 1997 00:30:07 GMT

From: Sid Boyce <szb50@amdahl.com>

Subject: 11 volts from 12 volt regulator?

Bill Meara wrote:

>

> I just put the finishing touches on my (supposedly!) 12 VDC
QRP

> station power supply. Circuit is VERY
simple:

18 volt (2 Amp)

> tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack
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12

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>

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>

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>

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> heat sink on it and I don't seem to get to the thermal shut
down

point

> (even when pulling around 1 amp through it.)

>

> Any suggestions?

>

> Thanks, 73
Bill N2CQR

Looks like it to me, with

that sort of input voltage, you should get

12V out no trouble, very like the regulator is out of spec.

Regards

--

... Sid Boyce...Amdahl(UK)...44-121 422 0375

Any opinions expressed above are mine and do not necessarily
represent

the opinions or policies of Amdahl Corporation.

Date: 16 Aug 1997 04:09:01 GMT

From: Vedant<sales@koolatron.com>

Subject: 12V portable electronic Cooler/warmers

Hello,

Visit www.koolatron.com to look at all the amazing products including

solid state thermoelectric portable cooler/warmers and solid state
water

coolers. Best Saving! Big Savings!!!

Happy Shopping!!

Koolatron

Date: Fri, 15 Aug 1997 10:33:02

From: Alan.Peake@dsto.defence.gov.au (Alan Peake)

Subject: Crystals and overtones

>Reminds me of the customer who wanted a 12 volt power supply.
When

I asked

>him the tolerance, he said "none. Exactly 12 volts." I had
to admit

that I

>didn't know how to build one of those.

What you could've done was to build one and adjust the output
for 12.00

+/-

0.005 and show the customer the output on a 3-1/2 digit DVM
and say

"There

you are! 12 Volts exactly!"

Alan

Date: Mon, 11 Aug 1997 08:39:00 -0400

From: Joseph M Zawodny <J.M.nospam.Zawodny@LaRC.NASA.gov>

Subject: Crystals and overtones

Kelvin Charlson wrote:

>

> Hi

>

> I have just built a 6 meter reciever and want to tune the
local oscillator

> in. The easiest and cheapest way I know how to do this is
to build

a

> crystal oscillator.

>

> Because an approx 50 MHz crystal is expensive ie $20, is it
possible

to say

> use a 17.73 MHz crystal and use its third overtone ie around
53 MHz.

As

> this crystal is only a few dollars.

>

> I have a siimple schematic for a crystal osillator, but do
you have

to do

> anything special to the circuit to make sure you get the third
overtone.

Or

> do you get it anyway once the crystal is operating and no
high pass

filters

> are added to the circuit.

>

> I hope this makes some sense because I am only new at this
stuff

>

> Kelvin

>

> kelvin@netspace.net.au

Just go to DigiKey ( http://www.digikey.com

) and by a 50.000MHz sine

wave oscillator for 2 or 3 bucks. I doubt whether
you could tweak

the third harmonic down 3MHz from 53 to 50 anyway.

KO4LW

--

------ To Reply, Please remove the .nospam from addresses below
------

Work: Dr. Joseph M. Zawodny

Play: Joe Zawodny

NASA Langley
Research Center

KO4LW.nospam@amsat.org

E-mail: J.M.nospam.Zawodny@LaRC.NASA.gov

zawodny.nospam@exis.net

(757) 864-2681
(757) 864-2671

FAX http://wwwp.exis.net/~zawodny

Date: Mon, 11 Aug 1997 08:29:36 -0400

From: Dave Potter <dpotter@bbn.com>

Subject: Double Sided PC Boards

wrightj@planetc.com wrote:

>

> How does a homebrewer plate thru holes in making oc boards?

> I have a X-Y table used to draw the art work on both sides
of

> the pc board and drill them. Then how do you go about plating

> thru the holes?

I don't know how I would do it at home. In a board shop, they
do what

is

called electroless plating, basically dipping the board in a
solution

or

suspension of fine copper particles before it is etched but
after it

is

drilled. The copper particles adhere lightly to the surfaces
of the

board, including the shafts of the holes. Takes some specific
chemistry

in the solution to make that work, but it does work. The boards
are

then

plated with copper, more copper, that is, and the holes end up with

half

an ounce or so of copper plated into them. The next step is to clean

off

the resist that had been screened or photoplotted on the board. Under

the resist, the copper is thinner. Etching will remove all the

previously resist-covered copper but only half the bare copper areas

that had been thickened by the plating. The board is done.

good luck.

73

Dave

K1MBO

Date: 14 Aug 1997 06:19:23 GMT

From: rog42@aol.com (Rog42)

Subject: F.S. - Tubes, radios, books, misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,

and Philco. Schematics for many older radios and TV's - just

$3

delivered. Tube manuals, Tube substitution books, Service manuals,

Radio

magazines, much more from the 30's to the 70's. Now over 1600

different

tube types in stock - Contact Rog42@aol.com for an E-mail copy

of my

latest offerings on RADIO list - #810-T.

Date: Sun, 17 Aug 1997 04:23:02 GMT

From: aruder@pipeline.com (Annette or Lou Hinshaw)

Subject: Front end of DC RX

"Carl R. Stevenson" <wa6vse@fast.net> wrote:

>Annette or Lou Hinshaw <aruder@pipeline.com> wrote in
article

><33f1ff14.28596756@news.pipeline.com>...

>>

>> The single largest problem facing modern ANYONE is the same
as ever:

The

>> preponderance of naysayers who have no idea what's going
on outside

their

>> own little foxhole and think that means the world is behind
them.

>

>However, those of us who work at the forefront of technology
know

of what

>we speak when we say that the vast majority of hams are stuck
in the

50s

>(or 60s at best) technologically speaking ...

YES!!

The vast majority of EVERY field is stuck in the past.

It is part of what I was saying.

>> In the backward '70s, I devised a radio set made of '50s technology

>>wedded to WW2 technology, and it transmitted music (admittedly
poor

>>quality, but it WAS only a prototype) over a bandwidth of
100 HERTZ.

>

>I can believe that it sounded poor ...

>

>> this summer I mentioned it on these ham newsgroups. I got
97 replies,

and

>>ALL BUT 3 of them were naysayers, pointing out the known limits
why

it can't

>>be done the way I said I had done it. All too polite
to call

me a liar, of cuss,

>> of cuss, but nonetheless saying it can't be done.

>> 2 of the remaining 3 replies offered encouragement, an ONLY
one

gave

>> serious advice, which was all I had asked for in
the first

place.

>

>I believe if your check back, you'll find that I gave you nothing

but some

>simple advice on how to protect your ideas, based on my experience

in getting a

>couple of patents ...

>

>I don't recall bad-mouthing you, or your claims of accomplishment,

but I do

>recall having serious doubts that you knew what the hell you
were

talking about

>..

>(but again, if I recall correctly, I kept them to myself
...)

>

>> But I did do it, back there in the '70s

>>

>> Haven't been able to sell it, ain't gonna give it away for some

snot nose

>> engineer to sneer at until he/she sees how it works and then try

to claim

>> credit for. I been down that road and up that tree, and all I got

was

>>ticks.

>

>If it was worth much, you should have been able to patent it and license

it

>by now ...

>>

>> BTW, about code, do you have a garden?

>

>Nope ...

>

>> no wheelbarrow, I suppose?

>

>Nope ...

>

>> Or shovel?

>

>Nope ...

>

>> Use electronic gardening only, do you?

>

>Yup ... all I grow are electronics things ...

>

>>Old don't mean get rid of.

>

>In technology, old=junk=toss it (or sell it if you can find
someone

to give

>you 10 cents a pound to haul it off ) ...

>

>486 machines are getting hard to give away ... 386's are ancient,

>out-dated, and won't run much modern software ... 286s??? The
electronic

equivalent

>of dinosaurs ... XTs??? Primordial slime ...

>

>Yes, in some venues, old DOES mean "get rid of" ...

>

>Carl - wa6vse

>wa6vse@fast.net

I started to answer this para by para, and then came to the peroration.

486 he says is hard to give away, etc, and 386 is worse, and
so on

Let Then Eat Cake, said the queen.

With that he shows how he is divorced from rfeality.

The flea markets are loaded with 8088 machines that sell well
for about

150 bucks and get people started on computing who haven't BEEN
to

college to learn the show.

This is the same kinda guy who says if you aint't got the latest
and

greatest

you are kidding yourself, while all around him, others do it
better

and cheaper.

In one place, he says it must have been poor quality radio, and
in another,

he

says he didn't badmouth me, and in another he says
he didn't

think I knew

what I was talking about.

Hoo, boy.

Ciao.

Lou Hinshaw

Next thing for me to do is be kind to sorts like this, but mostly
myself,

and

quit wasting time on this NG.

Prolific inventor,

Lousy Salesman,

Incompetent businessman.

(Typical of the Breed)

Tulsa OK, USA

Date: Fri, 15 Aug 1997 23:48:55 -0500

From: Jason <kb5urq@earthlink.net>

Subject: Ham Database/Newsgroups

What is the best ham database to use on the internet.
I'm looking

for

one which has variable fields of search, like City, State, Zip
Code,

etc.

Also, does anyone have a list of ham radio newsgroups?

Thanks for the info.

Jason Dugas

Date: Sat, 16 Aug 1997 21:10:37 GMT

From: ernie@netvision.net.il (ernie)

Subject: Ham shops in Tennessee

Hello

I'm looking for any information on the subject and all will
be highly

appreciated.

Thanks in advance de Isaac, 4Z4TL

73

Date: Fri, 15 Aug 1997 16:54:55 -0500

From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>

Subject: High performance...Not the handbook.

This is a multi-part message in MIME format.

JohnsonHE wrote:

>

> Hi Rob...Like trying to find the wire tables and only later
realizing

it's

> under Copper wire tables. Sigh.

A scan of page 1190 of 1997 ARRL Handbook.

Content-Disposition: inline; filename="Doc0001.wri"

{\rtf1\ansi\deff0\deftab720{\fonttbl{\f0\fnil MS Sans Serif;}{\f1\fnil\fc=

harset2 Symbol;}{\f2\fswiss\fprq2 System;}{\f3\fnil Times New
Roman;}{\f4=

\fmodern Courier;}}

{\colortbl\red0\green0\blue0;}

\deflang1033\pard\tx3168\plain\f4\fs28 Wire:

\par \pard\tx144\tx3168\plain\f4\fs28 \tab Antenna, strength:

\tab 30.3=

0

\par \tab Copperclad steel: \tab
20.7

\par \tab Copperweld:

\tab 20.7

\par \pard\tx288\tx3312\plain\f4\fs28 Cutters:

25.4

\par Gauge, Standard vs American:\tab 30.31

\par Hookup color codes:\tab 24.9

\par Inductance of straight:\tab 6.23

\par Litz: \tab
6.18

\par Specifications:

24.8

\par Troubleshooting:\tab 27.6,27.20

\par Wrap:\tab 25.11

\par \pard\plain\f4\fs28 =

\par }

=00

Date: 16 Aug 1997 01:47:49 GMT

From: johnsonhe@aol.com (JohnsonHE)

Subject: High performance...Not the handbook.

>From: "William E. Sabin" <sabinw@crpl.cedar-rapids.

Hi Bill.

Well now, a number of years ago, I stopped purchasing a new handbook

every

year after having done so for many years and paying for a new
book

only to

get 5 percent of a new book. The rest of it was in my old handbook.

I

guess that was the first time I realized that there wasn't any
tooth

fairy, no real santa claus and ham radio started to look just
a tad

jaded.

Now I've got a 1991 handbook (purchased) in the shack, and a 1988
handbook

(purchased) in the shop, and maybe, if I like the cover of the
one

next

year, (You never get to look inside before you buy them you
know!)

I'll

buy a new 1998 and move the 1991 to the workshop. It's about
as frequent

as I get anymore.

I'm sure I'll enjoy your contribution to it, and maybe a few of
the

others

who labor so hard to provide a little payback for their hobby
of so

many

years, but at the current price, it had REALLY better be good.

Meanwhile, back at the ranchhouse, in MY copy of the handbook,
the index

leaves something to be desired.

I don't bother with MIME'd messages, so not real sure about your
comments,

but reading between the lines, figure it was something about
the Cu

wire

tables

W4ZCB

Date: Sat, 16 Aug 1997 23:11:37 -0400

From: kr4wm@sccoast!.net (Web Williams)

Subject: How do you connect LED's in parallel?

I'm working on a project for a friend, and need to connect two LED's

in

parallel. When I hook them up, only one lights, the other just sits

there. I'm supposing that the one which draws the most current is the

only one which will get any current through it, or something like that.

Don't need to understand the theory, just tell me what I need to know

to

get it working- please. We'll discuss why this happens in another message

thread- it's Saturday night, and I have to get it back to the owner

on

Monday morning (hopefully in working condition). No, it's not something

I

broke. It's a clock with an ambulance on the face, and the ambulance

has

three LED's for emergency lights. You push a momentary contact switch,

and the LED's alternate, i.e. Two parallel LED's light at one time,

then

go out, and the third light comes on, and they do this back and forth

contunially. At one time, it worked like this from the factory (who's

out

of business). I had to home brew a siren and this light system

without the benefit of having the old circuit to look at. This is

something I'm rigging up for the owner, who likes flashy stuff.
Thanks

in

advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC

TO REPLY: remove the ! from my address.

Date: Sat, 16 Aug 1997 12:34:42 -0700

From: "James R. Binkley" <w4aos@his.com>

Subject: MRF 479 Needed

Does anyone know where I can get an MRF 479 transistor, or its

equivalent. I need one for a portable transciever
I have, and

don't

find this transistor listed in any of my catalogs.

Thanks Bob w4aos@his.com

Date: Sun, 10 Aug 1997 20:27:17 -0700

From: AC6V <ac6v@ix.netcom.com>

Subject: Need CRYSTAL SET plans

N9KC wrote:

>

> Hi All,

>

> Need plans to build a simple CRYSTAL SET from readily
available

parts.

> Have a teenager in the neighborhood who needs help.

>

> We live close to an AM tower (KOA in Denver), so this should
be a

piece of

> cake.

>

> Reply to N9KC@aol.com

>

> Thanks!!!

>

> Lou

-----

Hi Lou -- try URL:

http://www.midnightscience.com/

For The Xtal Set Society

--

73

Rod in San Diego

--

AC6V's HAM AND DX REFERENCE
GUIDE

60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO

Main Page: http://pw2.netcom.com/~ac6v/index.html

Master Index: http://pw2.netcom.com/~ac6v/pageas.html

lack the right sound(?), smell(?), something undefinable(?),
and the

Dow-Keys were de rigeur in the timeframe :-)

Grant

nq5t@gte.net

http://home1.gte.net/nq5t

Date: Sat, 16 Aug 1997 05:32:13 -0500

From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>

Subject: PL259 Attachment to COAX Cable

KF6IIU wrote:

>

> The Radio Shack 259's were so crappy, they weren't even the
right

inner

> diameter to accept RG8 cable.

They also sell a silver plated version that is more expensive ($3.99),

part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99 cents),

part number 278-204. I have used these parts OK.

Bill W0IYH

Date: 16 Aug 1997 13:05:00 -0700

From: markem@primenet.com (M. Monninger)

Subject: PL259 Attachment to COAX Cable

Most of the mail order connector/cable outfits have teflon/silver PL-259's

for

$1.00-1.50 each depending on qty, even cheaper if you buy lots of 10.

The

silver plated adapters go for 25 - 30 cents each. The silver-plated

259's are

MUCH easier to solder and if you're using the adapter for RG-58, they'll

suck

the solder right in and give a great connection to the cable. Of course,

my

old Weller 350W gun helps a little too...

73... Mark AA7TA

In article <33F581AD.17FA@crpl.cedar-rapids.lib.ia.us>,

sabinw@crpl.cedar-rapids.lib.ia.us wrote:

>KF6IIU wrote:

>

>>

>> The Radio Shack 259's were so crappy, they weren't even the right

inner

>> diameter to accept RG8 cable.

>

>They also sell a silver plated version that is more expensive
($3.99),

>part number 278-188. Also a UG-176 reducer for RG58/59 (2 for
99 cents),

>part number 278-204. I have used these parts OK.

>

>Bill W0IYH

Date: Sat, 16 Aug 1997 15:34:30 -0700

From: Jack Taylor <n7oo@goodnet.com>

Subject: PL259 Attachment to COAX Cable

On Sat, 16 Aug 1997, William E. Sabin wrote:

> KF6IIU wrote:

>

> >

> > The Radio Shack 259's were so crappy, they weren't even
the right

inner

> > diameter to accept RG8 cable.

>

> They also sell a silver plated version that is more expensive
($3.99),

> part number 278-188. Also a UG-176 reducer for RG58/59 (2
for 99

cents),

> part number 278-204. I have used these parts OK.

>

> Bill W0IYH

I've had pretty good success by just using solder flux with the
crappy

fittings.

73 de Jack

Date: Sun, 10 Aug 1997 15:53:48 +0100

From: Simon Lewis <pacsat@pacsat.demon.co.uk>

Subject: Wanted - Copy of Article: Ham Radio Feb 85

wanted

---

Photocopy of article on hombrew silver plating - Ham Radio Feb
85

Any help appreciated

73 Simon

+---------------------------------------------------------------------+

|

Simon Lewis GM4PLM Editor -
EMN

|

| European Microwave News - Supporting Microwave Radio Across
Europe

|

| Homepage - www.pacsat.demon.co.uk
Email emn@pacsat.demon.co.uk

|

+---------------------------------------------------------------------+

Date: Sat, 16 Aug 1997 02:10:22 GMT

From: bry@REMOVE.mns.net (Bry)

Subject: WTB: 25K pot

I need a FOUR WATT potentiometer (large-ish!) for the drive control

in

my Valiant. It is 25 K-ohms panel pot with the standard 1/4"
shaft

about 3/8" to 1/2" long, the type that a regular knob will go
on.

Anyone got one?

NB: delete out the "REMOVE" from my e-mail address

or reply here.

Thanks - Bry, AF4K

PLEASE DON'T SEND ME ANYMORE NEWSGROUPS LETTERS MY HUSBAND
PASSED

ON AUGUST 10, 1997

THANK YOUMRS JONES

End of Ham-Homebrew Digest V97 #459

******************************

Date: 17 Aug 1997 12:30:34 GMT

From: dwentz@accessus.net (Dale Wentz)

Subject: Needed: Modem chip to decode EAS/SAME signals

There is nothing avalable at this time. I have some info from NOAA,
and the

odd rates where chosen so nobody could hack the thing easly. I am planing
on

building a unit also, and have been looking at some of the older RTTY
stuff

to get the job done. This is not the best way to do it, the parts count
will

be a bit high, but size is not a consern of mine at this time.

73's de KB9JJA/Dale

In article <33f204bd.24558958@news.shore.net>, dmoisan@shore.net
says...

>

>I'm designing an interface to retrofit my old NOAA Weather alerting

>radio to receive the new digital EAS/SAME signal. This is a
521 bps

>AFSK signal that you may have heard recently if you monitor NOAA

>weather radio.

>

>I need a modem chip, commercially available, that's programmable for

>that odd 521 bps rate. Once I get a data stream (parallel or
even

>serial), from there it should be easy to feed it to a microcontroller

>so that the information from the EAS/SAME alert would be displayed
on

>an LCD, and the CPU would turn on the radio when the transmitted alert

>location matched the user's.

>

>Any avenues I should follow? I'm good with microcontrollers,
not so

>good with modems (even less good with DSP's). Any ideas much

>appreciated!

>

>73's, Dave

>

>| David Moisan, N1KGH
Email: dmoisan@shore.net |

>| WWW: http://www.shore.net/~dmoisan
n1kgh@amsat.org |

>| Invisible Disabilities Page:
|

>| http://www.shore.net/~dmoisan/invisible_disability.html
|

>| GE Superradio FAQ:
|

>| http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html
|

>

End of Ham-Homebrew Digest V97 #461

******************************

## 1909. F.S. - Tubes, radios, books, misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970817164400.MAA13776@ladder01.news.aol.com>
Source record: 91678

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

## 1910. Up-links F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: Jerry Campbell <contach@lobo.net>
Message-ID: <33F72F15.7ABA@lobo.net>
Source record: 91679

Working pair of Racom Model 5005E links. Freq. 23.125. Good for data, video or voice. Asking $1500 for the pair. Will pay shipping within the U.S.
Jerry...

## 1911. Knight kit T-60 grounded cathode?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: kr4wm@sccoast!.net
Message-ID: <MPG.e6108b6236d12659896b0@news.infoave.net>
Source record: 91680

Hello fellow amateurs- I'm seeking help again with another project. Not quite sure what I'm going to do with it just yet, am thinking about using it for a 6 or 10 meter propagation beacon. Anyhow, my problem is this: it won't transmit. Now, I know what you're thinking- how am I going to help this guy diagnose something with this broad of a description? It's hopefully going to be easier than you think.

Question #1: There's an unlabeled switch off the back of the set, any idea what it's for?

Question #2: There's a small choke running off the cathode of the 6DQ6B final to a pin of a jack on the rear panel. This jack is un-numbered, so I don't know what pin is pin #1, but for indexing purposes of this posting, we'll call it pin #1. There's a wire going from pin #1 to the cathode of a triode inside a dual tube (has triode and pentode inside same glass, and is a 6HF8). I'm assuming that I need to make a jumper from pin #1 to pin #2, which goes to the key jack on the face of the radio, without which the cathode would never be grounded, hence will never transmit.

Question #3: Possibly I need some missing part that plugs into the jack, completing some other circuitry inside the transmitter?

Question #4: There's 557 volts DC (measured) on the plate of the 6DQ6B. The 1967 ARRL handbook tells me that there should be about 250 volts. Am I measuring wrong? If I ground the cathode, will that "pull down" this voltage to normal limits?

I guess what I really need is an owners manual- so if anyone has one, I'd appreciate a copy. Yes, I know about Hi manuals and the other manual company, so please don't bother telling me about them. We homebrewers are a CHEAP bunch, aren't we? I'll be happy to pay copying and mailing costs.

73, and thanks in advance for any assistance-

Web Williams, kr4wm@sccoast!.net
NOTE: Remove the ! from the address to reply- I'm getting tired of all the spam-bots leeching my address!

## 1912. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <33F741C2.45B2@pop.removethistomailme.net>
Source record: 91681

Web Williams wrote:
>
> I'm working on a project for a friend, and need to connect two LED's in
> parallel. When I hook them up, only one lights, the other just sits
> there.

Instead of using one resistor in series with a parallel combination of
two LEDs, use an independent resistor on each individual LED.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

## 1913. FS: Microwave Transceivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: rnelson@se-iowa.net
Message-ID: <33f746d3.199792104@news.lisco.com>
Source record: 91682

I have four Microwave Associates 12 GHz transceivers for sale.
Please e-mail me for a more detailed description of this equipment.

Randy

# 1914. REGEN SW ANT AMP for small SW RX ant in Apts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33F73C5A.3537@NOSPAM.exit109.com>
Source record: 91683

I live in an apartment and can at most use a small 10 foot wire out
of the window to receive Shortwave weak signals. So I have a need
to boost the signal without being drowned by out of band megawatt
transmitters.

An regenrative receiver coupled to the ANT of my SONY ICF 2001
did the trick. It boosts the signals upto 5-7 S points while
providing a lot of front end selectivity . That keeps the
out of band signals out.

The regenrative receiver is tuned to the frequency and has the
regeneration set to just below the point of oscilattion.
The tuning is very sharp, 3 KHZ or so.

Has any body had a similar success/experience with this
method of using a regenerative receiever to boost the signal
strengh and front end selectivity of a SUPERHET receiver.

I believe that this gives you the best of both, i.e.
Very high selectivity and stability of the superhet and the
very high sensitivity of the REGEN RX + more front end selectivity.

Please let me know what you people think about.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 1915. CB Mod to Ham Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: Bob Palmquist <rlasky@d.umn.edu>
Message-ID: <33F77F07.6F5D@d.umn.edu>
Source record: 91684

Are there any resources out there to convert CB gear to 10 meter or any other ham bands? Specifically, I havve a Cobra 2000GTL that is screaming to be Ham enabled! Thanks

Jim Wrobleski
jwrobles@d.umn.edu

## 1916. GE Radio Battery Charger

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: in717@cleveland.freenet.edu
Message-ID: <871863361.12297@dejanews.com>
Source record: 91685
Cross-posted to: rec.antiques.radio+phono,rec.ham-radio.swap,uk.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Hi, I've got for sale on Ebay's Beta Auction Web a:
GE Radio Battery Base, model #P5PS10, for GE hand held radios,
VG condition, Buyer pays $3.00 S&H. It's URL is:
http://komodo.ebay2.com/aw-cgi/ItemISAPI.dll?ViewItem&item=21984
email: in717@cleveland.freenet.edu

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 1917. Antique Tube AM/Police Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: in717@cleveland.freenet.edu
Message-ID: <871862610.11709@dejanews.com>
Source record: 91686
Cross-posted to: rec.antiques.radio+phono,rec.ham-radio.swap,uk.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Hi, I've got for sale on Ebay's Auction Web a:
Antique Majestic AM/Police Tube Radio, Model 666, 6 Tube: 2/ G-58-S, G-2A7-S, G-80, G-55-S, G-2A5. Frequency coverage is the AM Band, with a Police band at the top end of the AM band. Dimensions 38" Tall, 10 1/2" Deep, 19 1/2" Wide, 12" speaker. The case is in sound restorable condition, although, I think there is a piece missing that would sit on top, and is decorative. The fabric covering the speaker area is thinning on one side, one knob on the side is missing.
40 lbs S&H, please e-mail me your zip code for accurate shipping costs. Thanks for your time. It's URL is:
http:www2.ebay.com/aw/itemfast.cgi?item=agk87201
e-mail: in717@cleveland.freenet.edu

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 1918. EBAY: WW II Microphone No.4A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: in717@cleveland.freenet.edu
Message-ID: <871862909.11952@dejanews.com>
Source record: 91687
Cross-posted to: rec.antiques.radio+phono,rec.ham-radio.swap,uk.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Hi, I've got for sale on Ebay's Beta Auction Web a:
WW II microphone, No. 4A,5 foot cord, push to talk switch, chest support, Bakelite Case and Connector, 4 pin Jack, Key-Up Slide Lock for hands free operation, exc. like new. Buyer pays $3.00 S&H.
It's URL is:
http://komodo.ebay2.com/aw-cgi/ItemISAPI.dll?ViewItem&item=20880
email: in717@cleveland.freenet.edu

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 1919. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5t72hq$1di@cletus.bright.net>
Source record: 91688

The common pratice for double sided boards is not to plate through (a real bother) but to solder a piece of wire through the interface hole

de Norm N8RGR

# 1920. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: Jan Allbright <wharfrat@pcisys.net>
Message-ID: <33F72394.2313@pcisys.net>
Source record: 91689
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Peter Parker wrote:
>
> fireman@netrover.com (Jean-Pierre Magnan) wrote:
>
> >Now, according to the latest posts in the various ham NG, a J-pole is a
> >lousy antenna. I had planned to build one sometimes this month. Now I'm
> >not just sure I should. I heard about dipoles doing a better job. Is
> >this true and where, on the Internet, can I get plans to do this ? Is
> >there other omnidirectionnal antennas that can be built on a thight
> >budget ?
> >
>
> The J-pole should be a little better than a dipole. The only one I ever
> built worked very well.
>
> For a quick dipole, get some RG58 coax and strip off the outer jacket up
> to 48cm from the end of the cable. Then make a small hole in the exposed
> braid near where the outer jacket starts. Bend the cable and pull out the
> inner conductor. end the braid back along the coax. Hang the antenna
> up somewhere by the end of the inner conductor. Your dipole's finished.
>
> 73,
>
> Peter VK1PK
>
> --

Just built one of those! ... well 48.5 cm actually ...
Mounted the coax inside 1/2" PVC with a cap on the top. Fixed the end of
the center connector to the cap and sealed the bottom with hot-glue.

This made a pole about 100 cm high. Fixed to the side of the roof with a
couple clamps. I can now hit the repeater (about 25 miles away) with
2wt.

Time to build, install, etc. ... less that 3 hrs.

Now....does this kind of antenna have a name?
1/4 wave vert dipole stuffed inside PVC ... a bit long winded 8)

--
Jan Allbright - "14-91" - Calhan Volunteer Fire Department
-- KC0BUY -- 146.970(-) <100hzPL> -- Colorado Springs --
_real_ mail response needs to remove NOSPAM from email

# 1921. Re: Wanted CTCSS decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: rbaker@worldchat.com
Message-ID: <08-17-1997.14608@worldchat.com>
Source record: 91690

I have small decorders .

If give me your E-Mail address I will E-Mail you the specs and the costs.

73 Rae VE3CZN
rbaker@worldchat.com

## 1922. Updated Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: Geoff Brown <equinox@itl.net>
Message-ID: <33F7B803.A81AD91C@itl.net>
Source record: 91691
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.dx

At long last we have now updated/added many links and our own pages re
50MHz.
The 50MHz News pages is still hitting around 1000 hits per day and now
includes the previous days Solar news from DXLC.(very accurate news!)
There's also the start of a 50MHz DDS CW/SSB TX/RX as a winter project
with many additions including, Super Keyer 3, Digital Voice Recorder,
Audio Bandpass filtering, digital Display etc.....
http://user.itl.net/~equinox
:-)

# 1923. Re: Knight kit T-60 grounded cathode?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: Ed Cummins <MrMicro@techie.com>
Message-ID: <33F75240.7614DA0@techie.com>
Source record: 91692

I havea T-60 in my collection. The previous owner was kind enough to label all of the stuff on the rear of the chassis.

Q#1. The switch on the back is marked "meter sensitivity".

Q#2. The accessory jack on the back has pins 4 and 5 jumpered together. This puts the cathode of the final amp on the key jack at the front panel. With nothing plugged into the key jack, it should transmit when the funtion knob on the front panel is turned to "am" or "cw".

Q#4. My T-60 has about 500 volts on the plate of the 6DQ6B. Your 557 volts should be ok without a load on the tube.

--

Ed
MrMicro@techie.com

## 1924. My quest to connect LED's in parallel ANSWERED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.e612d1f4b826da89896b2@news.infoave.net>
Source record: 91693

I'd like to thank all who replied to me with respect to connecting LED's to a common supply voltage. One fellow (Allan Butler of Inter Access Internet Services of Cedar Rapids, Iowa) suggested that I connect the LED's in series instead of parallel, and that cured my problem. I suppose LED's are current-driven, rather than voltage-driven. This configuration divides the current equally between them, since current through one LED must equal current through the other one (in a series curcuit). I appreciate the lesson!

Several suggested using separate current-limiting resistors on each LED. I'm sure that would have worked, however, a drop or two of solder wiring the LED's in series did the job instead of digging in my junk box for a couple of resistors. Go figure!

Thanks Allan! 73 all- Web Williams, KR4WM

## 1925. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-17 00:00:00 UTC
From: tsimonds@icanect.net
Message-ID: <5t7gbu$7ic$1@news.icanect.net>
Source record: 91694

kr4wm@sccoast!.net (Web Williams) wrote:

->I'm working on a project for a friend, and need to connect two LED's
in
->parallel.

You can get them both to light simultaneously by inserting the
suitable current-limiting resistor in series with each lamp.

73--Terry/WB4FXD in Ft. Lauderdale, FL
***Use this for reply: fsimonds@icanect.net
Address in header is SPAM filter

# 1926. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <33f9f1e5.320938425@news.sci.fi>
Source record: 91562
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

w6uv@wco.com (Jerry Gardner) wrote:

>On Tue, 12 Aug 1997 17:18:10 GMT, orion@xyzcapital.net wrote:
>
>>You are absolutely wrong. The tuner DOES work. It does an excellent
>>job on bands that the antenna is not resonant on. My antenna is cut
>>for the 41 meter shortwave broadcast band. On this band, yes, the
>>tuner does very little. (The preamp does bring in the weak signals,
>>however and the attenuator is usefull for the too strong signals.) I
>>listen on frequencies from 160 to 10 meters, and this is where the
>>tuner is outstanding. It DOES bring up the signal strength 3 or 4 S
>>units. It DOES NOT bring the noise up.
>
>OK, explain to me how the tuner can bring the desired signal up 3-4 S units,
>but not bring the noise level up at the same time.

While I agree that this is the case for noise and interference
generated in the far field (several wavelengths away from the
antenna), I would not be too categorical about interference generated
in the near field of the antenna (much less than a wavelength away).
Unless you know the current and voltage distribution along the antenna
in the untuned and tuned case, it is hard to predict how local
interference is capacitively and/or inductively connected to the
antenna and then into the receiver. So tunning the antenna _may_ have
some effect on the susceptibility to _local_ (near field) noise, so
in some cases you might have some S/N advantage of tunning the
antenna.

Paul OH3LWR

# 1927. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33F87D0F.5692@erols.com>
Source record: 91563

Terry Simonds wrote:
> 
> wrt@eskimo.com (Bill Turner) wrote:
> 
> ->kr4wm@sccoast!.net (Web Williams) wrote:
> 
> ->>I'm working on a project for a friend, and need to connect two
> LED's in
> ->>parallel. When I hook them up, only one lights, the other just sits
> 
> ->>there. I'm supposing that the one which draws the most current is
> the
> ->>only one which will get any current through it, or something like
> that.
> ->>Don't need to understand the theory, just tell me what I need to
> know to
> ->>get it working- please. We'll discuss why this happens in another
> message
> ->>thread- it's Saturday night, and I have to get it back to the owner
> on
> ->>Monday morning (hopefully in working condition). No, it's not
> something I
> ->>broke. It's a clock with an ambulance on the face, and the
> ambulance has
> ->>three LED's for emergency lights. You push a momentary contact
> switch,
> ->>and the LED's alternate, i.e. Two parallel LED's light at one time,
> then
> ->>go out, and the third light comes on, and they do this back and
> forth
> ->>contunially. At one time, it worked like this from the factory
> (who's out
> ->>of business). I had to home brew a siren and this light system
> ->>without the benefit of having the old circuit to look at. This is
> ->>something I'm rigging up for the owner, who likes flashy stuff.
> Thanks in
> ->>advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC
> ->>
> ->>TO REPLY: remove the ! from my address.
> ->><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
> ->All you need to do is connect a small value resistor in series with
> ->each LED. What you want is about a 200-300 millivolt drop across
> the
> ->resistor. If the LED draws 20 ma for example, the resistor would be

> ->10-15 ohms. Since you probably don't know the exact current drain
> or
> ->the extent of the mismatch between the LEDs, a certain amount of cut
> ->and try will be needed, but 10-15 ohms is a good place to start.
>
> ->73, Bill W7TI
>
> Bill--Wouldn't it be safer to calculate the R value thus:
>
> Assume the drop across the LED to be zero and the current through the
> LED to be 20 mA. (These are super-safe values...)
>
> Calculate the resistor value to be source volts/LED current.
>
> If the source voltage were 5V, then
> R = 5/.02 = 250 ohms.
>
> If the source were a single alkaline cell at 1.5V, then
> R = 1.5/.02 = 75 ohms
>
> 73--Terry/WB4FXD in Ft. Lauderdale, FL
> ***Use this for reply: fsimonds@icanect.net
> Address in header is SPAM filter

Many LEDs drop about 2 volts at their maximum current. If your source is only 5 volts or less you may run into problems assuming an LED drop of zero volts.

# 1928. Re: WX-SAT receiver from FM radio - Would this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: nospam@nowhere.net
Message-ID: <33f85e93.0@news.dol.net>
Source record: 91564

KD1YV <jimkd1yv@ix.netcom.com> wrote:

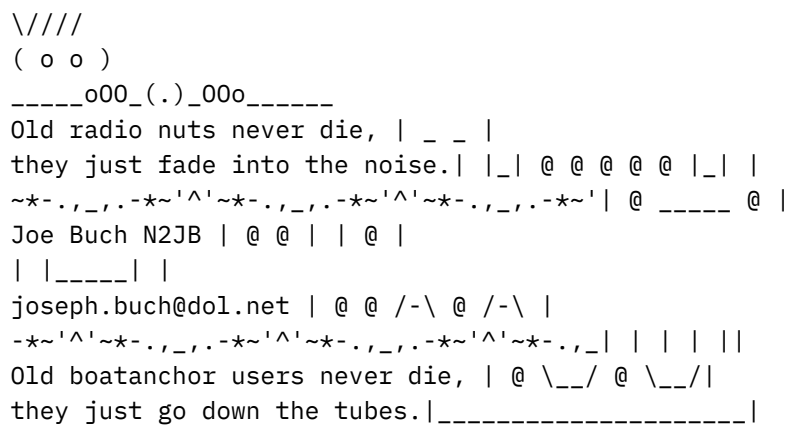
>I am interested in trying out some of the weather sats, but not interested enough to
>invest a ton of money. I have read recently that the sats of interest operate around
>137 MHz wideband FM. None of my ham receivers have a wideband option, so I wondered if
>the following might work.

>I would intend to create a simple 30 MHz oscillator fed into a mixer circuit of some
>sort, with the other input to the mixer being the received signal from the antenna. The
>output would then be fed to a conventional consumer-type FM receiver, tuned around 107
>MHz.

>Could anybody comment whether something this simple could work? Has anyone tried
>something similar? Is my design philosophy out in left field?

You may need a tuned pre-amp between the antenna and the
mixer to get the noise figure down to a level that works
well.

I have used a Radio Shack PRO-2004 scanner in the wideband
FM mode to hear these satellites using the scanners built in
whip antenna. Find one of those or an equivalent and save
yourself a lot of work.


\////
( o o )
_____oOO_(.)_OOo_____
Old radio nuts never die, | _ _ |
they just fade into the noise.| |_| @ @ @ @ @ |_| |
~*~.,_,.-*~'^'~*~.,_,.-*~'^'~*~.,_,.-*~'| @ _____ @ |
Joe Buch N2JB | @ @ | | @ |
| |_____| |
joseph.buch@dol.net | @ @ /-\ @ /-\ |
-*~'^'~*~.,_,.-*~'^'~*~.,_,.-*~'^'~*~.,_| | | | ||
Old boatanchor users never die, | @ __/ @ __/|
they just go down the tubes.|_____|

# 1929. Need Manual for Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5ta2hr$nft$1@rosenews.rose.hp.com>
Source record: 91565

Howdy. I was given an HP180D dual trace scope, and
found that the horiz. trace is starting from about
an inch from the right hand side of the screen.

Havent been able to find any adj on the horiz sweep
board etc.

Does anybody have any information on this adj
or better yet, I'd like to get a manual for
this thing.

Thanks in advance,

tony

# 1930. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <33F8A030.7E5F@HP.com>
Source record: 91566

pavel.reberc@guest.arnes.si wrote:
>
> wrightj@planetc.com wrote:
>
> >How does a homebrewer plate thru holes in making oc boards?
> >I have a X-Y table used to draw the art work on both sides of
> >the pc board and drill them. Then how do you go about plating
> >thru the holes?
>
> For amateur projets you can simply solder components on both sides of
> PCB, i did it many times.
>
> 73, Pavle s57ra

Pavle OM,

Another way to make electrical connection from top to bottom of PCB is
to
use small brass eyelets. This was (and still is) used to make reliable
thru-hole
connections with simple two-sided etched boards.

73,

Don, W6JL

# 1931. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <SZlLLyAskJ+zEwW4@two-way.demon.co.uk>
Source record: 91567

>> What you may be looking for is a portable heavy duty welder. This
>> could
>> crank out the voltage and current you need. Maybe float a bank of
>> lead-acid batteies across it. There could be some problems with
>> regulation
>> here, but nothing that couldn't be worked out.
>
> For portable welding - use acetylene.
>
>--
>Mike
This is what happens when too much of the original post is clipped.
Yes, you're not the first to suggest a portable welder.
But I need to drive this off the crank or prop, I don't want to have to
carry a genny in the back of the van.
Lestek alternators in Texas have contacted me saying they produce 48V
units so even if I have to strap a pair of 100A units together that
should do the job nicely.

Be seeing you.

Phil G4ZOW/M

# 1932. Re: Need Manual for Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001808971244020001@news.primenet.com>
Source record: 91568

In article <5ta2hr$nft$1@rosenews.rose.hp.com>, tonyz@rose.hp.com (Tony Zugec) wrote:

:Howdy. I was given an HP180D dual trace scope, and
:found that the horiz. trace is starting from about
:an inch from the right hand side of the screen.
:
:Havent been able to find any adj on the horiz sweep
:board etc.
:
:Does anybody have any information on this adj
:or better yet, I'd like to get a manual for
:this thing.
:
:
:Thanks in advance,
:
:tony

You could try Manuals Plus, but I paid $120 to them for an incomplete set for my Tek 7704 plus plugins. If you can't find them anywhere else, you'll have to fork out the dough. I don't have their web address- maybe someone else will.

Rob.

# 1933. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970818211201.RAA27481@ladder02.news.aol.com>
Source record: 91569

>> KF6IIU wrote:
>>
>> >
>> > The Radio Shack 259's were so crappy, they weren't even the right
inner
>> > diameter to accept RG8 cable.
>>
>> They also sell a silver plated version that is more expensive ($3.99),
>> part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
cents),
>> part number 278-204. I have used these parts OK.
>>
>> Bill W0IYH
>
>I've had pretty good success by just using solder flux with the crappy
>fittings.
>
>73 de Jack
>
Pre-tinning everything helps too.

# 1934. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970818223201.SAA03282@ladder02.news.aol.com>
Source record: 91570

>Also, with a good plug and socket the gp is water proof first time,
>and will not be such a rewarding challenge to ones plumbing skills.

Moritz.

Haven't you heard, the old plumbers delight is obsolete.

New Better J-Pole, don't use plumbing parts.

Don't need an SWR meter, because their is nothing to tune.

Not only works better than a ground plane,
Its Dual Band J146/440.

73 Allen Lowe N0IMW

# 1935. Re: PL259 Attachment to COAX Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970818180104.8718A-100000@oso.slonet.org>
Source record: 91571

Yes and even for four buks, the Radio Shack garbage is just that! GARBAGE!

On 18 Aug 1997, Jsender104 wrote:

> >> KF6IIU wrote:
> >>
> >> >
> >> > The Radio Shack 259's were so crappy, they weren't even the right
> inner
> >> > diameter to accept RG8 cable.
> >>
> >> They also sell a silver plated version that is more expensive ($3.99),
> >> part number 278-188. Also a UG-176 reducer for RG58/59 (2 for 99
> cents),
> >> part number 278-204. I have used these parts OK.
> >>
> >> Bill W0IYH
> >
> >I've had pretty good success by just using solder flux with the crappy
> >fittings.
> >
> >73 de Jack
> >
> Pre-tinning everything helps too.
>
>

# 1936. Re: It's fixed, but... (HW-101)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5tak43$47o$1@rosenews.rose.hp.com>
Source record: 91572

europa@primenet.com wrote:
: In article <33F3E02C.51B9@flash.net>, hynde@flash.net wrote:

: :This is a multi-part message in MIME format.
: :
: :--------------43AD277811CF
: :Content-Type: text/plain; charset=us-ascii
: :Content-Transfer-Encoding: 7bit
: :
: :I picked up an HW 101 at Dayton last year and finally got around to
: :re-tubing it and putting it back on the air. I noticed however that the
: :LSB reception was way out of whack, not having a manual I figured no
: :prob, I'll just tweak the cap/coil/? for the lower side and put it back.
: :
: :No chance, there are two rocks in the BFO for upper and lower, NO trim
: :cap and no other way to adjust freq. I put a trimmer between the xtal
: :and ground and brought it back into the passband of the IF.
: :
: :A. Is it typical for old xtals to drift or shift freq?
: :
: :B. Was this the best way to solve the problem short of replacing the
: :xtal?
: :
: :
: :73, Tim, ka8ddz
: :
: :

: I wish I would have thought of that when I had my SB-101, about 23 years
: ago. At that time, I thought the crystal filter was going bad. But I bet
: it was just crystal drift.

: Rob.

They drift, AND they go bad. There has been a lot of
stuff written for the HW-101 and when I restored mine
(bought it here on the internet- the usual "worked the
last time I turned it on"...) I was able to weed thru
no less than 8 major problems... one of which was
that I had no lower sideband and ended up finding a
crystal someone pulled from a junker. The 101 is
supposed to be notorious for bad crystals, not only
for the sideband selection, but for band selection too.

Resistors can go way up out of tolerance as well.
The one good thing about these old rigs is that when

you get one with a lot of problems and have the patience,
you will learn a LOT!

Good job!

# 1937. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <33f9beda.2390801@eskinews.eskimo.com>
Source record: 91695

kr4wm@sccoast!.net (Web Williams) wrote:

>I'm working on a project for a friend, and need to connect two LED's in
>parallel. When I hook them up, only one lights, the other just sits
>there. I'm supposing that the one which draws the most current is the
>only one which will get any current through it, or something like that.
>Don't need to understand the theory, just tell me what I need to know to
>get it working- please. We'll discuss why this happens in another message
>thread- it's Saturday night, and I have to get it back to the owner on
>Monday morning (hopefully in working condition). No, it's not something I
>broke. It's a clock with an ambulance on the face, and the ambulance has
>three LED's for emergency lights. You push a momentary contact switch,
>and the LED's alternate, i.e. Two parallel LED's light at one time, then
>go out, and the third light comes on, and they do this back and forth
>contunially. At one time, it worked like this from the factory (who's out
>of business). I had to home brew a siren and this light system
>without the benefit of having the old circuit to look at. This is
>something I'm rigging up for the owner, who likes flashy stuff. Thanks in
>advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC
>
>TO REPLY: remove the ! from my address.
<><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
All you need to do is connect a small value resistor in series with
each LED. What you want is about a 200-300 millivolt drop across the
resistor. If the LED draws 20 ma for example, the resistor would be
10-15 ohms. Since you probably don't know the exact current drain or
the extent of the mismatch between the LEDs, a certain amount of cut
and try will be needed, but 10-15 ohms is a good place to start.

73, Bill W7TI

# 1938. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: "hf.broekhuizen (SBKM-ME/C3)" <hf.broekhuizen@navy.disp.mindef.nl>
Message-ID: <33F87773.6E6D@navy.disp.mindef.nl>
Source record: 91696
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

orion@xyzcapital.net wrote:
>
> On Thu, 14 Aug 1997 16:48:01 GMT, ke4zv@bellsouth.net (Gary Coffman)
> wrote:
>
> >On Wed, 13 Aug 1997 20:52:25 GMT, w6uv@wco.com (Jerry Gardner) wrote:
>
> >>Sure, I've used tuners, but gave up on them when I found they didn't make a
> >>bit of difference in a signal's SNR. Sure, they make a perceived difference in
> >>signal strength, but I can do the same thing by turning up the volume on my
> >>receiver--more signal ...and more noise.
> >
> >Jerry's right. It would be a poor HF receiver indeed which would benefit from
> >a preamp. Any reasonable HF receiver is limited by atmospheric noise, not
> >internal noise, and a preamp will amplify that equally with the signal, thus the
> >SNR will not be improved. The preselection may sometimes be of benefit,
> >but any competent receiver already has plenty of gain. (Now on VHF+, an
> >*antenna* mounted preamp can be very useful, but for HF, forget it, atmospheric
> >noise dominates.)
> >
> >Gary
> >Gary Coffman KE4ZV
>
> Thanks for your comments, Gary. As I said, I respect your opinion.
> Maybe the Kenwood R-1000 is not that good? It's the first modern SW
> radio I've owned. The tuner and preamp do seem to work. I have heard
> weak signals with the preamp on that I couldn't hear without it. Also
> the tuner seems to help the signal strength on bands that the antenna
> isn't resonant on.
>
> --
> Butch N2YMJ
>
> To reply,
> delete the xyz
> from my address.

I do not have specs of your receiver, but I agree with Gary KE4ZV: the
pre-amp for your HF-RX should not make a difference, since there is no
improvement in SNR (N being mainly the atmospheric noise on HF).

More likely by adding the pre-amp you overload the input of your
HF-receiver with too strong signals, thus creating stations as products
on frequencies they never have been.

I.e.: by non-linearity in the high part of the dynamic range (1 dB compression point etc.) of the receiver reciprocal mixing occurs. As a result frequencies are generated as (f1+f2) and (f1-f2), but also higher-order products.
The operator will now notice stations on frequencies never radiated by any transmitter, so on a different location in the frequency band.

--
* Koninklijke Marine (Royal Netherlands Navy)
* Het Sewaco bedrijf (Sensors-Weapons-Command division)
* Ing. H.F. Broekhuizen ME/C3
* Postbus 10.000
* NL-1780 CA DEN HELDER
* The Netherlands
* email: mailto:hf.broekhuizen@navy.disp.mindef.nl

Warning: this email message was made on a multi-user browser,
so the sender can be anyone of ME/C3

## 1939. Re: doppler velocity measurement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5t970n$d5$1@news.belwue.de>
Source record: 91697

>I am looking for any information on how to build a reciever that will
>allow me to measure the doppler shift of a moving cw transmitter. The
>purpose is to measure the velocity of the transmitter wrt the receiver.
>I would like to operate in the 2m band. Please e-mail me any
>references.

The magazine VHF Communications had an article (series?) on that a few years ago. I think they have an index on their page:

www.vhfcomm.co.uk/vhfcomm.htm

Good luck, Moritz

# 1940. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <33f8310b.33260962@news.thuntek.net>
Source record: 91698

kr4wm@sccoast!.net (Web Williams) wrote:

>I'm working on a project for a friend, and need to connect two LED's in
>parallel. When I hook them up, only one lights, the other just sits
>there. I'm supposing that the one which draws the most current is the
>only one which will get any current through it, or something like that.

Just use separate current limiting resistors for each LED. Or, if
that's not easy, add a series resistor to each LED. In the latter
case, assuming there's a single current limiting resistor somewhere,
100 ohms in series with each ought to force them to share the current.
Be aware that even at identical currents two LEDs might not have the
same brightness,

Jim Potter

## 1941. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: tsimonds@icanect.net
Message-ID: <5t9rru$lll$2@news.icanect.net>
Source record: 91699

wrt@eskimo.com (Bill Turner) wrote:

->kr4wm@sccoast!.net (Web Williams) wrote:

->>I'm working on a project for a friend, and need to connect two
LED's in
->>parallel. When I hook them up, only one lights, the other just sits

->>there. I'm supposing that the one which draws the most current is
the
->>only one which will get any current through it, or something like
that.
->>Don't need to understand the theory, just tell me what I need to
know to
->>get it working- please. We'll discuss why this happens in another
message
->>thread- it's Saturday night, and I have to get it back to the owner
on
->>Monday morning (hopefully in working condition). No, it's not
something I
->>broke. It's a clock with an ambulance on the face, and the
ambulance has
->>three LED's for emergency lights. You push a momentary contact
switch,
->>and the LED's alternate, i.e. Two parallel LED's light at one time,
then
->>go out, and the third light comes on, and they do this back and
forth
->>contunially. At one time, it worked like this from the factory
(who's out
->>of business). I had to home brew a siren and this light system
->>without the benefit of having the old circuit to look at. This is
->>something I'm rigging up for the owner, who likes flashy stuff.
Thanks in
->>advance for any advice- 73, Web- KR4WM in Myrtle Beach, SC
->>
->>TO REPLY: remove the ! from my address.
-><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
->All you need to do is connect a small value resistor in series with
->each LED. What you want is about a 200-300 millivolt drop across
the
->resistor. If the LED draws 20 ma for example, the resistor would be
->10-15 ohms. Since you probably don't know the exact current drain
or
->the extent of the mismatch between the LEDs, a certain amount of cut

->and try will be needed, but 10-15 ohms is a good place to start.

->73, Bill W7TI

Bill--Wouldn't it be safer to calculate the R value thus:

Assume the drop across the LED to be zero and the current through the
LED to be 20 mA. (These are super-safe values...)

Calculate the resistor value to be source volts/LED current.

If the source voltage were 5V, then
R = 5/.02 = 250 ohms.

If the source were a single alkaline cell at 1.5V, then
R = 1.5/.02 = 75 ohms

73--Terry/WB4FXD in Ft. Lauderdale, FL
***Use this for reply: fsimonds@icanect.net
Address in header is SPAM filter

## 1942. micro power source needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <5t9p9j$2hl@news2.tds.net>
Source record: 91700

My friends,

I have need for a somewhat specialized power supply and haven't been able to find the answer within the PM Tube industry, so I thought I would run it up the flagpole here, so to speak.

Power supplies for PM Tubes are VERY EXPENSIVE and Hamamatsu makes the power supply I need (almost). They have developed the Cockdroft-Walton multiple stage voltage doubler power supply, but refuse to make it available in a form that can be utilized for non-Hamamatsu PM Tubes.

So, I am currently searching for an alternative to the Cockcroft-Walton supply, the most obvious solution is to RUN THE TUBE DIRECTLY from batteries.

---

I need a power source as follows:

Each stage needs to supply (about) 100 volts DC at picoamp to 100 microamp amplitude (100 microamp current draw would be VERY RARE, typical operating current draw is less than 5 microamp, and the tube will spend 99 percent of it's life drawing 10 picoamps or less).

10 of these stages are needed to produce voltage taps at 1000v, 900v, 800v, 700v and so on, down to zero volts.

---

My first thought was to check out the nicad battery suppliers, but they only have 1.5 v and 9 v cells, and they don't have any miniature versions. I could not find a single vendor who had any interest in anything other than 1.5 and 9 v cells.

In light of the VERY MODEST current demands of the PM Tube, I wondered if it might be possible to actually fabricate small electro-chemical batteries on a printed circuit board (or similar technique) and to then put the boards in series when needed. Obviously, lead-acid as used in car batteries would be a good place to start, but each cell needs its electrolyte to be physically isolated from the other cells, making microfabrication somewhat more complicated.

I do not run the PM Tube often, so I don't mind if the battery stack requires some occasional maintenance (a maintenance free 'battery' is not required).

I'd love to find some ni-cad watch battery sized cells, they are stackable and rechargeable-but they just aren't available.

Any ideas from the group regarding how to make compact low current dc power sources by using electrochemical reactions?

I do need the power source to be reasonably compact.

thanks de K

# 1943. Re: WX-SAT receiver from FM radio - Would this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: rmf@ultra01.santafe.edu
Message-ID: <ydyb5zjvnl.fsf@ultra01.santafe.edu>
Source record: 91701

Jim,

I agree with the low cost approach. My attempt will be to
modify an old (cheap) scanner to have the appropriate passband. I'm
just trying to figure out the insides of a uniden 210xlt scanner to
bypass the filter section and see how that works.

Let us (me) know how your attempt works :-)

Rob Farber
N5RUQ

>>>>> "KD1YV" == KD1YV <jimkd1yv@ix.netcom.com> writes:
In article <33F7039A.34C8@ix.netcom.com> KD1YV <jimkd1yv@ix.netcom.com> writes:

KD1YV> I am interested in trying out some of the weather sats, but not
KD1YV> interested enough to invest a ton of money. I have read
KD1YV> recently that the sats of interest operate around 137 MHz
KD1YV> wideband FM. None of my ham receivers have a wideband option,
KD1YV> so I wondered if the following might work.

KD1YV> I would intend to create a simple 30 MHz oscillator fed into a
KD1YV> mixer circuit of some sort, with the other input to the mixer
KD1YV> being the received signal from the antenna. The output would
KD1YV> then be fed to a conventional consumer-type FM receiver, tuned
KD1YV> around 107 MHz.

KD1YV> Could anybody comment whether something this simple could work?
KD1YV> Has anyone tried something similar? Is my design philosophy
KD1YV> out in left field?

KD1YV> -- 73 de Jim, KD1YV http://www.qsl.net/kd1yv/
KD1YV> http://pw1.netcom.com/~jimkd1yv/hamily.html

# 1944. Re: Need Manual for Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <33F8A1DE.293F@popd.ix.netcom.com>
Source record: 91702

Tony,
You really do need the manual because the fault you describe could any number of things ...
There are x1, x5 and x10 horiz gain adjustments, three presets in a vertical line top left of the horiz amp board, they are marked on the pc board, but I wouldnt touch them without checking the supply voltages first, starting with the 100v rail which acts as reference for the others...
The eht supply can affect the deflection sensitivity as well.
Manuals, or good copies, are available from Ed Matsuda, phone 619 479 0225.
Don't forget, your problem may be with the horiz plug-in also, these have separate manuals.
It's worth persevering with the repair these are good scopes, different plug-ins (4 channel, spectrum analyzer, network analyzer) are available quite easily at swap-meets, and no exotic bits needed to repair them.
Good luck,
Dan AC6AO//G3NCR

## 1945. Re: A Regen RX that beats your Kilobuck RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001808971247360001@news.primenet.com>
Source record: 91703

Beating Kilobuck rx's isn't much of a bragging right :)

Most commercial ham equipment have terrible receiver performance. Thats why they need DSP so bad.

# 1946. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33F8BF65.24E4@kfa-juelich.de>
Source record: 91704

There is a method I have long been tempted to try for plating through holes.

Many older astronomy freaks know how to silver mirrors. You can find a recipe in the Handbook of Chemistry and Physics (CRC). IF YOU ARE TEMPTED TO TRY IT PLEASE FOLLOW THE SAFETY PRECAUTIONS!!!!
Anyway, if you deposit this silver on a well cleaned surface it sticks fairly well and will even deposit on a surface facing downward. Of course it will be everywhere, including on the copper foils; I propose wiping this off with some kind of abrasive like Scotch-brite, which ought not get out any of the silver in the holes.
Then plate generously with copper from a non-acid solution; the industry commonly uses pyrophosphate baths (Diphosphates). These have good throwing power (they plate in places with restricted access, like the holes!) and have low toxicity.

One tip is to experiment a little with getting the silver to deposit in the holes. I do not remember if you are allowed to move the substrate during silvering but forcing liquid through the holes could be beneficial.

On the safety issue- silvering this way is safe if you behave sensibly, but if you ignore the rules you often get an explosion which spreads eye-damaging chemicals around the room. It is particularly bad to store the baths after the silvering is finished- I have a cabinet in which someone deposited his leftovers- It is coated with the wastes from his explosion, which fortunately hurt nobody. Working at higher temperatures is also dumb. WEAR GOOD EYE_PROTECTION!

Good luck- if you don't try it, I will.

Bob

# 1947. Re: Need Manual for Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: John Mcleod <jmcleod@pacific.net>
Message-ID: <33F8C2A4.6D200647@pacific.net>
Source record: 91705

I just got a service manual for my Tek 465B. This is the original manual, in excellent condition. It cost me $40 from the Manual Merchant (Linda Perkins). I was quoted up to $100 from other vendors.

send mail to :

linda_p@ix.netcom.com

Good luck !

John Mcleod N6RCD

Tony Zugec wrote:
>
> Howdy. I was given an HP180D dual trace scope, and
> found that the horiz. trace is starting from about
> an inch from the right hand side of the screen.
>
> Havent been able to find any adj on the horiz sweep
> board etc.
>
> Does anybody have any information on this adj
> or better yet, I'd like to get a manual for
> this thing.
>
> Thanks in advance,
>
> tony

# 1948. TM-733A MOD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Rod <ke6mgb@ix.netcom.com>
Message-ID: <33F88EA8.5BBCA6E7@ix.netcom.com>
Source record: 91706

Hi,
I'm looking for the mod for the tm-733a. I would like to get cellular.
Please send any MOD you may have to Rod@radiolink.net

Thank you very much!
Rod

# 1949. 4CS250R Tube Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Brian <haberlb@cadvision.com>
Message-ID: <33F8E688.2CBE@cadvision.com>
Source record: 91707

Needed, 4CS250R tubes. Used, pulls, new?
Anyone know where I can find some?
Thanks
Brian

# 1950. Re: Ham Database/Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33F911D1.3D5C@earthlink.net>
Source record: 91708

Jason wrote:
>
> What is the best ham database to use on the internet. I'm looking for
> one which has variable fields of search, like City, State, Zip Code,
> etc.
>
> Also, does anyone have a list of ham radio newsgroups?
>
> Thanks for the info.
>
> Jason Dugas

Hey Jason....check QRZ.Com and also Buck.com for Buckmaster callbook

Most if not all ham radio NGs are rec.radio.amateur.xxxxx
but the rec.radio.swap is one that doesnt fit that....and is a ham/two
way radio/ etc swap area....

BTW nice ISP you have there hehehe!

73
Chris
WB5ITT

# 1951. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <33F7F7E8.A42B81E2@rl.ac.uk>
Source record: 91709

Jsender104 wrote:

> What you may be looking for is a portable heavy duty welder. This
> could
> crank out the voltage and current you need. Maybe float a bank of
> lead-acid batteies across it. There could be some problems with
> regulation
> here, but nothing that couldn't be worked out.

For portable welding - use acetylene.

--
Mike

(Remove the space from the Email address to reply)

# 1952. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-18 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5t92k7$b7v$1@news.belwue.de>
Source record: 91710
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>You can also make a quicky 2M ground plane using five pieces of 19"
>segment cut from coathangers and an SO-239 connector. Solder one 19"
>wire straight out from the center conductor, solder the ramaining 19"
>segment at each corner mounting screw-hole, 90 degrees from the center
>conductor.

Personally, I would agree with you,

But:
The ground plane usually works first time and you do not need a SWR-meter
to tune it. So building it is not as interesting as building a J-Pole, where
you can do a lot of tuning, adding chokes, baluns et.c. and be proud if
it finally works, because it might be 1/10 dB better than the simple gp.

Also, with a good plug and socket the gp is water proof first time,
and will not be such a rewarding challenge to ones plumbing skills.

Moritz.

## 1953. Re: A Regen RX that beats your Kilobuck RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <33f90cf2.30184692@news.azstarnet.com>
Source record: 91573

On 18 Aug 1997 12:45:01 -0700, europa@primenet.com wrote:

>
>Beating Kilobuck rx's isn't much of a bragging right :)

This may be true in many cases but...
>
>Most commercial ham equipment have terrible receiver performance. That(')s
>why they need DSP so bad.

Personally, I'm not sure DSP as implemented in current ham gear is so
great, but if it compensates for design deficiencies elsewhere and
makes the overall performance satisfactory then what's the problem
with that.

I thought it was the bottom line that counted, not how you got there.

N7WS

# 1954. PAGER NOISE HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: John Clarke <jclarke@tpgi.com.au>
Message-ID: <01bcac70$7a66bfc0$9ea00ccb@johnc>
Source record: 91574

Help requested, for a amateur located in the valley below a commercial tower site briselling with pager antenna, so any 2 metre signals are flatened by the data streams.
Would a high Q tunable notch filter help? Any circuits or pointers will be much appreciated. Cheers and thank you in advance, John

# 1955. Re: DC-DC Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: jamesh@trib.com
Message-ID: <5tbkgt$1m9@news.trib.com>
Source record: 91575

I've run into this same sort of problem. You need an isolated supply for the voltmeter since they usually can't handle an input voltage referenced to their own power supply. You have the right answer, a DC-DC converter. Fortunately, the computer folks use little dc-dc converters to make the -9V used for LAN work. This means that these converters are available cheap (under $5 apiece) from the surplus places. I think I've seen them in Hosfelt or Marlin P. Jones. In any case, you *can* make a DC-DC, I had to late one night when I had to have the circuit for the next day to go out of town. It works fine, but it was more than $5.00 worth of hassle. I used a tiny audio transformer and drove it with a couple of transistors in a push-pull circuit. Now I'll just keep some of the commercial surplus dc-dcs around. Make sure that the converter is truely isolated though, and not referenced to the input side of the converter. I've seen both kinds for sale.

Jim N7SEG

Norm Melick <henmel@worldnet.att.net> wrote:

>I built a variable power supply that uses a digital meter. I'd like to
>replace the 9V battery used to power the meter with 9 volts off my power
>supply.

>Can anybody direct me to a schematic or article to make a DC-DC
>converter?

>Thanks alot for the BW.

>Norm/KF6HSK

jamesh@trib.com

# 1956. Help!: Taming HF preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33f95b77.1710144@news.erols.com>
Source record: 91576

Ferric Chloride users:

Made some MAJOR progress on my homebrew superhet receiver (20 meters) this weekend. Finally built a proper frequency readout. It consists of the circular part of the coffee can that is normally thrown out right after you smell the Folgers. With an old junk-box Jackson 6:1 reduction drive (out of a Swan 240!) and some scrap aluminum it is now providing me with far more frequency info than I had before. (Before I had to peer over the front panel to eyeball the tuning cap!).

I went ahead and built a little grounded gate FET pre amp circuit. The circuit comes out of W1FB's Design Notebook. It has really improved receiver performance. Before I could not hear the band noise - now I can. More important, however, is that it's two tuned circuits have completely knocked down the 22 Meter broadcast band spill over. So I no longer have to listen to fundamentalist preachers or Radio Canada International while trying to copy DX stations. Like I said - MAJOR progress.

I have one problem that I would like to ask the group about: As I tweak the two tuned circuits (input and output) in the pre amp, it breaks into oscillation whenever I put them both at their resonant points. If I back off a bit on the input tank, the oscillation goes away, sensitivity remains sufficiently high and the 22 meter gang continues to be blocked. I suspect I may have failed to use a sufficiently short PC board trace to ground for the FET gate.

Anyway, is this worth fixing or should I just leave it as it is? Is it normal for grounded gate FET preamps to behave this way? Am I losing performance by operating the input circuit slightly off resonant frequency? Can someone explain WHY this circuit is doing this (Too much gain? Why would the lead length matter?)

Thanks, 73 Bill N2CQR

# 1957. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <$QvJUBAa7V+zEwzS@ddwyer.demon.co.uk>
Source record: 91577

In article <5t6vdt$8ts_001@leeds.ac.uk>, "L. DE BRUIJN"
<CBS5LD@leeds.ac.uk> writes
>In article <33F228AD.FD5@altair.ucdavis.edu>,
> Heffner <mheffner@altair.ucdavis.edu> wrote:
>>I am somewhat new to radio design, so I have question about crystals
>>and overtones. I would like to build a LO with a freq in the 2m freq
>>band. Since this is in the 146MHz range I would like to use an overtone
>>oscillator. I have looked in catalogs (such as Digi-key) and I have
>>found xtals that list the fundamental freq, but not the overtone. Also
>>the selection is rather poor. My question is where do I find xtals with
>>a selection that covers the freq bands in small steps, and lists the
>>overtone freq of the xtals?
>>
>>Thanks for any help.
>>
>>Mike KF6FPW
>
>Don't talk to me about 2m xtals! :-) I've been trying to get a UKW Berichte
>transverter design to work for the past fortnight and the LO (116MHz crystal
>series resonant with a grounded gate JFET) doesn't want to osciallate, I've
>tried everything (including hooking the xtal up to an HP8753D Vector Network
>Analyser (300kHz - 6GHz!) to make sure that the xtal is working). I've just
>got my license about a fortnight ago but I still haven't been on air...
>
>Re your questions however: fundemental mode xtals can be operated in their
>overtone mode BUT they won't operate on the exact odd multiple (thus their
>overtone freq. won't be specified). You are probably better off using a
>standard xtal and multiplying it by say 18 or so, this allows a reasonable
>tuning range of 100kHz at the desired frequency. I'm in the UK so sending you
>the address of UK suppliers won't be much use I'm afraid.
>
> 73 and good luck de Laurens M1CCO
>
>(wow, this is the first time I've used my callsign in a posting!)

Try testing the oscillator maintaining circuit with a "synthetic"
crystal. Construct the synthetic crystal from chip components consisting
of a series C say 1000pf (to remove DC) in series with a 120 ohm
resistor paralleled with a 5pf. This synthetic crystal represents the
equivilent circuit of a worst case in spec 5th overtone at the required
frequency. Your circuit should then oscillate within a few percent of
the crystal frequency. If you have an out of spec crystal the most
likely problem will be that the crystal has a higher starting resistance
(can be 2 to 300 ohms) than when it is running at say 100uW

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax: +44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 1958. Re: DC-DC Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: xavier <xavier@mail.got.net>
Message-ID: <33F94807.B6EB66AC@mail.got.net>
Source record: 91578

QST, july '97 page 40

Norm Melick wrote:

> I built a variable power supply that uses a digital meter. I'd like
> to
> replace the 9V battery used to power the meter with 9 volts off my
> power
> supply.
>
> Can anybody direct me to a schematic or article to make a DC-DC
> converter?
>
> Thanks alot for the BW.
>
> Norm/KF6HSK

# 1959. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: jamesh@trib.com
Message-ID: <5tbmh9$1m9@news.trib.com>
Source record: 91579

Just to add fuel to this thread, and since I really want to know what I'm doing wrong:

I built the J-Pole as shown in the 1996 ARRL Handbook. I used the exact measurements shown. This is a copper plumbing sort of unit. The antenna works great. (even better than my cheap-o piano wire 1/4 wave ground plane). The problem is that it can't seem to be tuned up to a 1 to 1 SWR as the book claims it should. The best I get is about 1.7 to 1. Not terrible, but pretty bad for a 2 meter antenna. (The 1/4 Wave ground plane is as near to 1 to 1 as I can read on any meter I have with no tuning, just the standard dimensions.

I have tried this with the antenna mounted in different locations to be sure it wasn't being affected by nearby objects, etc. I have also tried it with and without a balun (several turns of the RG-58 about 8 inches in diameter). No luck.

I built this antenna just as the book says, but, the book shows lengths for pieces before soldering it together. This means that if the caps, tee, elbow, etc don't have the same depth of seating for the tubing, the end-result dimensions will not be the same as they were for the unit in the book. I really wish they would have just shown the finished dimensions of the antenna. That way anyone could cut the pieces to arrive at the proper lengths and spacings.

If anyone has built one of these and had it tune up to a good low SWR, I would be interested in knowing what their final dimensions on the unit were. Also, it seems like the method of running the feedline to the attachment points should have an influence on things. This is a subject that the book failed to address. The coax being right in the area of the matching section probably throws things off. Perhaps I should be feeding it in from a right angle to the antenna. I could build a plastic support to hold the coax out so it could come in at some angle.

Another question is about the piping below the "J". Can this be any length? I'm hoping that the matching section makes anything below it just "dissappear" as far as the antenna is concerned. I am using another 5' section of the copper tubing heading down from the "tee" to provide a mounting pole for the antenna. If this section is being "seen" by the antenna as a parisitic element of some sort, I can see how things might not ever tune up. And, since this piece may be connected to still another section of pipe as a support for the antenna, things would be even more complicated. Please say this isn't so! :)

As good as this antenna seems to get out and receive, I can only imagine that things would work even better if it were a better match to the line and transciever. I want to build one to put up on the roof of my office, but I'll need to run a fairly long feedline. If the SWR is this bad, I'll have considerable loss in the coax. I might go back to a 1/4 wave ground plane for the office if I can't get the J-Poles to tune up. (I also like the idea that the entire J-Pole antenna is a DC short circuit. It makes lightning protection a bit more positive. If only in my mind.)

Thanks for any help.

Jim N7SEG

"David Newkirk" <dnewkirk@bellatlantic.net> wrote:

>Jerry W. O'Dell <psyodell@mail.provide.net> wrote in article
><33ea61c9.1277555@news.provide.net>...

>> Could someone clear up the question of the j-pole for me. My ARRL
>> antenna handbook says that it's simply a quarter wave with a matching
>> section attached, which is easily mounted. No particular gain.

>Oh, I hope the ARRL Antenna Book doesn't really say that, because the J is
>a *half*-wave vertical element end-fed by a quarter-wave matching stub. It
>can be considered a special case of the antenna older-time MF and HF
>operators called a Zepp.
>
>> Yet I hear ham after ham singing the glories of the j-pole. Have I
>> missed something? Does the j-pole really have 11 db gain, as some
>> have said quite definitely on the repeater?

>Maybe compared to something like a really bad "rubber duck" a J could
>exhibit a gain of 11 dB, but not compared to something like a quarter-wave
>groundplane or half-wave dipole. It's just a half-wavelength radiator,
>after all.

>Regards,

>David Newkirk, W9VES

jamesh@trib.com

# 1960. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: jamesh@trib.com
Message-ID: <5tbnkm$1m9@news.trib.com>
Source record: 91580

lassie <arvid@plea.se> wrote:

>Robert Lay wrote:
>>
>> How could their be any silver in photographic developing solution? The
>> silver is in the emulsion. If you want silver in your developing solution
>> you have to first develop a hell of a lot of prints or film. OK?
>>
>> 73 de w9dmkYes, that's correct. In a used fix bath there is silver di(tiosulphate).
>The process is:
>After development, when all the exposed silverbromide crystals have been reduced to
>metallic silver (wich is black since it's very fine powder), the prints has to
>be fixated, the unexposed crystals of silverbromide has to be removed. That is done
>by a solution of potassium tiosulphate: AgBr + 2 S203 (2-) ==> Ag(S2O3)2(3-) + Br(-).
>Both of the resulting substances is water soluble, so they end up in the fix bath.
>If the prints shouldn't be fixated, the unexposed crystals will go black as well when
exposed
>to daylight.

>I've read that 1 square meter of print paper contains 5-15 gramms of silver.
>The discussion above is of course only valid for black-and-white prints.

>greetings // Lars (SM4RZW)

When I worked as a photographer for a local newspaper, we installed a silver recovery system to plate the silver out of our used fixer solution. The large sheets of film used for actually "burning" the printing plates were where we got the most silver. We got hundreds of dollars worth per month. The company from which we bought the sheet film for the line camera bought the silver back from us. It was in a sludge form. Not really pretty to look at, but they just turned around and made more film with it. I understand that places that do X-Ray film get even better production than that. The X-Ray film has to be very sensitive (high ASA or ISO number). To get the higher "speed" in the film, they commonly use more silver. This makes a tidy sum of money for the dentists, doctors, hospitals and clinics that put in recovery units. Not to mention that the local wastewater plant doesn't like the way silver poisons their biological treatment system. Most cities will not let you discharge more than a certain amount of silver into the municipal waste stream.

I believe that color film has silver in it as well. (At least the standard types of color film). And Lars is correct about the silver being found in your used fixer. As he stated, fixing the film or paper removes the "undeveloped" silver. Thus allowing the image to be seen, and preventing the film or print from turning really ugly.

Print papers don't have nearly as much silver as do films since the speed of print papers is very slow compared to most films. If you only did printing, you might not get enough silver out of your fixer to be worth putting in a recovery system.

Jim N7SEG

jamesh@trib.com

# 1961. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5tc3tp$84u$1@news.belwue.de>
Source record: 91581

>I built the J-Pole as shown in the 1996 ARRL Handbook.

Bad luck.

All the problems of this design have been discussed extensively in the past few months here. A possibility is to try dejanews rather than going through it all over again.

73, Moritz

# 1962. Re: Ham Database/Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33F9925F.1E39@ix.netcom.com>
Source record: 91582

Jason wrote:
>
> What is the best ham database to use on the internet. I'm looking for
> one which has variable fields of search, like City, State, Zip Code,
> etc.
>
> Also, does anyone have a list of ham radio newsgroups?
>
> Thanks for the info.
>
> Jason Dugas
---
Good Morning Jason - from San Diego.
There are 30 callsign lookup data bases at URL:
http://pw2.netcom.com/~ac6v/page2.html
Take your pick.

There are 40 news groups clickables at URL:
http://pw2.netcom.com/~ac6v/page9.html
Most about Ham radio -- some shortwave and scanner

73
Rod
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 1963. Re: WX-SAT receiver from FM radio - Would this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Alex <abom@iaehv.nl>
Message-ID: <01bcaca5$ff4c67f0$de219082@cig483>
Source record: 91583

```
--
*************** Alex ***************
* e-mail: abom@iaehv.nl *
* pa0axb@qsl.net *
************************************
```

KD1YV <jimkd1yv@ix.netcom.com> wrote in article
<33F7039A.34C8@ix.netcom.com>...
> I am interested in trying out some of the weather sats, but not
interested enough to
> invest a ton of money. I have read recently that the sats of interest
operate around
> 137 MHz wideband FM. None of my ham receivers have a wideband option, so
I wondered if
> the following might work.
>
> I would intend to create a simple 30 MHz oscillator fed into a mixer
circuit of some
> sort, with the other input to the mixer being the received signal from
the antenna. The
> output would then be fed to a conventional consumer-type FM receiver,
tuned around 107
> MHz.
>
> Could anybody comment whether something this simple could work? Has
anyone tried
> something similar? Is my design philosophy out in left field?
>
> --
> 73 de Jim, KD1YV
> http://www.qsl.net/kd1yv/
> http://pw1.netcom.com/~jimkd1yv/hamily.html

Ofcourse you can do that.
But if you would have an accepable receiversensitivity you have to add a lownoise preamp in the antennacircuit. The other thing you have to do is to make the bandwith of th conventional FM-receiver smaller (about 40kHz instead of the conventional 150kHz). Further you have to enlarge the Q-factor of the FM- discriminator.(more volts output per FM- deviation. Last action implements enlarging a resistorvalue of the FM-discriminator.

An other way is to look at my homepage where you can find all information for building a receiver yourself.

http://www.qsl.net/pa0axb/

Good luck !!!

alex.

# 1964. YEASU FL/FR DX 400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: George Andrews <vcmmcts@nlnet.nf.ca>
Message-ID: <33F9A284.78B2@nlnet.nf.ca>
Source record: 91584

desperately need Schematic for the FL and FR DX 400 Transmitter and Receiver. Cany anyone help????????

VO2AA/VO1VCM
vcmmcts@nlnet.nf.ca

# 1965. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Alex <abom@iaehv.nl>
Message-ID: <01bcacaa$e8de45b0$de219082@cig483>
Source record: 91585

```
--
*************** Alex ***************
* e-mail: abom@iaehv.nl *
* pa0axb@qsl.net *
************************************

Sid Boyce <szb50@amdahl.com> wrote in article
<33F4F48F.AAC291E6@amdahl.com>...
> Bill Meara wrote:
> >
> > I just put the finishing touches on my (supposedly!) 12 VDC QRP
> > station power supply. Circuit is VERY simple: 18 volt (2 Amp)
> > tranformer to a 2000 Mfd (50 Volt) filter cap to a Radio Shack 7812 12
> > VDC voltage regulator.
> >
> > Problem is that the output voltage is only about 11.1 volts.
> >
> > Has anyone seen this problem before? What do you think, bad
> > component?
> >
> > I also notice that the regulator gets quite hot. I put a fairly large
> > heat sink on it and I don't seem to get to the thermal shut down point
> > (even when pulling around 1 amp through it.)
> >
> > Any suggestions?
> >
> > Thanks, 73 Bill N2CQR
> Looks like it to me, with that sort of input voltage, you should get
> 12V out no trouble, very like the regulator is out of spec.
> Regards
> --
> ... Sid Boyce...Amdahl(UK)...44-121 422 0375
> ----------------------------------
> Any opinions expressed above are mine and do not necessarily represent
> the opinions or policies of Amdahl Corporation.

Hi Bill,

Are you sure you measure the voltage at the correct point of the sabilizer
(direct on the sabilizer's output).
You have to account to the resistive losses from the output of the
stabilizer to the input of the DUT (device under test= is your load)

Best regards,
```

# 1966. Fast O'scope for tiny Homebrewer budget

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <33F9AAFE.4E3@lafn.org>
Source record: 91586

Hi,
I am still working (having fun) on my Comb and Marker gen ckts for my
HomeBrew Spectrum Analyser. My old trusty 35 mhz scope is
UNUSABLE with comb ckts that narrow pulse width and with the
surplus 100 mhz TTL osc dips I bought. My TTL 74F gates and flip flops
won't operate when driven with these 100 mhz TTL osc parts because,
the osc's are actually output ECL voltage levels. Finally figured
this out by testing on a friends TEK465 scope...marginal
but usable with 100 mhz ECL.

I am desperate for a replacement usable used or new scope, TINY BUDGET,
for checking QRP RF ckts and for checking 100 mhz ECL and TTL logic.
This is for my home shop shack.

What scope are you folks using that are small, light weight for checking
RF and for checking high speed digital logic?

I have looked at TEK 465, 475, 485. I find the probes for a 485
are possibly more expensive than the scope. Sounds like we use 465,75,85
until they need repair, then discard due to parts shortages. This
worries me.

Anyone using a TEK TDS360 or 380 at these speeds? Very expensive
but can print waveform on a Laser printer.
7904 seem usable but are too big for my space.
Any usable TEK 2XXX series at these speeds?
I am use to analog scopes so these Digital Sampling Scopes worry me when
I try to use for analog measurements.

Please list model numbers that work for you. This will be very helpful.

Thanks so very much for any helpful hints and
model numbers to help narrow and concentrate my search.

73, W6MIK

--

_____________________________________
Dave Shalita,
af389@lafn.org
Van Nuys, CA

# 1967. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33F9D07F.4128D72C@direct.ca>
Source record: 91587

Assuming you don't have a dud crystal (it happens...), the way
I always set up overtone oscillator circuits is to remove the
crystal, replace it with a 47 ohm resistor, and adjust the
oscillator until it free runs on the correct frequency. Then
remove the resistor, reinstall the crystal, and watch the
lovely stable numbers on the frequency counter.

What circuit are you using? I like the Butler emitter-follower
circuit in the no-tune transverters. Use hot transistors -
2N5179, BFR91, MRF901, etc.

While you can, in theory, operate any crystal on any overtone,
crystals ground for specific overtones will be a lot better
behaved, and may be worth it when you consider the hassle factor.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

## 1968. need filter cap.'s

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: fuse19@aol.com
Message-ID: <19970819183300.OAA28492@ladder01.news.aol.com>
Source record: 91588

i need some filter cap.'s 120mfd 500volt's the mfd can be smaller but the voltage has to be 500volt thanks email fuse19@aol.com

# 1969. Re: re homebrew 12v antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970819192201.PAA01617@ladder01.news.aol.com>
Source record: 91589

>Subject: Re: re homebrew 12v antenna rotator
>From: jamesh@trib.com (Jim Harrison)
>Date: Tue, 19 Aug 1997 10:03:05 GMT
>Message-ID: <5tbqs5$1qu@news.trib.com>
>
>jeffg@istar.ca (Jeff Groberman) wrote:
>
>>Over the past few months I've been asking for tips on building a 12v
>>antenna rotator controller. The roator itself is fitted with a pot
>>that turns as the rotator turns thus changing the ohmage. I can of
>>course read the ohmage on a VOM an extrapolate the readings to
>>N/S/E/W. but does anyone have a better way of converting the readings
>>without using an ohmmeter?
>>Jeff
>
>A very simple method would be to supply a regulated voltage to one end
>of the position sensing pot, tie ground to the other, then use the
>resulting voltage from the wiper to drive a mechanical meter. You
>could use any meter whose full scale current was low compared to the
>current drawn by the potentiometer alone. Then, pick a resistor value
>to place between the meter and the pot wiper which gives full scale
>deflection when the wiper is at the regulated voltage end of the pot.
>
>Now all you need to do is mark the meter with N, E, S, W or some such
>readings. Perhaps 0 to 360 degrees would be better. In any case,
>many mechanical meters can be opened up, and a new meter face either
>made by hand or printed on a PC printer can be glued over the original
>face. (I like 3M Photo Mount spray for this). Then just put the
>cover back on the meter. If you do this carefully, the new meter face
>will look as good as or better than the original.
>
>Now you have a good indicator of your rotator position. In addition,
>you could then use the voltage from the position potentiometer to
>drive a circuit which would automatically position the rotor if
>desired. This could be done by a computer which looks at the voltage
>and runs the motor, or a simple analog circuit which lets you dial up
>the desired position on one potentiometer and then drives the rotator
>to achieve a match.
>
>Hope this is some help
>
>Jim N7SEG
>jamesh@trib.com
>

>
>
>
>
>
>
>

Use 3.6 or 36 volts on the pot and you can read direction directly from a
digital panel meter or VOM.

# 1970. Re: High Performance Receiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33f9e0cc.1108056@news.online.no>
Source record: 91590

On 15 Aug 1997 10:20:01 -0700, europa@primenet.com wrote:

>In article <19970811214801.RAA11619@ladder01.news.aol.com>,
>cwonders4@aol.com (Cwonders4) wrote:
>
>:Has anybody built the High Performance Receiver published
>:in the ARRL Handbook 1994 to 1997?
>:I have built it and would like to compare notes.
>:Any takers?
>:
>:Sameer
>:KF6HST
>
>
>I looked in the 1997 Handbook in the Index and then in Receiver Projects
>section and could find no mention of the "High Performance Receiver" There
>are however discussions about some high performance building blocks, like
>the Makhinson Front End, and the Horrabin H-Mode mixer.
>
>(Note to anyone reading this message that works on the ARRL Handbook:
>
>The ARRL Handbook has one of the worst indexes of any technical book I've
>seen. You'd think that now that we're in the computer age, it would be
>easy to produce one, since many word processors do it automatically. Time
>and time again I have to leaf thru hundreds of pages to find something that
>I know is in the book, but can't find it in the index.)
>
>Rob.

indeed(!) and ARRL publications are wellknown for all the printing
faults, is it really so difficult to avoid? When an idea looks
somewhat strange, it is best to avoid it!

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1971. Re: opto isolator/couplers in VFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33f9f9ca.664702@news.online.no>
Source record: 91591

On 11 Aug 1997 03:46:07 GMT, s002veb@alpha.wright.edu (VINCENT
BARMANN) wrote:

>Ian Liston-Smith (ianls@patrol.i-way.co.uk) wrote:
>: Anyone tried using these devices to isolate VFOs from their loads? I
>: saw a circuit in a professional radio/elecronics mag in the 1970 using
>: one up to about 1 MHz. Surely this is easy-peasy now...up into the 10s
>: or 100s of MHz? These devices don't seem to have listed their maximum
>: operating freqs. Any ideas?
>
>When I was at Drake, there was discussion of this. At the time, opto
>isolators were extremely nonlinear devices; they tended to square off the
>envelope. This was a long time ago.
>

TANDBERG used a 4N28 in VIDEO coupler for TV sets. The problem being
that chassis may carry 240VAC phase voltage. LA4WN copied this
optocoubler ccircuit and reported that it performed very well. So it
is only question of how you apply the circuit. For video you need some
large current through the opto device and use some heavy feedback to
reduce nonlinearity.
Current feed for the diode should not be to arkward to connect?

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 1972. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: worms92@aol.com
Message-ID: <19970819204101.QAA14049@ladder02.news.aol.com>
Source record: 91592

I not sure about 11dbs. but there should be some increase in gain because
the vertical should cause a directional effect to some small degree.
mdj KE4YJX

## 1973. diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: worms92@aol.com
Message-ID: <19970819205401.QAA14959@ladder02.news.aol.com>
Source record: 91593

Look at the LEDs as two diodes in parallel and you will realize that it will take an alternating current to light both if there place opposite of of each other. That being one has the anode tied to ground while the other has it s cathode grounded. This should give it an alternating light effect.

## 1974. dc dc converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: worms92@aol.com
Message-ID: <19970819204901.QAA14577@ladder02.news.aol.com>
Source record: 91594

I like using the Maxim 796/797 dc dc converter chips and build my own.
It allows you add external FETs to have up to 10amps drawn. Their web
page has everything you need and will even send you some samples.

mdj KE4YJX

# 1975. RE:A REGEN RX ..

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33F9CF90.68C2@NOSPAM.exit109.com>
Source record: 91595

Some clarifications for everyone who is interested in this REGEN:-

Tony Zugec wrote:
>
> In article <33F6CE5D.13EC@exit109.com> you wrote:
> : Recently I made a Regen RX and was truly amazed by its
> : performance. This baby can receive anything from QRP
> : HAM CW or SSB stations on 80M or 40M to Megawatt Broadcast
> : stations WHEN SET UP and OPERATED PROPERLY.
> : It has very smooth , stable, noise free regen control.
>
> : Its circuit follows :
>
> : |---|
> : ------- REGEN---R7----------- R6 ------POS 6 V DC
> : ANT |L2 | |GND | _|_ |
> : ------------------| D1 _ _C5 R5
> : IN | R3 _|_ _|_ |--------|---------||--- To LM386
> : | |_|D GND GND R4 | | Audio AMP
> : ---------R2--->|__S_Q1__| |___|___|/Q2 |
> : | | | | | | | | |\ |
> : | | | | | C3 | _|_
> : _|_ L1 | R1 C2 | -|- C4
> : _ _C1 | --- | | | |
> : | | --- C6 | | | |
> : |----------|---------------------------------NEG 0 VDC(GND)
> : |
> : GND
>
> However, I am going cross-eyed trying to figure out
> the circuit drawing. Any chance you might be able
> to draw it out and fax it to me or clean it up and
> spread it out a little to make it more understandable?
>
> PS. I am building a world band radio using mixer chips,
> and crystal filters etc etc... I just love this stuff!
>
I will try to clean up the ASCII ART schematic and repost it.
I am also looking for a tool to draw/convert schematics into JPG/GIF.

A superhet using mixer chips/Crystal filters is a very interesting idea.
May I suggest a regen IF at a fixed frequency like 20 / 24 MHZ
using a crystal instead of the LC circuit I am using.

You could start with a pierce oscilator circuit with a crystal between
the drain and the gate of a fet

This idea of a superhet/regen using XTAL has been driving my crazy for
some time now, and, I would like to try it myself soon.

The advantage of using a superhet with XTAL/REGEN IF are:-
1. 1 XTAL can be used both as a XTAL filter and as BFO .
(DID you notice that I have connected the ANT to the drain
instead of the gate. I would feed the output of the mixer here at
the drain, and, that should improve selectivity/ overload
characteristics a lot.)

2. NO IF AMP/ detector is needed. Some AGC is provided inherently
by the regen detector.

3. Very low power operation. This regen works well at around
1.5 volts!

Possible problems could be:-
OVERLOAD due to very strong signals.

----------message separator----------

> Hi !
> I'm intrigued by your regen rx, but am having a bit of trouble >deciphering
> the schematic, and hoped that you could help me out here.
I need a tool to draw/save the schematic as a gif or JPG.
Sorry for the bad ASCII schematic. The circuit is good though.

> I think R2 is in series between C1/L1 and Q1-gate (?)
Yes, it is 47 OHM stopper resistance to stop VHF parasitics
which are common with (MPF 102) J-fets.

> Q2 appears to collector-feedback audio amp (R4, R5, C4 and Q2-collector
> share a common connxn ?).
Yes, R4 provides feedback mostly at DC, and has little
effect at audio because because r4= 560 K and C3 = 10 UF or so
electrolytic.So, R$ is mainly to bias the Q2 in a table way
with about 2 Volts at its collector.

> R6 (3k3) seems to be in series with the battery - should R5 connect directly
> to +6VDC ?
R6/C5 are used to filter isolate the audio pre amp Q2 from the
following audio AGC amp using LM386 /2n3904 which was not drawn/shown
for lack of time/patience. R6/C5 is needed if you are using LM386
amp after it and feeding both from the same supply.
Without it, you might run into audio oscilations or motorboating.
Incidentally the ten-tec regen has audio oscilations all over the
audio and ultrasonic range.

> Your notes indicate that the hot end of the REGEN control go to R6/C5, but
> the schematic shows it connected to R7/D1 (?).
OOPS, the schematic is correct and the notes are wrong. The hot end of
regen goes to R7/D1.

> (Is D1 just an indicator, or are you using it as a bias regulator ?).
YES, D1 regulates the power to the REGEN transistor Q1 at about 1.8
Volts. Q1 only needs about 1 volt to oscilate even with the very LOW
amount of feedback that is obtained with the 1:10 turns ratio between
L2/L1.

> I think that L2 and R3 are in series between the REGEN wiper and Q1-drain (?)
YES, R3= 100 OHMS. It is used again as a stopper to prevent any
chance of VHF parasitics. ALso, L2 is 3-4 turn link on L1.

> Where does the other end of C6 connect ?
>
GROUND. It is 100 UF electrolytic which bypasses the wiper of the
REGEN so that all wiper noise is not regenrated by Q1.

> The remainder looks straight-forward - it looks like a fun project, too !

YES, the most fun I had in a long time. Also, I have an AGC audio amp
using LM 386 following it.
ALso, I wanted to build a 1 transistor active butterworth lowpass
filter after the Q2 to clean up the high pitched whistles.

Incidentally Bill, I used it as a regenerative RF antenna amp
with a ten foot wire out of my apartment in conjuction with my
SONY ICF 2001. It REALLY pulled a lot of signals for ICF 2001
out of the noise for ICF2001. Signals that could barely be heard
before on ICF2001 were now about (4-5 S points ) on the ICF 2001
signal meter after adjusting this regen.

Also, no internal connections are needed into the SONY or whatever
radio you are using. All you need is the high impedance telescoping
whip on your portable. Connect the regen to it and you have a GREAT
Q-MULTIPLIER / SIGNAL MULTIPLIER at the incoming signal freq.

Let me know how it goes.

P. Singh

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 1976. Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Russell Chandler <rhchan@tsquare.com>
Message-ID: <Pine.LNX.3.95.970819183651.24014A-100000@tsquare.com>
Source record: 91596

The project I am working on calls for a Mylar dipped capacitor. My copy of the Mouser catalog lists capacitors in Ceramic, Electrolytic, Polyester, Polyproylene, and Tantalum. W1FB's Design Notebook also makes mention of Mylar capacitors, Tubular and Rectangular Paper capacitors. What am I missing here? What would a possible source be for Mylar cpacitors? Tubular and Rectangular Paper capacitors?

Russ

# 1977. Re: Doppler velocity measurement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33fa2ab0.2215015@news.online.no>
Source record: 91597

On 29 Jul 1997 09:55:47 GMT, "Eric" <ke4kik@infi.net> wrote:

>I am interested in any comments anyone would have on my web site. This is
>mainly for Doppler direction finding in amateur radio.
>
>www.infi.net/ke4kik
>
>Thanks for any comments
>
>Eric KE4KIK

did you see this - on rec radio.amateur.dx and mni other?

73
Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 1978. power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: sw1gak@polaris.mindport.NET
Message-ID: <Pine.SUN.3.96.970819182214.9162A-100000@polaris.mindport.net>
Source record: 91598

I have a question about submarine power transmission cables.

Why do power companies use DC to transmitt power. 400KV, 500MW. What kind
of equipment is used to transform from AC to DC and DC to AC?
Could it be power factor?
73 and TIA
Spencer
W1GAK
Preston, Ct.

# 1979. Help rewinding small transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Ricky Ponder <*kc4kin@geocities.com>
Message-ID: <33FA4A65.DAF18C6F@geocities.com>
Source record: 91599

I have two small transformers that I need to rewind. Each transformer has 2 windings of 20 or 21 ga. wire 76 in. long. One red enamel and the other green enamel. First question. Where can I get this enameled wire. I've seen it referred to as Magnet wire before. The second problem,
on the outside of the transformer there's what looks like a bright yellow tape on the outside of the windings. What is this tape and where can it be obtained? There's a split ferite horseshoe that goes over the completed winding assembly that looks like regular scotch tape that holds
it together.

You might wonder why anyone would go to the trouble to try and rewind such a critter. They are a special transformer that drive a florescent lighting circuit in a Heathkit Weather station. No cross reference to anything availiable elsewhere. They want around $60 for these and this is the second time I've had them go bad on me. It seems that as the light bulb gets older even though it still burns it causes the transistors
to draw excessive current. This builds up heat in the area of the transformers evidently breaks down the enamel coating on the wire just enough so that the transformer loses it's required properties. Any help or suggestion would be greatly appreciated.

Thanks,
Ricky L. Ponder


_____
_ | | _
/ ) | A M A T E U R * R A D I O * S T A T I O N | ( \
/ / | __ __ _____ __ __ __ __ ____ _ __ | \ \
_( (_ | _ / //_/ / ____/ / // / / //_/ / _/ / | / / | _) )_
((((\ \> |/ )/ ,< / / / // /_ / ,< / / / |/ / ( \| </ ))))
(\\\\ _/ // /| | / /___ /__ __// /| | _/ / / /| / \ _/ ////)
\ //_/ |_| ____/ /_/ /_/ |_| /___/ /_/ |_/ \ /
\ _/ _ /
/ / | Attention: The header address is ANTI-SPAM | \ \
/ / | Remove the * from the front to send e-mail. | \ \
| |
| Home Page: http://www.geocities.com/~kc4kin |
|_____|

# 1980. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970819234201.TAA26897@ladder02.news.aol.com>
Source record: 91600

>Subject: Re: J-Pole
>From: jamesh@trib.com (Jim Harrison)
>Date: Tue, 19 Aug 1997 08:48:59 GMT
>Message-ID: <5tbmh9$1m9@news.trib.com>
>
>Just to add fuel to this thread, and since I really want to know what
>I'm doing wrong:
>
>I built the J-Pole as shown in the 1996 ARRL Handbook. I used the
>exact measurements shown. This is a copper plumbing sort of unit.

Sorry, you built the old obsolete copper j-pole. You missed one
small paragraph, and I quote.

"The open stub-fed J antenna shown in Fig 36B can be
connected directly to low-impedance coax lines with GOOD
results. The lack of a movable Balun (which allows some
impedance adjustment) may make this antenna a bit more
difficult to adjust for minimum SWR, however."

I have refined the open stub-fed J antenna for a 1 to 1 match.

Here are the instructions for the Better J-Pole.
Remember, the spacing is important, If you use any element material
other than what is shown here, you may have to change the spacing
to get a low SWR.
Please e-mail me, and let me know how this works out.
and let me know if you have any questions.
You may want to print the page showing the J-Poles at....
<A HREF="http://members.aol.com/Arrow146/index.html">Arrow Antenna</A>
or
http://Members.aol.com/Arrow146/index.html

Construction Plans for the Model J146 2 Meter Solid Aluminum J-Pole

Parts Needed:

Radio Shack # 21-961 3/8"-24/SO239 Mount (Mobile CB Antenna)
Radio Shack # 15-826 TV Mast U-Bolt Clamp Assembly
About 80 inches of 3/8" diameter Solid Aluminum Rod.
5 1/2 inch piece of strut angle Aluminum 1 1/2" X 1 1/2" X 3/16" Thick.
2 Stainless Jam Nuts 3/8-24 thread

Tools needed:

Drill Press with drill Bits up to 1/2".
Tap & Die for 3/8-24 thread.

Sander or file to de-burr the cut edges.
2 9/16 wrenches & a 3/4 wrench.
Vice-grips

Make sure the piece of angle Aluminum is exactly 5 1/2 inches long.
Drill 2 1/4" holes on one side, centered to fit the U-Bolt for mounting.
On the other surface of the angle
Measure in 1/2" in from each end and drill a 1/4" pilot hole.
This should give you 4 1/2" from center to center of the two holes.
Redrill one of the pilot holes to 11/32" Then tap the hole with a 3/8-24
Tap.
Redrill the other pilot hole to 1/2"
Finish as required.

Cut a piece of the 3/8" Aluminum rod to about 59".
Attach a vice-grip to one end.
Using a 3/8-24 Die cut in about 8 threads in the other end.
Screw on the Coupling Nut that came with the SO239 Mount
Tighten as much as you can.
Measure the rod & coupling nut & cut to exactly 57 1/2"

Cut a piece of the 3/8" Aluminum rod to about 21"
Attach a vice-grip to one end.
Using a 3/8-24 Die cut in about 14 threads in the other end.
(If you don"t have jam nuts, cut enough threads for 2 nuts & the thickness
of the angle bracket.)
Screw on one of the Jam nuts & tighten as much as you can.
Measure from the bottom of the nut and cut the rod to exactly 19 1/4"
(Remember the nut must be included in the Measurement.)
(Put a small amount of grease on the threads)
Screw the element into the threaded hole of the angle bracket and tighten.
Screw on the other nut and tighten it.
Attach the 57 1/2" element in the 1/2" hole using the rest of the SO239
Mount.
Mount & test your new antenna. SWR should be < 1.2-1 at 146 MHz and
<1.4-1 at 144 &148 MHz.

This Model J146 is available from Arrow Antenna for only $ 35.
The J146/440 Dual Band with single SO239 feed is only $ 43.
Please add $ 6. Shipping & Handling per order (for US Funds).

73 Allen Lowe N"IMW
Arrow Antenna
1803 S. Greeley Hwy. # B
Cheyenne, WY 82007
(307) 638-2369 Fax (307) 638-3521
Arrow146@aol.com

## 1981. WTB: Eimac Tube sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: banderso@eni.net
Message-ID: <MPG.e6428e568bc8a9c989699@news.hlc.net>
Source record: 91601

Folks ...

I am starting to build a KW amp for 432 (DEM type) and need a
pair of these sockets. Does anyone have them available at a reasonable
cost. Thanks for your time reading this message.

73,
--
Barry Anderson K3SUI
Frederick, MD.
banderso@eni.net

# 1982. HAM WEB SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33FA5955.FBEFC7CF@cyberramp.net>
Source record: 91602

http://www.cyberramp.net/~rnewland

# 1983. Re: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970819234601.TAA27184@ladder02.news.aol.com>
Source record: 91603

>
> The project I am working on calls for a Mylar dipped
>capacitor. My copy of the Mouser catalog lists capacitors

Mylars have a very nice temperature coeffecient. You can often purchase them surplus from many of the surplus dealers. If you only need a few, I have a good selection. Give me the values and I'll try to help out

W4ZCB

# 1984. Re: WTB: TUBES for RCA BA-6A Broadcast Limiter, list enclosed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: postmaster@triodeel.com
Message-ID: <33fa1208.15605181@news.chicago.il.ameritech.net>
Source record: 91604
Cross-posted to:
rec.audio.tubes,rec.audio.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.audio.marketplace

SoundTch@MNSi.NET (Mark Plancke) wrote:

>I have an RCA BA-6A broadcast limiter that's in need of
>tubes. If you have any of the following tubes, preferably
>NOS please let me know.
>
>Qty Type
> 2 6SK7
> 2 6J7
> 1 6H6
> 1 OD3/VR150

We've got all of those in stock.
Prices very reasonable.

Ned Carlson, Triode Electronics, Chicago, IL http://www.triodeel.com
Open 12:30-8 PM CT, 12:30-5 PM CT Sat Closed Wed
ph:773-871-7459 fax 773-871-7938 "where da tubes are"
Email catalogs: email our CataBot: catalog@triodeel.com

## 1985. Silver plating... how much improvement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: mmss@mmss.sdi.agate.net
Message-ID: <33f913ba.32034951@news.agate.net>
Source record: 91605

Hi all,

In response to a recent posting, I received the following comment:

> I fail to understand why you got more than a slight improvement
> unless your copper was "dirty" before plating. Silver has only about 3%
> better conductivity than copper. On brass I would expect considerably
> more benefit as alloys are usually inferior to pure metals (silver or
> copper.)

To which I replied:

Perhaps our definitions differ. What I think of as a very
significant change might in fact be a slight improvement
to many. Here were the results I obtained:

I plated three separate amplifiers of different designs.
The first was a pair of 4CX250Bs with an all copper plate
circuit (yes, it was clean). Efficiency in class AB1 was
54% before plating and 59% after. In class C it was 67%
before and 76% after.

The second amp was three 4CX250Bs. Mostly brass. Before
plating it was 64% in class C, and after plating it was
75%.

The third amp was a 4CX1000 with a mix of copper and brass.
It was 52% AB1 / 66% C... came up to 58% AB1 / 77% C.
Well, sort of class C... it's tough with a 1000.

They were all 144 MHz amplifiers.

These are not huge increases in power out, especially
thinking in terms of decibels. However, as I was running
them on EME (moonbounce, where every tenth of a dB helps)
it was a lot to me. Also, they ran much cooler and that
was a welcome change.

EME'rs tend to think everything is a big improvement,
because it is... to us. HiHi.

> Thank you for the details; now I must speculate how the
> slight extra conductivity translates into such large improvements
> (3% is far less than a dB and that is in the loss, not in what is
> left after the loss.) I wonder if you want to post your values in
> the hope somebody can explain.

Sounds good. Now I'm curious... let the debate begin... can anyone explain the whys and wherefores???

Paul N1BUG

## 1986. Re: Silver plating... how much improvement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: mmss@mmss.sdi.agate.net
Message-ID: <33f9144e.32182919@news.agate.net>
Source record: 91606

Good grief! Sorry about the multiple postings. It said it didn't succeed, so I kept trying... sure wishe we had some other ISPs around here, so I could switch!!!

# 1987. WTB: TUBES for RCA BA-6A Broadcast Limiter, list enclosed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: SoundTch@MNSi.NET
Message-ID: <33f93759.12034386@snews.zippo.com>
Source record: 91607
Cross-posted to:
rec.audio.tubes,rec.audio.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.audio.marketplace

I have an RCA BA-6A broadcast limiter that's in need of
tubes. If you have any of the following tubes, preferably
NOS please let me know.

Qty Type
2 6SK7
2 6J7
1 6H6
1 OD3/VR150

Thank you
Mark Plancke
SOUNDTECH RECORDING STUDIOS
Windsor, Ontario, Canada
http://www.mnsi.net/~soundtch
mailto:soundtch@mnsi.net

# 1988. Re: re homebrew 12v antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: jamesh@trib.com
Message-ID: <5tbqs5$1qu@news.trib.com>
Source record: 91608

jeffg@istar.ca (Jeff Groberman) wrote:

>Over the past few months I've been asking for tips on building a 12v
>antenna rotator controller. The roator itself is fitted with a pot
>that turns as the rotator turns thus changing the ohmage. I can of
>course read the ohmage on a VOM an extrapolate the readings to
>N/S/E/W. but does anyone have a better way of converting the readings
>without using an ohmmeter?
>Jeff

A very simple method would be to supply a regulated voltage to one end of the position sensing pot, tie ground to the other, then use the resulting voltage from the wiper to drive a mechanical meter. You could use any meter whose full scale current was low compared to the current drawn by the potentiometer alone. Then, pick a resistor value to place between the meter and the pot wiper which gives full scale deflection when the wiper is at the regulated voltage end of the pot.

Now all you need to do is mark the meter with N, E, S, W or some such readings. Perhaps 0 to 360 degrees would be better. In any case, many mechanical meters can be opened up, and a new meter face either made by hand or printed on a PC printer can be glued over the original face. (I like 3M Photo Mount spray for this). Then just put the cover back on the meter. If you do this carefully, the new meter face will look as good as or better than the original.

Now you have a good indicator of your rotator position. In addition, you could then use the voltage from the position potentiometer to drive a circuit which would automatically position the rotor if desired. This could be done by a computer which looks at the voltage and runs the motor, or a simple analog circuit which lets you dial up the desired position on one potentiometer and then drives the rotator to achieve a match.

Hope this is some help

Jim N7SEG
jamesh@trib.com

## 1989. Re: How do you connect LED's in parallel?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <33fa97c4.1662822@eskinews.eskimo.com>
Source record: 91609

tsimonds@icanect.net (Terry Simonds) wrote:
<snip>
\>
\>Bill--Wouldn't it be safer to calculate the R value thus:
\>
\>Assume the drop across the LED to be zero and the current through the
\>LED to be 20 mA. (These are super-safe values...)
\>
\>Calculate the resistor value to be source volts/LED current.
\>
\>If the source voltage were 5V, then
\> R = 5/.02 = 250 ohms.
\>
\>If the source were a single alkaline cell at 1.5V, then
\> R = 1.5/.02 = 75 ohms
\>
<><><><><><><><><><><><><><><><><><><><><><><><><><><><>
In my post, I made the assumption that there was already a series
current limiting resistor present, since he was modifying existing
equipment. My suggestion of 10-15 ohms was based on ADDITIONAL
resistance, not the ONLY resistance. If it were the only resistance,
then your calculations were on the money.

73, Bill W7TI

# 1990. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <33F9A45E.14EC@boeing.com>
Source record: 91610

norman wrote:
>
> The common pratice for double sided boards is not to plate through (a
> real bother) but to solder a piece of wire through the interface hole
>
> de Norm N8RGR
I agree with Norm. This is the easiest way to do it. There is very
little return on investment for PTH in homebrew as this is the least
problem with their reliability factor. PTH will improve the reliability
of a solderjoint in a high temperature cycling environment
significantly. However, all of the other homebrew construction
practices sufficiently reduce the reliability to put this in the noise.

If the originator of the thread is overwhelmed with the idea to PTH.
There is a couple of web sites devoted to circuit board
fabrication...including the circuit board fabrication equivalent of IEEE
called IPC.

What I remember about the process is that the holes are drilled before
you etch and that IN SOME CASES the through holes where filled with
graphite. The board is then dipped in a electroless tin plating bath.
Ralph

# 1991. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5tcklo$hg0@hpcvsnz.cv.hp.com>
Source record: 91611
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Gary Coffman (ke4zv@bellsouth.net) wrote:

(on making a coaxial-sleeve dipole:)

: There's a neater way to do this, Peter. After you strip off the outer
: insulation, push back on the braid. It will loosen like a chinese finger
: trap. Now you can turn it inside out like a sock, *rolling* it back over
: the cable until it forms a 1/4-wave sleeve below the exposed inner
: conductor. This forms a sleeve dipole which offers decoupling of
: the feedline from antenna currents while your approach does not.
: Form a small loop in the end of the inner, attach a heavy bit of twine,
: and you have an antenna you can hoist into the nearest tree. This sleeve
: dipole works at least as well as a J-pole, and is simpler to construct. The
: only material needed is a length of coax.

: Note that you'll have to cut back more than a quarterwave of the outer
: insulation to wind up with a quarterwave braid sleeve, so you'll have to
: trim the exposed inner down to a quarterwave to finish it off. A bit
: of experimentation with the cable you are using will show you where to
: cut the outer insulation so that you wind up with a quarterwave sleeve.
: You can overwrap the sleeve with electrical tape to make a finished
: antenna that can tolerate handling and the weather. Or you can enclose
: the whole thing in a length of heat shrink tubing, that's what I do.

I think the sleeve dipole is a good antenna, but I'd suggest a way to
build a better one. I've made a few of these in the past, with braid
drawn back over the jacket as Gary suggests, and wondered why they
haven't worked as well as I expected. They do work, and they are quick
and easy to build, but they just never worked as well for me as other
simple antennas. A little reflection on the problem made it obvious to
me... The sleeve is supposed to decouple the coax feeline from the
antenna, by being a 1/4 wave section of line between the folded-back
braid and the braid of the feedline going up the center, shorted at the
top end and reflecting back an open circuit to the bottom. But:

1. The sleeve, if it's about 1/4 wave long, doesn't make a good
decoupling sleeve because the coax formed by that folded-back braid
and the coax braid under it, insulated by the vinyl jacket, is more
like 0.4 wavelengths long...because of the velocity factor
introduced by the vinyl jacket. You want it to be 1/4 wave long,
accounting for the velocity factor of the dielectric in there.
But it also must be 1/4 wave long on the outside, to form the
lower part of the dipole... therefore, you need to have a much
lower effective dielectric constant between the sleeve and the
feedline to get it to work right.

2. The sleeve is also not very good at decoupling because the vinyl jacket is rather lossy as a dielectric. That means that even if the length were trimmed to be 1/4 wave, accounting for the velocity factor, it still wouldn't reflect back a very high impedance to where the coax emerges from the sleeve.

3. The impedance of the line you form by folding the braid back tight over the jacket that way is quite low--perhaps 25 ohms. That, too, limits the impedance which can be reflected back. It's a lot better to have a higher impedance, ideally above 70 ohms. (Or -- use a flared skirt like the AEA "isopole".)

It's a bit more work, but I think you'll end up with a much better antenna if you use a piece of copper or aluminum tube for the sleeve. I know it's not as convenient to pack up for camping, and not as easy to construct, but it avoids the poor decoupling problem of the folded-back braid. Suggest using something like a 1" tube with RG-58 feed, assuming the feed line is shorter than 50 feet or so. Make a little "cork" from styrofoam to fit the bottom of the tube, with a hole in the center, to keep the coax centered where it leaves the sleeve. A similar alternative antenna that could roll up a bit smaller is the drooping-radial ground-plane. If you make it from something like 14-gauge solid copper wire, it can be rolled up for packing and then straightened out when you put it up.

If you want to mount a sleeve dipole to a mast instead of hanging it by the upper end, you can make it from pieces of copper water pipe and fittings...use a 1/4 wave piece of 1" pipe over a longer piece of 1/2" pipe, shorted with a reducing fitting at the top, and open around the bottom. Feed the feedline up thru the 1/2" pipe, connecting the braid at the reducing fitting, and extending the center conductor up 1/4 wave. (Or build it so there's a coax connector at the bottom of the 1/2" pipe that you just connect your feedline to.) Then you can support the antenna by the lower exposed piece of 1/2" pipe.

--
Cheers,
Tom
tomb@lsid.hp.com

# 1992. Resistor Kit - 1% Tolerance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <33F9F3B7.1796@ix.netcom.com>
Source record: 91612

Check out:

http://www2.ebay.com/aw/itemfast.cgi?item=pcx586914

for an auction of a resitor kit that homebrewers may be interested in.
E-mail me for any questions. 73 de WA1UWZ

## 1993. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: sdickson@iamerica.net*SPAM-HATER
Message-ID: <33f9f5d2.11707470@news.iamerica.net>
Source record: 91613
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>Just built one of those! ... well 48.5 cm actually ...
>Mounted the coax inside 1/2" PVC with a cap on the top. Fixed the end of
>the center connector to the cap and sealed the bottom with hot-glue.
>
>This made a pole about 100 cm high. Fixed to the side of the roof with a
>couple clamps. I can now hit the repeater (about 25 miles away) with
>2wt.
>
>Time to build, install, etc. ... less that 3 hrs.

What about a simple Yagi? I'm a brand-new (licenced on 8/19/97) ham.
I built a 3 element Yagi last night using these plans:
http://www.qth.com/antenna/tiny3.htm
I mounted it about 7 feet high to try it this morning when my callsign
was issued.

Build time was 1-2 hours.

I hit a repeater ( WA5OKO in Longview, TX on 146.635 ) 150 miles away
with a Kenwood 7625 2 meter mobile rig. I'm not sure of the output
power of this rig....

--73 de KD5CAS

# 1994. Re: Fast O'scope for tiny Homebrewer budget

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001908971239350001@news.primenet.com>
Source record: 91614

100
:What scope are you folks using that are small, light weight for checking
:RF and for checking high speed digital logic?
:
:I have looked at TEK 465, 475, 485. I find the probes for a 485
:are possibly more expensive than the scope. Sounds like we use 465,75,85
:until they need repair, then discard due to parts shortages. This
:worries me.
:
:Anyone using a TEK TDS360 or 380 at these speeds? Very expensive
:but can print waveform on a Laser printer.
:7904 seem usable but are too big for my space.

I think you have two choices. Get a very large bench where you can put a 7704 or 7904. Or fork out a couple grand for a used modern scope.

I got my 7704 plus 7A18, 7A16, 7B70, 7B71 for $250. You should probably be able to find similar deals from individuals. Otherwise, same setup would cost $1000 from a dealer.

Good luck, Rob.

# 1995. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33fa23aa.417155@news.online.no>
Source record: 91615

On 12 Aug 1997 17:51:39 GMT, tomb@lsid.hp.com (Tom Bruhns) wrote:

>Bob Lewis (aa4pb@erols.com) wrote:
>
>: If the voltage is low during low current draw, I'd try another
>: regulator. Actually, the spec on many brands of three-terminal 78XX
>: series regulators is +/-10% so you are within tolorance. You can
>: probably hand-pick one or prop up the common terminal with a silicon
>: diode (raising the output by 0.7 volts).
>
>Egad, 10%?? Can you tell us the brands so I can avoid them? All the
>ones I've ever used are _supposed_ to be within 5%.
>
>(Another possibility for Bill is that his meter is inaccurate by some
>amount...and the voltage is really somewhat higher than 11.0 volts.)
>
>--
>Cheers,
>Tom
>tomb@lsid.hp.com

to me it looks like Bill has no rectifier filter capacitor??
or the filter capacitor is defective.
First of all - add another 2200uF 35V capacitor across the possibly
existing (or not) capacitor.
A rather usual similar question is asked by persons using a VOM
reading a specified voltage and they forget that ripple minimum
voltage is too lower for the power regulator to function properly.

ANOTHER perhaps BETTER IDEA if the QRP transceiver is intended for
portable operation:
Design the transceiver to operate at any voltage between 11-24V, a
class A-B power amplifier will operate perfectly well with some ripple
voltage and need not a voltage regulator. Let the input voltage decide
the output power or use some sort of power correction.
Use maximum +9V output from any voltage regulators in the transceiver

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 1996. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970819234401.TAA19821@ladder01.news.aol.com>
Source record: 91616

>
>Why do power companies use DC to transmitt power. 400KV, 500MW. What kind
>of equipment is used to transform from AC to DC and DC to AC?
>Could it be power factor?
>73 and TIA

Most of them don't. Those that do, do it for several reasons. If it's submarine, to get rid of the 1.41 multiplier required for insulation. Often, for mountainous terrain, and in cases of high humidity (think fog), they do it to get rid of corona losses which although a dv/dt problem (Corona occurs at the zero crossing of the AC waveform) is exacerbated by low pressure and high humidity.

Some, like an unnamed Texas Power Company do it to get away from Congress. (In it's infinite wisdom, congress passed a law or rule that required companies that engaged in transmission of AC power between states, to comply with the Federal rules pertaining to equal everything for employees.) TP took their AC to the Oklahoma border, rectified it to DC (With rectifiers!) and piped it across the line, chopped it back to AC (with SCR's!) and sold it to OK.

W4ZCB

# 1997. Re: WTB: TUBES for RCA BA-6A Broadcast Limiter, list enclosed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-19 00:00:00 UTC
From: Jim Cross <vactubes@cinternet.net>
Message-ID: <33FA4CEB.2D22@cinternet.net>
Source record: 91617
Cross-posted to:
rec.audio.tubes,rec.audio.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.audio.marketplace

Mark Plancke wrote:
>
> I have an RCA BA-6A broadcast limiter that's in need of
> tubes. If you have any of the following tubes, preferably
> NOS please let me know.
>
> Qty Type
> 2 6SK7
> 2 6J7
> 1 6H6
> 1 OD3/VR150
>
> Thank you
> Mark Plancke
> SOUNDTECH RECORDING STUDIOS
> Windsor, Ontario, Canada
> http://www.mnsi.net/~soundtch
> mailto:soundtch@mnsi.net

I have your tubes for the following prices plus shipping to Canada:
New Tubes:
6SK7 - $2.5ea
6J7 - $3ea
6H6 - $2ea
0D3 - $4ea

Please check out my tube sales web site at:

http://www.cinternet.net/~vactubes

Jim Cross - Vacuum Tubes Unlimited

## 1998. Re: ferrite slug?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: NOjlundgreSPAM@deltanet.com
Message-ID: <5tdngq$h5e$2@news01.deltanet.com>
Source record: 91618
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,alt.radio.pirate

In alt.radio.pirate Thomas G. McWilliams <tgm@netcom.com> wrote:
: Paul DiSciascio (thenut@netaxs.com) wrote:
: : I am building a transmitter, and the schematics/plans that I acquired
: : say to make an inductor by wrapping enamel wire around a ferrite slug.
: : I have the wire, but I have been unable to find anything made of
: : ferrite, let alone something that might make a decent core. Any ideas?

: Take a look inside a junk TV set. You will find a fistful of slugs
: and ferrite cores.

That would work fine if you'r e building HF gear like ham equipment. But
most of the slugs in the TV set are not made for VHF FM band. If you use
the slugs from IF cans, they have too low Q at VHF or higher freqs.

And it would be okay to use the slugs out of a TV tuner, but it's doubtful
that they have any nowadays.

BTW you're a shameless crossposter, it's wrong to post to so many
non-relevant newsgroups.

--
Please DO NOT send email the deltanet address, which has all email
trashed when it arrives. Send email to the following address.
--
#=====================================================================#
| John Lundgren - Elec Tech - Info Tech Svcs. | lundgrej@mail. |
| Rancho Santiago Community College District | rancho.cc.ca.us |
| 17th St at Bristol \ Santa Ana, CA 92706 | http://www.rancho|
| My opinions are my own, and not my employer's. | .cc.ca.us |
! Unsolicited Email is THEFT of Service and Harassment! STOP! !
#======P=G=P==k=e=y==a=v=a=i=l=a=b=l=e==u=p=o=n==r=e=q=u=e=s=t======#

# 1999. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3401ecb0.516213495@news.sci.fi>
Source record: 91619

sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:

>I have a question about submarine power transmission cables.
>
>Why do power companies use DC to transmitt power. 400KV, 500MW. What kind
>of equipment is used to transform from AC to DC and DC to AC?
>Could it be power factor?
>73 and TIA
>Spencer
>W1GAK
>Preston, Ct.

I have not been able to verify this, but some claim that only one conductor is used and the salty water is used as a return path. You would need three conductors isolated from each other and from the environment if normal 3 phase AC would be used.

When talking about submarine cables, they are often connecting different nations with national grids that are not synchronized together, so anyway you would have to make an AC/DC/AC conversion, if you wanted to transfer power between these countries.

DC transfer is sometimes used on extremely long lines (several thousand kilometers) since the free space wavelength for 50 Hz is 6000 km and for 60 Hz it is 5000 km, so the lines are long compared to the wavelength. Transmission line theory must be applied for these open wire feeders :-) and the situation is much more complex than a simple transmitter, feedline and antenna case, since distributed generators and loads are all over the network. In this case it might be easier to control the situation in DC.

Paul OH3LWR

# 2000. Re: Need CRYSTAL SET plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: ctyoung@mtu.edu
Message-ID: <5tevp5$egs$1@dip.geo>
Source record: 91620

A crucial item is a high impedance earphone. The Antique Radio Supply catalog has the push in your ear type for 49 cents. What a bargain.

I dont have their address on me, but I'll bet they have an ad in QST.

Chuck YOung

# 2001. Re: RI cable co ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: dunnt@cco.caltech.edu
Message-ID: <dunnt-2008970802450001@tom-dunn.caltech.edu>
Source record: 91621

In article <nqz2nDA1dq+zEwDB@two-way.demon.co.uk>, philip de cadenet
<phil@two-way.demon.co.uk> wrote:

> Hoping one of you Rhode Islanders can help me with some company contact
> info.
> Carol Cable Co Inc, Lincoln, Rhode Island.
> I'd like an email or fax number if possible as I've tried a search on
> the web to no avail.
> Help appreciated.
>
> (((73)))
>
> Phil G4ZOW/M

Phil: I found a reference in the EEM directory that the Carol Cable Co.is
now the General Cable Corp. located in Kentucky. The address is below.
73 Tom WB6IQD

General Cable Corp.
4 Tesseneer Dr.
Highland Heights KY 41076

Phone 606 572-8000 Fax 606 572-9634

## 2002. Re: High Performance Receiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002008970940120001@news.primenet.com>
Source record: 91622

In article <33f9e0cc.1108056@news.online.no>, la8ak@online.no wrote:

:On 15 Aug 1997 10:20:01 -0700, europa@primenet.com wrote:
:
:>In article <19970811214801.RAA11619@ladder01.news.aol.com>,
:>cwonders4@aol.com (Cwonders4) wrote:
:>
:>:Has anybody built the High Performance Receiver published
:>:in the ARRL Handbook 1994 to 1997?
:>:I have built it and would like to compare notes.
:>:Any takers?
:>:
:>:Sameer
:>:KF6HST
:>
:>
:>I looked in the 1997 Handbook in the Index and then in Receiver Projects
:>section and could find no mention of the "High Performance Receiver" There
:>are however discussions about some high performance building blocks, like
:>the Makhinson Front End, and the Horrabin H-Mode mixer.
:>
:>(Note to anyone reading this message that works on the ARRL Handbook:
:>
:>The ARRL Handbook has one of the worst indexes of any technical book I've
:>seen. You'd think that now that we're in the computer age, it would be
:>easy to produce one, since many word processors do it automatically. Time
:>and time again I have to leaf thru hundreds of pages to find something that
:>I know is in the book, but can't find it in the index.)
:>
:>Rob.
:
:indeed(!) and ARRL publications are wellknown for all the printing
:faults, is it really so difficult to avoid? When an idea looks
:somewhat strange, it is best to avoid it!
:
:
I was looking thru my 1990 Handbook and did find an article for the W7ZOI/K5IRK
"High Performance Communications Receiver" p. 30-8

I never built the entire receiver, but I did use the VFO and IF (minus AGC)
circuits as part of another receiver. So if this is the one the original
poster is talking about, he can email me.

The VFO circuit will work well for any high performance design as long as
the tuning ckt Q is very high. Never had any problems with noise even with

very narrow filters.

The IF circuit will work well for modern low gain HDR front ends if an L network is used to match the crystal filter to the first mosfet gate. Otherwise, not good enough S/N.

This IF, along with my own hang AGC circuit was in my own homebrew receiver until the Carver AD600 agc came along, and then I tore out the old mosfet one.

Rob.

# 2003. Re: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5tf9bf$9d1@hpcvsnz.cv.hp.com>
Source record: 91623

Russell Chandler (rhchan@tsquare.com) wrote:
: The project I am working on calls for a Mylar dipped
: capacitor. My copy of the Mouser catalog lists capacitors
: in Ceramic, Electrolytic, Polyester, Polyproylene, and
: Tantalum. W1FB's Design Notebook also makes mention of
: Mylar capacitors, Tubular and Rectangular Paper capacitors.
: What am I missing here? What would a possible source
: be for Mylar cpacitors? Tubular and Rectangular Paper
: capacitors?

Mylar is a trademarked name (DuPont, I believe) for polyester.
So, a polyester capacitor is equivalent to a Mylar capacitor.
Mylars (polyesters) can generally be replaced by polypropylene,
if you can't find the polyester. But polyprop are more expensive
and larger, generally. They also have lower losses, lower
dielectric absorption, and lower distortion in audio filtering
applications, though you'd probably only notice those things in
critical applications. Don't try to substitute an electrolytic
(or tantalum) for a mylar unless you really understand what you
are doing (or just want to experiment!); usually (but not always)
it's OK to replace a mylar with a C0G or NPO ceramic if you can
find one of the right value, but not with the more common "high-K"
ceramics (Y5V, etc.) used for bypass or non-critical coupling.
Paper caps seem to be mighty rare except as surplus now; as far
as I know, they offer no advantages over the plastic film caps.

--
Cheers,
Tom
tomb@lsid.hp.com

# 2004. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <5tfall$74k@harpo.cs.ubc.ca>
Source record: 91624

ken@hnvr.com writes:
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).

Regulating the temperature with a Peltier device would be better than nothing, but not as good as an OCXO. With an OCXO, the temperature is stabilized at the temperature where the crystal's temperature coefficient is zero, or almost zero. So the crystal is almost insensitive to temperature changes (over a small range), and the temperature changes are kept small.

But why use a Peltier device? Why not just use a resistor as a heater, and control the temperature by feedback? There's nothing magic about room temperature. If your crystal is currently on frequency at room temperature, you may have to readjust it at elevated temperature, but that's a one-time adjustment.

Dave

## 2005. Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: Kenneth M Gianino <ken@hnvr.com>
Message-ID: <33FB23CA.7095@hnvr.com>
Source record: 91625

Has anyone done any experimenting with keeping a quartz crystal at room temperature using a Peltier device? I'd like to improve the stability of my HF rig, but don't want to pay Yaesu $100+ for their high-stability TCXO option (a meager +/-2ppm).

I'm looking for a simple but effective scheme to improve stability without spending a lot of money. I'd like match Yaesu's 2ppm while retaining the original crystal. It is 10-point-something-MHz and I'm not likely to find a surplus TCXO or OCXO.

## 2006. Kenwood TR9000 schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199708201955.QAA16484@netra01.origin.com.br>
Source record: 91626

Hi and thanks on reading this.

I'm looking for the schematic diagram of the Kenwood TR9000 VHF
transceiver. The service manual is wellcome as any scanned copy
of the diagram atached to a msg.

I tried one or two manuals sellers but they just have the Operation
Manual, not the service one.

Any help?

Regards.
Marcus Ramos
PY3CRX - GG66QJ

# 2007. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33fb496e.1034896@news.online.no>
Source record: 91627

On 20 Aug 1997 10:43:00 -0700, davem@cs.ubc.ca (Dave Martindale)
wrote:

>keinanen@sci.fi (Paul Kein&#65533;nen) writes:
>>I have not been able to verify this, but some claim that only one
>>conductor is used and the salty water is used as a return path. You
>>would need three conductors isolated from each other and from the
>>environment if normal 3 phase AC would be used.
>
>The electric power feed from mainland to Vancouver Island is high
>voltage DC (actually several lines). The towers carrying the
>feed visibly have two wires on them. I can't say what's in the
>submarine cables themselves.

a 100mile DC line between Norway and European continent is planned
>
>However, if you used just one wire, with salt water as the return
>path, how would you avoid electrolysis problems at the point on
>the shores where the return path is coupled to the sea water?

yes, this is what the complaints against it says; the water will be
polluted by chlorides..

> And
>wouldn't the current concentration in the water at that point make
>it unsafe to be anywhere near the return electrodes?
>
> Dave

Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 2008. Re: Crystals and overtones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5tfbuj$8ro_001@leeds.ac.uk>
Source record: 91628

In article <33F9D07F.4128D72C@direct.ca>,
laura halliday <ve7ldh@direct.ca> wrote:
>Assuming you don't have a dud crystal (it happens...), the way
>I always set up overtone oscillator circuits is to remove the
>crystal, replace it with a 47 ohm resistor, and adjust the
>oscillator until it free runs on the correct frequency. Then
>remove the resistor, reinstall the crystal, and watch the
>lovely stable numbers on the frequency counter.
>
>What circuit are you using? I like the Butler emitter-follower
>circuit in the no-tune transverters. Use hot transistors -
>2N5179, BFR91, MRF901, etc.
>
>While you can, in theory, operate any crystal on any overtone,
>crystals ground for specific overtones will be a lot better
>behaved, and may be worth it when you consider the hassle factor.

I'm not sure what the type of oscillator is, it uses a power (500mW) U310 N-channel JFET, Gate grounded, Source +2V (biasing resistor to ground). Xtal is connected to Source and in series with 82pF to ground, 12pF to Drain. 0.1uH inductor from +9V to Drain, 2.2pF capacitor to MAR3 MMIC (then on to SBL1). Diagram:

```
----------+9V
|
|3 0.1uH 2.2pF
__D----------------||----(MAR3)
| |
---G = 12pF
| |__ 116MHz |
| S-----|#|----
| | |
| {}150Ohm = 82pF
| | |
| | |
GND GND GND
```

As stated I've tested the xtal on a Network Analyser and it definately works, just not in the above oscillator;(there is a better picture in the Radio Communicatiosn Handbook 6th Ed., pub. RSGB, in the Microwaves chapter.). I've been thinking of just using a tansistor (BFY90 or whatever and using a butler oscillator but would like to get the above working (I've already etched the board and don't want to build an outboard oscillator). Apart from the variable inductor (0.1uH) there is nothing else to tune. The inductor is not the same as the one specified, but has an Aluminium core, Q 70 @100MHz and

usable up to 200MHz (Toko S18). TIA

73 de Laurens M1CCO

# 2009. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970820211301.RAA01359@ladder01.news.aol.com>
Source record: 91629

>
>> stabilized at the temperature where the crystal's temperature
coefficient
>> is zero, or almost zero. So the crystal is almost insensitive to
temperature changes...
>
>> But why use a Peltier device? Why not just use a resistor as a heater,
The crystal in the radio, while not in a temperature compensated circuit,
should (in theory) have a zero temp. coefficient at room temperature. I
could place the same crystal in a homebrew TCXO, but I'm
>not sure how I would calibrate the temperature compensation. I thought
it might be easier to build a current-reversing controller for the
peltier. It should be possible to heat or cool the crystal in order to
keep the temperature constant.
>-Ken

Regardless of how you stabilize the temperature, the crystal has a
"turnover" temperature. A temperature where it's thermally induced
frequency drift goes through zero and reverses direction. That is the
temperature the oven should operate at. Then, minor oven temperature
variations minimize the frequency instability.

For most crystals, this temperature is between 50 and 90 degrees C, so you
never need the cooling capability of the peltier device.

(Nothing is constant. Even my 12 volt power supply isn't PRECISELY 12
volts. The oven controller has some loop gain. It's not infinite, ((If it
were infinite, it'd oscillate anyway and be unuseable)) so there will be
limitations on the temperature stability you can achieve.)

W4ZCB

## 2010. Diathermy Machine $100.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: K0PW <pwentzel@minn.net>
Message-ID: <33FB2E31.10B7@minn.net>
Source record: 91630

I have a friend who has a working diathermy machine for sale. I tore one of these apart a couple of eons ago, and harvested an excellent HV power supply for a linear -- also some heavy duty RF components. This is too heavy to ship. If anyone is interested, send me an e-mail and I'll pass along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

## 2011. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970820211501.RAA08649@ladder02.news.aol.com>
Source record: 91631

>>>I have not been able to verify this, but some claim that only one
>>>conductor is used and the salty water is used as a return path.

Whoever claims it, doesn't know what they are talking about.

W4ZCB

# 2012. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002008971749350001@news.primenet.com>
Source record: 91632

In article <33FB23CA.7095@hnvr.com>, ken@hnvr.com wrote:

:Has anyone done any experimenting with keeping a quartz crystal at room
:temperature using a Peltier device? I'd like to improve the stability
:of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
:TCXO option (a meager +/-2ppm).
:
:I'm looking for a simple but effective scheme to improve stability
:without spending a lot of money. I'd like match Yaesu's 2ppm while
:retaining the original crystal. It is 10-point-something-MHz and I'm
:not likely to find a surplus TCXO or OCXO.

There's an electronics place here in Portland OR called Cascade Surplus.
They had lots of temp controlled crystal oven modules, with schematic
included. I don't know if they still have them. Their # is 503-285-0832.
Sold them for a couple bucks. I also don't know if they will ship mail
order. I've also seen the same modules in some other surplus catalogues,
although I don't remember which.

I used the double insulated boxes for building weak signal generator and
IMD signal generators for dynamic range testing. Threw the insides away.
:)

Rob.

# 2013. Heathkit Clock GC-1720 Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: "Mark L. Bary" <mbary@erols.com>
Message-ID: <33FBC821.EF8@erols.com>
Source record: 91633

Hello,

I'm looking for one or two of the above 'wall' clocks in good working order.

These clocks are about 6"x4" with an LCD display of about 1.2"x3" and the numerals are about 1" tall. Mine has a brown man-made material as the 'case'. Power is supplied by a single AA Alkaline battery.

If you have one of these and would like to sell it please reply via email.

Thanks for reading this & 73,

Mark
N4EOC
Germantown, MD

# 2014. Shared 2-meter / Broadcast Mobile Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: John Baxter <jbaxter@voicenet.com>
Message-ID: <33FB9865.B458D83D@voicenet.com>
Source record: 91634

Does anyone have suggestions for designing a circuit to allow sharing a 5/8 wave two-meter mobile antenna between a 2-meter transciever and the car's AM/FM broadcast radio?

The system I now use has a simple A/B switch. The antenna is correctly matched for the two meter band, and operates as a compromise antenna for the car's AM/FM broadcast receiver. I try to always remember to turn off the broadcast radio when using the ham rig - RF can get into it even if it is switched out of the antenna circuit. (I can't imagine why!!! 45 watts within an inch or so... :)

I'm just wondering if there is a straightforward way to isolate the AM/FM radio from the 2 meter rig, while leaving it connected - and passing signals within its bands. Obviously this is possible - the duplexers used for repeaters share and antenna between a transmitter and receiver with frequencies which are very close. But I'm looking for something a whole lot less involved to keep 2 meter RF out of a broadcast radio.

Perhaps a (very) steep notch filter, and back-to-back diodes to help protect the broadcast radio's front end? Any thoughts?

Thanks and 73...

John, N3FPZ

# 2015. FS: Antique Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5tgbcn$haf$26@ha1.rdc1.occa.home.com>
Source record: 91635

ANTIQUE TUBES, USED, pulled from old radios and equipment, UNTESTED.

qty manuf. tube type shape price each

1 EO 2A5 ST ( shoulder ) $7.50
1 Philco 2A6 ST ( shoulder ) $2.50
1 CBS 5Z3 ST ( shoulder ) $2.50
1 GE 6A7 ST ( shoulder ) $4.00
1 Philco 6A7 ST ( shoulder ) $4.00
1 Raytheon 6A7 ST ( shoulder ) $4.00
1 Tung-Sol 6A7 ST ( shoulder ) $4.00
1 Raytheon 6AB5/6N5 Tubular $5.00
1 Raytheon 6B7 ST ( shoulder ) $2.25
2 Nat. Union 6D6 ST ( shoulder ) $1.75
1 Raytheon 6D6 ST ( shoulder ) $1.75
1 Sylvania 6E5 Tubular $7.50
1 Silvertone 6F5G ST ( shoulder ) $7.50
1 Zenith 6K7G ST ( shoulder ) $2.00
1 Silvertone 6K8G ST ( shoulder ) $2.00
1 Tung-Sol 24 ST ( shoulder ) $2.00
1 GE 24-A ST ( shoulder ) $2.00
1 Ken-Rad 24-A ST ( shoulder ) $2.00
1 Nat. Union 24-A ST ( shoulder ) $2.00
1 Raytheon 24-A ST ( shoulder ) $2.00
2 RCA 24-A ST ( shoulder ) $2.00
1 Kadette 25B5 ST ( shoulder ) $4.00
1 Sylvania 25Z5 ST ( shoulder ) $1.75
1 Raytheon 25Z5 Tubular $1.50
1 Cunningham 26 ST ( shoulder ) $2.00
1 Raytheon 26 ST ( shoulder ) $2.00
1 Sylvania 26 ST ( shoulder ) $2.00
1 Cunningham 27 ST ( shoulder ) $1.50
5 Gibraltar 27 ST ( shoulder ) $1.50
1 Nat. Union 27 ST ( shoulder ) $1.50
3 Raytheon 27 ST ( shoulder ) $1.50
4 RCA 27 ST ( shoulder ) $1.50
1 Sylvania 27 ST ( shoulder ) $1.50
2 RCA 35 ST ( shoulder ) $2.00
1 Cunningham C35 Globe $5.00
1 RCA 36 ST ( shoulder ) $2.00
1 Raytheon 37 ST ( shoulder ) $2.00
1 RCA 37 ST ( shoulder ) $2.00
1 Cunningham 38 ST ( shoulder ) $1.75
1 GE 39/44 ST ( shoulder ) $1.00
2 Sylvania 39/44 ST ( shoulder ) $1.00

2 Philco 41 ST ( shoulder ) $2.50
3 RCA 41 ST ( shoulder ) $2.50
1 Cunningham 42 ST ( shoulder ) $4.00
2 Raytheon 42 ST ( shoulder ) $4.00
1 Raytheon 43 ST ( shoulder ) $2.00
1 RCA 43 ST ( shoulder ) $2.00
1 Delco 47 ST ( shoulder ) $4.00
1 Cunningham 57 ST ( shoulder ) $2.00
1 RCA 57 ST ( shoulder ) $2.00
1 Nat. Union 75 ST ( shoulder ) $2.50
1 Ken-Rad 75 ST ( shoulder ) $2.50
1 Cunningham 76 ST ( shoulder ) $3.00
1 Philco 76 ST ( shoulder ) $3.00
1 Tung-Sol 76 ST ( shoulder ) $3.00
1 RCA 77 ST ( shoulder ) $1.50
1 Ratheon 80 ST ( shoulder ) $4.00
1 Nat. Union 85 ST ( shoulder ) $1.50
1 Raytheon 85 ST ( shoulder ) $1.50
1 Triad T-224 Globe $15.00
1 EO 247 Globe $15.00
1 Silvertone 251 Globe $10.00
1 Sllvania SX-280 Globe $15.00
2 Cunningham C327 Globe $5.00
1 Cunningham 380 Globe $15.00

Shipping in USA: 1 - 6 tubes $4.00, 7 or more shipping free.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

# 2016. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: pronney <pronney@sprynet.com>
Message-ID: <5tgff9$b2q$1@juliana.sprynet.com>
Source record: 91636

Spencer:

Spencer Trombly wrote in article ...

>I have a question about submarine power transmission cables.
>
>Why do power companies use DC to transmit power. 400KV, 500MW. What kind
>of equipment is used to transform from AC to DC and DC to AC?
>Could it be power factor?
>73 and TIA
>Spencer
>W1GAK
>Preston, Ct.

In southern California we get some of our power on DC lines from Oregon. I got to visit the southern terminus of it many years ago. What they told us then was, as best as I can recall, to avoid skin effect. With the high current flowing through the wires, skin effect is a problem even at the low frequency involved.

They also mentioned that they do not use ground as the return path. One of their two wires failed and a temporary operation using the other wire and ground caused worms to crawl up out of the ground all the way from southern California to Oregon! Honest! That's what they told us.

As another note, I am told that many of the AC lines carrying high power 60Hz are hollow, to reduce weight and since there is skin effect, losses are not increased much.

I think power factor is correctable, so it doesn't seem like the reason.

Caveat Emptor. I'm not an expert.
Martin Ronney, WB6YMI

# 2017. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: pronney <pronney@sprynet.com>
Message-ID: <5tgi74$evv$1@juliana.sprynet.com>
Source record: 91637

Hi Spencer,

I have an addition to my previous response.

> What kind
>of equipment is used to transform from AC to DC and DC to AC?

The conversion station I saw used, as I recall, thyristors, which are giant vacuum tube equivalents of SCRs. They were controlled via a simple optical link that was isolated from the high voltage. The banks of thyristors were on progressively taller and taller insulators, as they went down the building, each seeing higher and higher voltage. They were triggered in sequence to SYNTHESIZE the AC sinewave. A substantial section of the plant was lowpass filters (For 60 Hz!) as the synthesized sinewave was comprised of, maybe 10 steps or so. With so few steps, they had large amounts of harmonic energy above the fifth harmonic of 60 Hz.
The whole plant was surrounded by a shield that looked like a form of chain link fencing, except that it covered the entire outside including over the roof. This was to contain harmonic radiation.

The thyristors could also be used dis-assemble the AC into DC, essentially a synchronous rectifier. The conversion station on the Oregon end of the wire was identical to the one that I saw.

Again, this is my recollection from over twenty years ago when I visited this place on an engineering school field trip.

73's
Martin, WB6YMI

## 2018. help on unknown components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: wahzoo <wahzoo@voyager.net>
Message-ID: <33FB5B99.79D9@voyager.net>
Source record: 91638

Does anyone know what these following components are and where I can
find same?
HP2835 diode
TCM 3105
Also,any cross-ref. on any of these parts.

Thanks-wahzoo

# 2019. PNP transistor, VCEO highest possible - looking for

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: Frank Bures <fbures@address.in.the.sig>
Message-ID: <lychabwsyaqru.pminews@frank.chem.utoronto.ca>
Source record: 91639
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

I am trying to locate a PNP transistor with highest available VCEO value, ideally up to 1kV.

ICmax or Pw is not too important, neither is hFE.

So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does not seem to be available anywhere in North America.

Any advice would be greatly appreciated.

Thanks

Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
fbures@alchemy.chem.utoronto.ca (use this address for replies)

## 2020. Returned mail: User unknown

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: MAILER-DAEMON@uucom.COM
Message-ID: <199708200208.WAA24893@echo.uucom.com>
Source record: 91640

```
This is a MIME-encapsulated message

--WAA24893.872042884/echo.uucom.com

The original message was received at Tue, 19 Aug 1997 22:07:58 -0400 (EDT)
from ftp.paonline.com [198.69.90.11]

----- The following addresses had permanent fatal errors -----
<ctgangl@epix.net>

----- Transcript of session follows -----
... while talking to grape.epix.net.:
>>> RCPT To:<ctgangl@epix.net>
<<< 550 <ctgangl@epix.net>... User unknown
550 <ctgangl@epix.net>... User unknown

--WAA24893.872042884/echo.uucom.com
Content-Type: message/delivery-status

Reporting-MTA: dns; echo.uucom.com
Received-From-MTA: DNS; ftp.paonline.com
Arrival-Date: Tue, 19 Aug 1997 22:07:58 -0400 (EDT)

Final-Recipient: RFC822; ctgangl@epix.net
Action: failed
Status: 5.1.1
Remote-MTA: DNS; grape.epix.net
Diagnostic-Code: SMTP; 550 <ctgangl@epix.net>... User unknown
Last-Attempt-Date: Tue, 19 Aug 1997 22:08:04 -0400 (EDT)

--WAA24893.872042884/echo.uucom.com
Content-Type: text/rfc822-headers
Content-Transfer-Encoding: 8bit

Return-Path: <Ham-Homebrew@ucsd.edu>
Received: from ftp.paonline.com (ftp.paonline.com [198.69.90.11])
by echo.uucom.com (8.8.6/8.8.6/970102ccg) with ESMTP id WAA24889
for <ctgangl@epix.net>; Tue, 19 Aug 1997 22:07:58 -0400 (EDT)
Received: from mailbox1.ucsd.edu ([132.239.1.53]) by ftp.paonline.com
with ESMTP (IPAD 1.82/64) id 3625000 ; Tue, 19 Aug 1997 18:57:40 -0400
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id OAA29749 for <ham-homebrew-list@mailbox.ucsd.edu>; Tue, 19 Aug
1997 14:52:15 -0700 (PDT)
Received: by mail.ucsd.edu; id OAA14592
sendmail 8.8.5/UCSD8.3
Tue, 19 Aug 1997 14:40:17 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
```

Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id OAA14563
sendmail 8.8.5/UCSD8.3
Tue, 19 Aug 1997 14:40:10 -0700 (PDT)
Message-Id: <199708192140.OAA14563@mail.ucsd.edu>
Date: Tue, 19 Aug 97 14:40:09 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #466
To: Ham-Homebrew@ucsd.edu

--WAA24893.872042884/echo.uucom.com--

## 2021. RI cable co ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <nqz2nDA1dq+zEwDB@two-way.demon.co.uk>
Source record: 91641

Hoping one of you Rhode Islanders can help me with some company contact info.
Carol Cable Co Inc, Lincoln, Rhode Island.
I'd like an email or fax number if possible as I've tried a search on the web to no avail.
Help appreciated.

(((73)))

Phil G4ZOW/M

## 2022. Accurate measurement of low level RF in the VHF region

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: Niels Montanana <nielsm@lcpub.co.uk>
Message-ID: <33FAF41D.6076@lcpub.co.uk>
Source record: 91642

I am considering purchasing either a surplus RF
Millivoltmeter or RF PowerMeter to accurately measure
output of local oscillator and r.f. amplifier stages up
to 150Mhz.

Levels will range between -20dBm and +20dBm.

Has anyone got any suggestions for a suitable
instrument and will a RF Millivoltmeter be more
flexible than an RF Powermeter.

Thanks

Niels Montanana
G8RWG

nielsm@lcpub.co.uk

# 2023. Re: yagis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: lingjaer@online.no
Message-ID: <MPG.e629383fd42f08d989681@news.online.no>
Source record: 91643
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <33EE27AC.7666@one.net>, bgwillis@one.net says...
> I have been searching for the measurements for a 4 to 6 element yagi for
> 2m or 70cm. I haven't come up with anything. If someone out there
> could point me in the direction of measurements, the equations, or a
> piece of software it would be a big help.
>

Hi!
Is this what you're looking for:

Design:
-----------
YA.EXE Yagi Analyzer, PC-program for modeling yagi arrays.
Copyright Brian Beezley, K6STI.
I found it in the ARRL antenna book..

YO.EXE Yagi Optimizer, bigger program by K6STI

I built a 6-element Yagi on 70cm, based on those programs.

Measurement:
------------
I put up a RF generator with a simple dipole antenna. 13
meters away I put up the antenna under test. I used a
sensitive level meter (actually, a spectrum analyzer) to
measure the received signal at different azimuth angles.
Then, I could draw the measured antenna pattern om my PC.
I cannot tell the exact gain, but the pattern was very
much like the theoretical pattern from the YA.EXE program.

So, I am satisfied..

73 de Erik, LA4WGA@LA2NK.HVG.Y.NOR.EU

# 2024. Re: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-20 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <33FAA3B5.6668@taxes.net>
Source record: 91644

Polyester and polypropylene may substitute, as may silver mica.

Two concerns -- what is the capacitor being used for,
and what is its physical dimension?

If it's a close-tolerance audio-frequency application,
polypropylene may be a better choice. If it's RF, it
depends on frequency. If it's DC bypassing, you've
got a different set of constraints.

If it's the R2/T2 project from QST, __USE THE EXACT
PARTS SPECIFIED__. There are some heavy-duty physical
constraints imposed by the circuit board, as well as some
heavy-duty tolerance constraints. Oh, and you'll need to buy
like 10 each and hand-match the parts.

So your answer is, as with practically everything in homebrew:
"It depends."

Alternate sources include Digi-Key and Newark (who has a big
minimum order...).

N6OTQ

## 2025. Help.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: Myles Hart <whart@mgl.ca>
Message-ID: <33FCB251.A822C660@mgl.ca>
Source record: 91512

I am interested in amateur radio. I am from Ontario, Canada. I would appreciate any help that somewhere from this area can give me on assembling the minimal equipment required to get started, so that I can learn from experience, and build on the original assembly.
Thanx ALOT!

B. Hart

## 2026. re: taming HF preamp, why

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FC8C8C.6878@NOSPAM.exit109.com>
Source record: 91513

Tapping down the drain on the output tuned circuit
mismatches the drain to the output tuned circuit
impedance.
Mismatching reduces the circuit gain without affecting
noise figure or selectivity.

This reduction in gain is just enough to stabilize your preamp.
Reduction in gain is not really harmful because RF preamp
gain should just be enough to give you a good Noise figure.

Also Noise figure is not very important at HF.

For more design information, please look at the motorola
RF design manuals.

----------message separator----------

At 03:51 AM 8/19/97 -0400, you wrote:
>1. Put 1 47 OHM resistor in series with the gate even with a grounded
>gate cicruit, or, you might just make an oscilator, which might even be
>oscilating at 400MHZ.
>
>2. Tap down the drain on the output tuned circuit. This will
>tame it without reducing Noise figure or needing you to offtune the
>input tuned cct.
>
>Alternately, you can try to tap down the source on the input tuned
>circuit.

pk: Thanks. The tuned circuit on the input side was already tapped
down.
So I went ahead and tapped down the tuned circuit on the outpt side.
went
about one quarter awayf rrom the top - this wasn't enough. The circyit
still oscillated. Tried again and went about halfway down. This did
the
trick. Oscillation stopped. Gain was reduced a bit (as expected) and
the Q
of the tuned circuit increased a lot (it it now a bit difficult to tune
and
only covers a small portion of the CW band.

Can you explain how/what this tapping down had eleiminated the feedback?
I'd like to understand what is going on.

I think the preamp has had a very positive impact on rx performance.
But

I'm a bit disappointed to hear the 22 meter band shortwave stations are still invading my RX. I wonder if the proble is somehow related to very strong broadcast band (AM) stations in the vicinity of my QTH. What do you
think?

---
Sending me SPAM or Junk-Mail means that you have legally agreed to pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2027. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: stevem@vax.area.com
Message-ID: <5tiiuc$gme$1@nixon.area.com>
Source record: 91514

In article <33F9A45E.14EC@boeing.com>,
Ralph Reinhold <ralph.r.reinhold@boeing.com> wrote:
>norman wrote:
>>
>> The common pratice for double sided boards is not to plate through (a
>> real bother) but to solder a piece of wire through the interface hole
>>
>> de Norm N8RGR
>I agree with Norm. This is the easiest way to do it. There is very
>little return on investment for PTH in homebrew as this is the least
>problem with their reliability factor. PTH will improve the reliability
>of a solderjoint in a high temperature cycling environment
>significantly. However, all of the other homebrew construction
>practices sufficiently reduce the reliability to put this in the noise.
>
>If the originator of the thread is overwhelmed with the idea to PTH.
>There is a couple of web sites devoted to circuit board
>fabrication...including the circuit board fabrication equivalent of IEEE
>called IPC.
>
>What I remember about the process is that the holes are drilled before
>you etch and that IN SOME CASES the through holes where filled with
>graphite. The board is then dipped in a electroless tin plating bath.
>Ralph

I do a lot of hobby boards and my employer's prototypes on a milling
machine. Typically I drill the holes first (before etching or milling)
then take the board in the back door of a cooperative board house
for plating. If I am in a hurry or if the board house is too busy to
deal with me, I use small brass or tin eyelets that I get at the
local hobby/model shop. They are easy to push in and solder and
require no cutting or trimming unlike wires.

Steve M.

## 2028. Re: A Regen RX that beats your Kilobuck RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002108971747590001@news.primenet.com>
Source record: 91515

In article <europa-ya023580001808971247360001@news.primenet.com>,
europa@primenet.com wrote:

:Beating Kilobuck rx's isn't much of a bragging right :)
:
:Most commercial ham equipment have terrible receiver performance. Thats
:why they need DSP so bad.

Saw someone who was questioning this on DejaNews. Unfortunately, primenet
is somewhat behind in news. Name was Wes Stewart.

Dear Wes:

Please check out the Sherwood Engineering homepage. It speaks for itself.
So much so, that I was very shocked myself to see just how awful modern
Japanese transciever performance was. Compare this page to the
"happy-go-lucky" ARRL reviews of the same equipment. Pure Embarassment.

Dont Blame me, I'm just the messenger, Rob.

## 2029. help: 2 rotor control question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: David Williams <david.w.williams@trw.com>
Message-ID: <33FCB1F7.378D@trw.com>
Source record: 91516

I see references to a SASI Sat tracker that hooks to a PC parallel port.
Where might I get more info on this device. Is there an interface spec
available if I wanted to build my own interface that is compatable?

Is there a "standard protocol" for sat tracking programs' output?

Thanks for the help -David KF6IB

# 2030. A regen RX..:repost bmp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FC867B.4E11@NOSPAM.exit109.com>
Source record: 91517

This is a multi-part message in MIME format.

--------------77FF266F53E0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The regen Circuit and the audio amp ckt is reposted

below as requested .

Sorry for the (less than) clear ASCII schematic posted earlier.

```
------------------------------|

| |+ REGEN-----R7-----------R6-------+6VDC

| --- GND | | | |

L2 --- C6 -- |+ | | +

| |GND D1 | ---

| --- | R5 --- C5

| GND | | |

A-||---------R3---------- --- | ---

Ca | D | + To Input

G |--- |----+-----------| |----

------------R2-->| Q1 R4 |C | C7 of LM386

| | |--- S + | |/ | Audio Amp
| | |---------| |-----| Q2 |

| | | | C3 B |\E C4

L1 C1/TUNE R1 --- | |

| | | ---C2 | |

GND__|_______|_____________|____|______________|____|_____________ 0V
```

NOTES:

GND means Common (chasis ground BUS) reference point.

L1 = 40 Turns (AWG 26) on T-50-2 red ferrite toroid.

L2 = 3 (3-4) turns link on L1

The turns ratio between L1:L2 should be about 10:1

A= Antenna connection. Yes antenna is connected to

the drain of Q1. This gives excellent performance

even with a 10 FT antenna

(Connecting to gate of Q1 will overload the regen

and the performance will be very bad.)

Ca= 100 PF ceramic or so. Antenna coupling cap.

C1 = 90 PF johnson tuning cap with gearing and reduction.

try 40 PF - to 365 pF( the reciever works well with any

of these, though the coverage will be modified appropritely)

Coverage will be 5MHZ to 12 MHZ with JOHNSON the 90 PF Cap.

R2= 47 Ohm VHF parasitic oscilation stopper

R3= 100 Ohm VHF parasitic oscilation stopper

C6= 100/6V UF electrolytic cap. Its + end goes to the wiper on REGEN.

REGEN= 5K linear. Wiper goes to L2/C6. One end goes to GND. The

other end goes to D1/R7

D1= RED/GREEN LED. It regulates the DC voltage at about 1.8 volts

for Q1.

R7= 2.2K( 1K to 3.3K . All values in this range should work fine)

C2= 0.01 UF ceramic. This is RF filter cap. It bypassed RF around R1

while rolling off audio around 3 KHZ or so.

C3= 1 UF electrolytic.

R4= 560 K bias resistor. Connects between base and collector of Q2

R5= 4.7K( 3.9K to 6.8K. ) This should give around 2 Volts at the

collector of Q1 with a 6V supply.

C4= 0.02UF Audio rolloff capacitor.

R6= 470 OHM( 1K)

C7= 10 UF/6V electrolytic.

Q1= J305, MPF 102 etc

Q2= 2n2222a, 2n3904, BC107B/BC557B etc

additional notes:

1. BAD performance in regens is due to

a. overcoupling of antenna

b. excessive feedback coupling.(I think!)

c. too high a supply voltage. (1.0 to 1.5 is all that is needed)

d. Using high gain devices like bipolar transistors or dual gate

FETS etc. A low gain device like MPF 102 or J305 is all that

is needed

c. TOO much input signal overlaoading the regen detector.

2. The excessive hand capacity effects and instability can almost

be eliminated by the used of toroid to wind the coil L1/L2.

3. Also, you can fine tune the coverage by spreading or squeezing

the turns of the coild .

4 Once the coil has been tested to work fine, GLUE the coil L1/L2

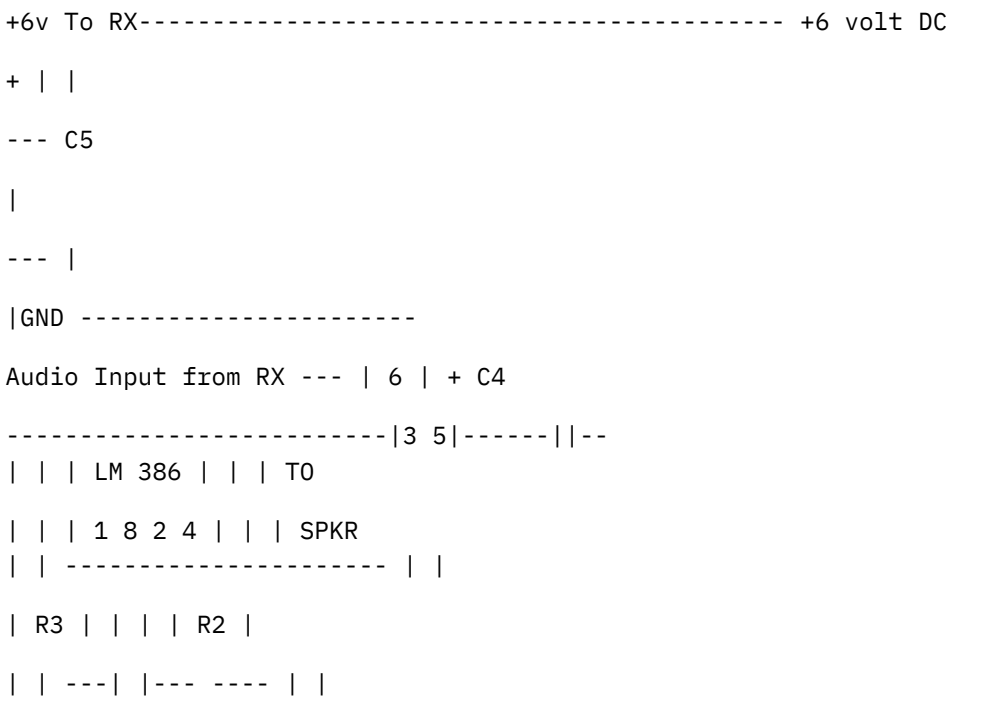
to the PCB with hot melt glue. This improves the stability of your

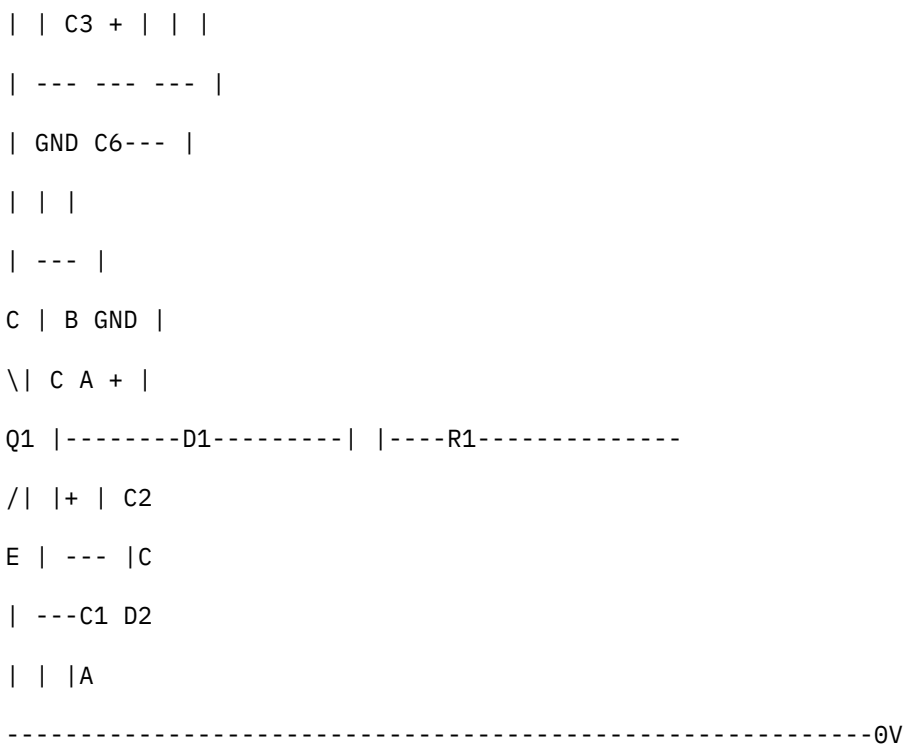
regen a lot.

5. KEEP the lead to gate of Q1 and L1/C1 as short as possible.

This is a high impedance node!

The LM386 audio amp with AGC is drawn as below:-






GND= common reference ground BUS

C1= 100UF / 16 V electrolytic

D1, D2= 1N4148

C2= 10UF / 16 V electrolytic

R1= 100 Ohm

C4, C5= 220UF/16V electrolytic

C3= 10UF/16V electrolytic

C6= 0.1 UF /50V ceramic

Q1= 2n3904, 2n2222A etc

R2= 10 Ohm

R3= 100 KOhm

note:

YES, you should be able to power the both from the same 6 volt supply

without oscilattions/motorboating.

Thanks to everyone for their help

happy home brewing

```
------------------------------------------------------------------------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
------------------------------------------------------------------------

--------------77FF266F53E0
Content-Type: image/x-MS-bmp; name="regen.bmp"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="regen.bmp"

<encoded_portion_removed>
//////////////////////////+AAAA
--------------77FF266F53E0--
```

# 2031. Re: Need CRYSTAL SET plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: rod7rg@aol.com
Message-ID: <19970821004301.UAA16407@ladder01.news.aol.com>
Source record: 91645

Dear Chuck
Check out the site at www.1stnet.net/~xtalset/ or
pw2.netcom.com/~ac6v/pageas.html. Should help you out.

Rod
KL7RG/8

# 2032. Re: Fast O'scope for tiny Homebrewer budget

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <33fa6491.3120487@news.doit.wisc.edu>
Source record: 91646

af389@lafn.ORG (David Shalita) wrote:

>I am desperate for a replacement usable used or new scope, TINY BUDGET,
>for checking QRP RF ckts and for checking 100 mhz ECL and TTL logic.
>This is for my home shop shack.
>
>What scope are you folks using that are small, light weight for checking
>RF and for checking high speed digital logic?

I believe the most popular series of scopes that Tek ever made was the
465, 475, 485 series, along with the later 465B. The 465s and 465Bs
are 100MHz, plentyful, becoming cheaper every day, and there should be
parts available, for those willing to scrounge, for decades.

I love my 465B.

Jim

---
Melissa Kepner Jim Adney
Laura Kepner-Adney
mgkepner@facstaff.wisc.edu
Madison, Wisconsin
---

## 2033. Yaesu AZ -EL rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: James E Elliott <jelliott@mail.stlnet.com>
Message-ID: <33FBFD48.22C@mail.stlnet.com>
Source record: 91647

Want to buy Yaesu 5400 or 5600. Jim N0TN

## 2034. IC 7528

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: James E Elliott <jelliott@mail.stlnet.com>
Message-ID: <33FBFCA2.5744@mail.stlnet.com>
Source record: 91648

Need a dual 8 bit D/A converter 7528. It is made by several manufacturers, TLC and AD. Jim N0TN

# 2035. Re: Shared 2-meter / Broadcast Mobile Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970821041901.AAA04476@ladder01.news.aol.com>
Source record: 91649

>Obviously this is possible - the
>duplexers used for repeaters share and antenna between a transmitter and
>receiver with frequencies which are very close. But I'm looking for
>something a whole lot less involved to keep 2 meter RF out of a
>broadcast radio.

>Perhaps a (very) steep notch filter, and back-to-back diodes to help
>protect the broadcast radio's front end? Any thoughts?

>Thanks and 73...

>John, N3FPZ

Bingo, I think you just answered your own question. That's what a
duplexer is a notch filter. Do it if you want, but I like my
AM FM radio to much, I wouldn't try it.

Why not used an on the windshield antenna for the AM & FM.
Cut your old radio antenna down to a 1/4 wave (19 1/4").
But if it is mounted on the side of the car (like most)
it still won't work very well.

73 Allen Lowe N0IMW

# 2036. Re: help on unknown components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <G1ZxBGASA$+zEw35@pacsat.demon.co.uk>
Source record: 91650

In article <33FB5B99.79D9@voyager.net>, wahzoo <wahzoo@voyager.net>
writes
>Does anyone know what these following components are and where I can
>find same?
> HP2835 diode
> TCM 3105
>Also,any cross-ref. on any of these parts.
>
> Thanks-wahzoo

TCM3105 is a modem chip I think, used in packet TNC's and telephone
modems

HP2800 series diodes are RF diodes, usually schottky types.

Trying www.digikey.com and use their search engine

73 Simon GM4PLM

+-----------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+-----------------------------------------------------------------+

# 2037. WINSSTV 2.01 WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: Bruno LENNE <f5lrg@hol.fr>
Message-ID: <33FBFDE4.47AF@hol.fr>
Source record: 91651

Hello,

Do you where I can download the version 2.01 of WINSSTV software.

Thanks.

# 2038. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <33fbec25.52610269@news.sci.fi>
Source record: 91652

davem@cs.ubc.ca (Dave Martindale) wrote:

>ken@hnvr.com writes:
>>Has anyone done any experimenting with keeping a quartz crystal at room
>>temperature using a Peltier device? I'd like to improve the stability
>>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>>TCXO option (a meager +/-2ppm).
>
>Regulating the temperature with a Peltier device would be better than
>nothing, but not as good as an OCXO. With an OCXO, the temperature is
>stabilized at the temperature where the crystal's temperature coefficient
>is zero, or almost zero. So the crystal is almost insensitive to
>temperature changes (over a small range), and the temperature changes
>are kept small.

This assumes that the crystal is cut for oven operation. The zero temperature coefficient can be zero for only a few degrees temperature range. Normal crystals are usually cut for zero temperature coefficient near 25 - 30 C, while oven crystals have their zero temperature coefficient placed near 60 C.

Operating a room temperature crystal at elevated temperatures in an oven will make it _more_ sensitive to temperature changes than operating it near room temperature, so the temperature control in the oven must be quite accurate.

>
>But why use a Peltier device? Why not just use a resistor as a heater,
>and control the temperature by feedback?

When using cheap room temperature crystals it is better to keep in constant temperature near room temperature for best stability.

If you are using battery power (at least for backup) it is nice if you do not have to use power all the time to keep the temperature constant. And even if a temperature correction is needed, it is usually only a degree or two if we talk about indoors operating, so the power requirement is not too great.

OTOH, you could build the oscillator inside a thermos, so the oven power consumption would be quite low.

Paul OH3LWR

# 2039. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <5thpsh$17j@harpo.cs.ubc.ca>
Source record: 91653

keinanen@sci.fi (Paul Kein&#65533;nen) writes:
>When using cheap room temperature crystals it is better to keep in
>constant temperature near room temperature for best stability.
>
>If you are using battery power (at least for backup) it is nice if you
>do not have to use power all the time to keep the temperature
>constant. And even if a temperature correction is needed, it is
>usually only a degree or two if we talk about indoors operating, so
>the power requirement is not too great.

Good point.

The problem with Peltier devices is that they are pretty efficient
heaters but lousy coolers. To move one watt of heat from their
"cool" side to their "hot" side, you need to supply 4 W of electrical
power, which is also dissipated on the "hot" side.

For example, to get 1 W of heating, you need to supply 0.8 W of electrical
power to the device, and the remaining 0.2 W will be picked up from the
cool side. But to get 1 W of cooling, you need to supply 4 W of electrical
power, and the hot side will dissipate 5 W total.

This means you need to have a lot of power available for the cooling
mode, and the servo system that drives the device should have about
5 times as much gain when cooling as when heating.

Note: the 4:1 power ratio is typical of Peltier devices being used
as refrigerators, with substantial temperature difference between
hot and cold sides. It might be much more efficient if the temperature
difference is smaller.

Dave

# 2040. Ceramic Capacitor Kit - Auction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <33FC8019.505C@ix.netcom.com>
Source record: 91654

Check out:

http://www2.ebay.com/aw/itemfast.cgi?item=nrh469

for an auction of a ceramic capacitor kit that homebrewers and
experimenters may be interested in. E-mail me with any questions.

73 de WA1UWZ

# 2041. Re: Accurate measurement of low level RF in the VHF region

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ti04i$i0@hpcvsnz.cv.hp.com>
Source record: 91655

L. DE BRUIJN (CBS5LD@leeds.ac.uk) wrote:

: Same situation, I'm thinking of building something using the LT1088, or
: AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
: datasheet (FARNELL server claims to have them but then says they aren't
: there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
: PowerMeter head (working) going on the cheap I'd be interested. TIA

Look for datasheets at www.analog.com. But...I'm not sure what someone's been smoking there...the Analog Devices parts, at least, are not thermal converters, and they have a signal-level-dependent bandwidth that in the best case is in the 100's of KILOHertz, not MHz. On the other hand, the LT1088 is a thermal converter, and has a rated 3dB bandwidth of 300MHz, 2% accuracy to 100MHz. See www.linear.com for a datasheet. (It is, in fact, simply resistors thermally coupled to diodes that provide temperature sensing. You must provide the external amplifier circuitry. For each diode, there is both a 50 ohms and a 250 ohm resistor. The tolerance on the 50 ohm resistors is +/- 20%... The data sheet has quite a bit of applications info.)

I know that some RF power meters just use Schottky diode detectors...at low RF levels, they respond with a linear output voltage versus input power, or nearly so. I suppose you must feed them with a reasonably low distortion sinewave, but after all, that's most likely what you have anyway. Unfortunately, at levels around 0dBm, they've become rather non-linear (voltage out vs power in)...tending toward linear voltage out for voltage in. But if you use a precision attenuator in front of the detector, then you can have a single calibration point and use the attenuator to determine the input level. I've been using a zero-bias Schottky detector in an RF sniffer I use for fox hunting, and by feeding the output of the detector to a very-low-bias-current chopper-stabilized (1uV input offset) op amp (Harris), I can detect RF input voltages down to the 100uV region.

--
Cheers,
Tom
tomb@lsid.hp.com

# 2042. Tantalum Capacitor Kit - Auction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <33FC7FBB.6CCD@ix.netcom.com>
Source record: 91656
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Check out:

http://www2.ebay.com/aw/itemfast.cgi?item=ypd017633

for an auction of a capacitor kit that homebrewers & experimenters may
be interested. E-mail me with any questions.

73 de WA1UWZ

# 2043. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <33FC8B87.500A@boeing.com>
Source record: 91657

Kenneth M Gianino wrote:
>
> Dave Martindale wrote:
>
> > stabilized at the temperature where the crystal's temperature coefficient
> > is zero, or almost zero. So the crystal is almost insensitive to
> > temperature changes...
>
> > But why use a Peltier device? Why not just use a resistor as a heater,
>
> The crystal in the radio, while not in a temperature compensated
> circuit, should (in theory) have a zero temp. coefficient at room
> temperature. I could place the same crystal in a homebrew TCXO, but I'm
> not sure how I would calibrate the temperature compensation. I thought
> it might be easier to build a current-reversing controller for the
> peltier. It should be possible to heat or cool the crystal in order to
> keep the temperature constant.
> -Ken
If the question is: Am I able to maintain a crystal temperature at or
near room temperature to a high degree of accuracy using a
thermoelectric device? Then, the answer is yes. Using a PWM controller
with a PID loop and an RTD sensor, you should be able to maintain
temperature to within 0.001 degrees (C or F, take you pick) if you make
the controller intelligent enough to recognize it is in a deadband
zone. Proportional Integrator/Differentiators are among the tightest
loops for controlling temperature. Resistance Temperature Devices are
among the most stable..although certain custom wire wound resistors can
maintain temperature stability for as long as they have been in use,
which is about 70 or 80 years. A PWM controller can be set up to
produce positive current when the duty cycle is more than 50% and
negative current when the duty cycle is less than 50%. Do you want to?
Only if building this thing is your hobby.
Ralph

## 2044. Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: jzawodny@pim.cse.nd.edu
Message-ID: <5ti5bd$1is@news.nd.edu>
Source record: 91658

Well the question this week goes as such. Computer power supplies
supply both 5V and 12V, and there are plenty laying around at work that
I could rig to produce the necessary current (and have backup) for
my VHF/UHF rig. Do you think that these supplies, powering a car battery
which provides that actual feed (and emergency backup power) to the
radio would be sufficient? Im trying to avoid spending the 130 dollars
I've seen radio power supplies going for...

Thanks

jtz

--
---
Jason T. Zawodny; U of Notre Dame; Computer Engineer
zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
---

## 2045. A regen Rx...:Repost of schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FC7070.6B88@NOSPAM.exit109.com>
Source record: 91659

The regen Circuit and the audio amp ckt is reposted
below as requested .

Sorry for the clear ASCII schematic posted earlier.

```
------------------------------|
| |+ REGEN-----R7-----------R6-------+6VDC
| --- GND | | | |
L2 --- C6 -- |+ | | +
| |GND D1 | ---
| --- | R5 --- C5
| GND | | |
A-||---------R3---------- --- | ---
Ca | D | + To Input
G |--- |----+-----------| |----
------------R2-->| Q1 R4 |C | C7 of LM386
| | |--- S + | |/ | Audio Amp
| | |---------| |-----| Q2 |
| | | | C3 B |\E C4
L1 C1/TUNE R1 --- | |
| | | ---C2 | |
GND__|_______|_____________|____|______________|____|_____________ 0V
```

NOTES:

GND means Common (chasis ground BUS) reference point.

L1 = 40 Turns (AWG 26) on T-50-2 red ferrite toroid.
L2 = 3 (3-4) turns link on L1
The turns ratio between L1:L2 should be about 10:1

A= Antenna connection. Yes antenna is connected to
the drain of Q1. This gives excellent performance
even with a 10 FT antenna
(Connecting to gate of Q1 will overload the regen
and the performance will be very bad.)

Ca= 100 PF ceramic or so. Antenna coupling cap.

C1 = 90 PF johnson tuning cap with gearing and reduction.
try 40 PF - to 365 pF( the reciever works well with any
of these, though the coverage will be modified appropritely)
Coverage will be 5MHZ to 12 MHZ with JOHNSON the 90 PF Cap.

R2= 47 Ohm VHF parasitic oscilation stopper
R3= 100 Ohm VHF parasitic oscilation stopper
C6= 100/6V UF electrolytic cap. Its + end goes to the wiper on REGEN.

REGEN= 5K linear. Wiper goes to L2/C6. One end goes to GND. The
other end goes to D1/R7

D1= RED/GREEN LED. It regulates the DC voltage at about 1.8 volts
for Q1.

R7= 2.2K( 1K to 3.3K . All values in this range should work fine)

C2= 0.01 UF ceramic. This is RF filter cap. It bypassed RF around R1
while rolling off audio around 3 KHZ or so.

C3= 1 UF electrolytic.
R4= 560 K bias resistor. Connects between base and collector of Q2
R5= 4.7K( 3.9K to 6.8K. ) This should give around 2 Volts at the
collector of Q1 with a 6V supply.
C4= 0.02UF Audio rolloff capacitor.
R6= 470 OHM( 1K)
C7= 10 UF/6V electrolytic.

Q1= J305, MPF 102 etc
Q2= 2n2222a, 2n3904, BC107B/BC557B etc

additional notes:

1. BAD performance in regens is due to
a. overcoupling of antenna
b. excessive feedback coupling.(I think!)
c. too high a supply voltage. (1.0 to 1.5 is all that is needed)
d. Using high gain devices like bipolar transistors or dual gate
FETS etc. A low gain device like MPF 102 or J305 is all that
is needed
c. TOO much input signal overlaoading the regen detector.

2. The excessive hand capacity effects and instability can almost
be eliminated by the used of toroid to wind the coil L1/L2.

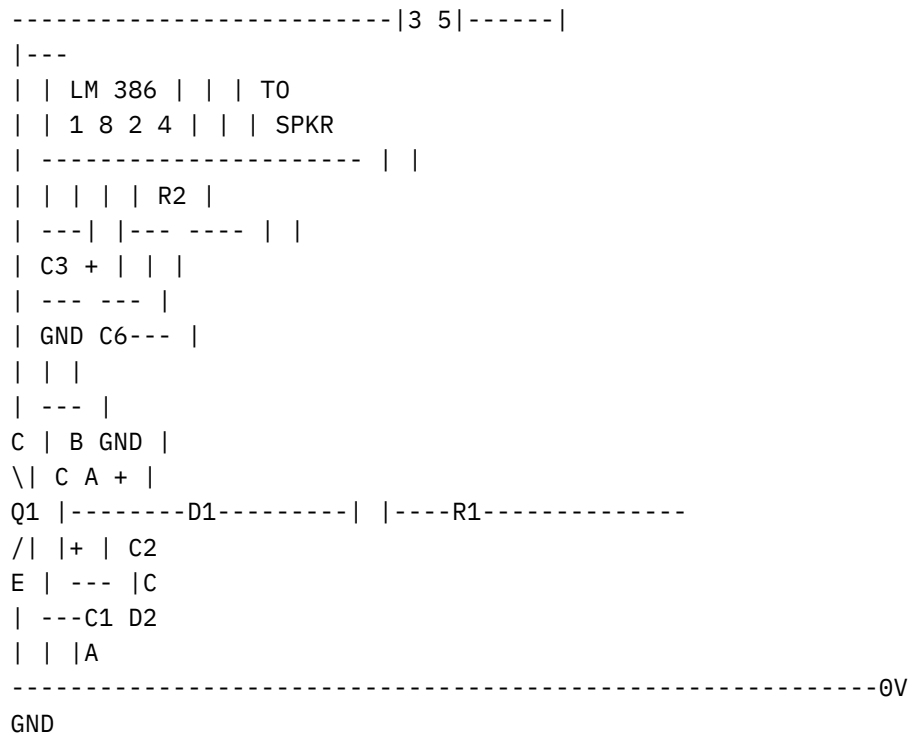
3. Also, you can fine tune the coverage by spreading or squeezing
the turns of the coild .

4 Once the coil has been tested to work fine, GLUE the coil L1/L2
to the PCB with hot melt glue. This improves the stability of your
regen a lot.

5. KEEP the lead to gate of Q1 and L1/C1 as short as possible.
This is a high impedance node!

The LM386 audio amp with AGC is drawn as below:-

```
+6v To RX------------------------------------------ +6 volt DC
+ | |
--- C5
|
--- |
|GND ----------------------
Audio Input from RX --- | 6 | + C4
```




GND= common reference ground BUS

C1= 100UF / 16 V electrolytic
D1, D2= 1N4148
C2= 10UF / 16 V electrolytic
R1= 100 Ohm
C4, C5= 220UF/16V electrolytic
C3= 10UF/16V electrolytic
C6= 0.1 UF /50V ceramic
Q1= 2n3904, 2n2222A etc

note:
YES, you should be able to power the both from the same 6 volt supply
without oscilattions/motorboating.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2046. Re: help on unknown components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5tidk1$i0@hpcvsnz.cv.hp.com>
Source record: 91660

wahzoo (wahzoo@voyager.net) wrote:
: Does anyone know what these following components are and where I can
: find same?
: HP2835 diode

Dunno if this is a Hewlett-Packard diode...if it is, perhaps it's an
5082-2835. Other possibility would be a different prefix, like
HSMS-2835...

The 5082-2835 is a glass-packaged axial-lead diode, 8V min breakdown,
max 340mV forward at 1mA, 450mV at 10mA, 100nA at 1V reverse, 1.0pF
at 0V. Effective carrier lifetime max 100ps, measured at 20mA.

--
Cheers,
Tom
tomb@lsid.hp.com

# 2047. A regen RX...:repost BMP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-21 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FC8362.7E61@NOSPAM.exit109.com>
Source record: 91661

```
This is a multi-part message in MIME format.

--------------1EB13D525104
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The regen Circuit and the audio amp ckt is reposted

below as requested .

Sorry for the (less than) clear ASCII schematic posted earlier.

------------------------------|

| |+ REGEN-----R7-----------R6-------+6VDC

| --- GND | | | |

L2 --- C6 -- |+ | | +

| |GND D1 | ---

| --- | R5 --- C5

| GND | | |

A-||---------R3---------- --- | ---

Ca | D | + To Input

G |--- |----+-----------| |----

------------R2-->| Q1 R4 |C | C7 of LM386

| | |--- S + | |/ | Audio Amp
| | |---------| |-----| Q2 |

| | | | C3 B |\E C4

L1 C1/TUNE R1 --- | |

| | | ---C2 | |

GND__|_______|_____________|____|______________|____|_____________ 0V

NOTES:

GND means Common (chasis ground BUS) reference point.

L1 = 40 Turns (AWG 26) on T-50-2 red ferrite toroid.

L2 = 3 (3-4) turns link on L1
```

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the drain of Q1. This gives excellent performance

even with a 10 FT antenna

(Connecting to gate of Q1 will overload the regen

and the performance will be very bad.)

Ca= 100 PF ceramic or so. Antenna coupling cap.

C1 = 90 PF johnson tuning cap with gearing and reduction.

try 40 PF - to 365 pF( the reciever works well with any

of these, though the coverage will be modified appropritely)

Coverage will be 5MHZ to 12 MHZ with JOHNSON the 90 PF Cap.

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R3= 100 Ohm VHF parasitic oscilation stopper

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REGEN= 5K linear. Wiper goes to L2/C6. One end goes to GND. The

other end goes to D1/R7

D1= RED/GREEN LED. It regulates the DC voltage at about 1.8 volts

for Q1.

R7= 2.2K( 1K to 3.3K . All values in this range should work fine)

C2= 0.01 UF ceramic. This is RF filter cap. It bypassed RF around R1

while rolling off audio around 3 KHZ or so.

C3= 1 UF electrolytic.

R4= 560 K bias resistor. Connects between base and collector of Q2

R5= 4.7K( 3.9K to 6.8K. ) This should give around 2 Volts at the

collector of Q1 with a 6V supply.

C4= 0.02UF Audio rolloff capacitor.

R6= 470 OHM( 1K)

C7= 10 UF/6V electrolytic.

Q1= J305, MPF 102 etc

Q2= 2n2222a, 2n3904, BC107B/BC557B etc

additional notes:

1. BAD performance in regens is due to

a. overcoupling of antenna

b. excessive feedback coupling.(I think!)

c. too high a supply voltage. (1.0 to 1.5 is all that is needed)

d. Using high gain devices like bipolar transistors or dual gate

FETS etc. A low gain device like MPF 102 or J305 is all that

is needed

c. TOO much input signal overlaoading the regen detector.

2. The excessive hand capacity effects and instability can almost

be eliminated by the used of toroid to wind the coil L1/L2.

3. Also, you can fine tune the coverage by spreading or squeezing

the turns of the coild .

4 Once the coil has been tested to work fine, GLUE the coil L1/L2

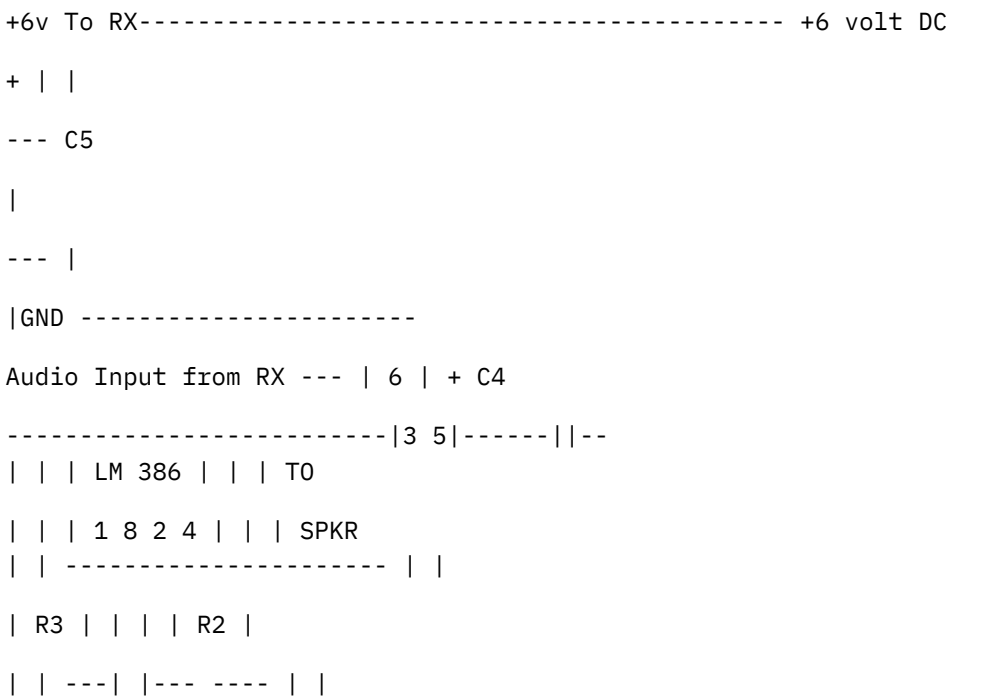
to the PCB with hot melt glue. This improves the stability of your

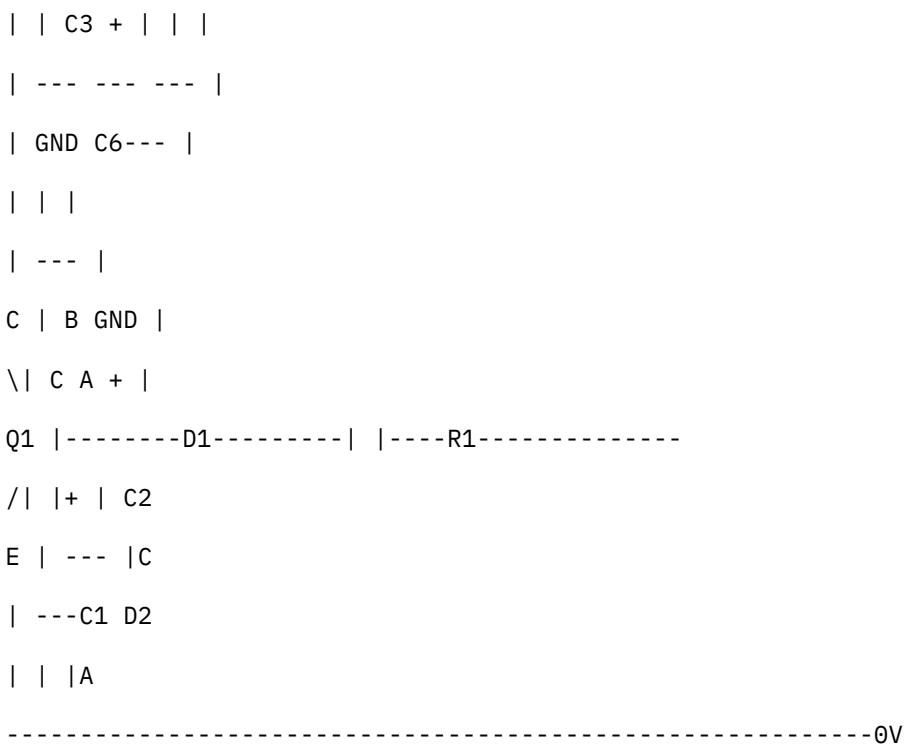
regen a lot.

5. KEEP the lead to gate of Q1 and L1/C1 as short as possible.

This is a high impedance node!

The LM386 audio amp with AGC is drawn as below:-






GND= common reference ground BUS

C1= 100UF / 16 V electrolytic

D1, D2= 1N4148

C2= 10UF / 16 V electrolytic

R1= 100 Ohm

C4, C5= 220UF/16V electrolytic

C3= 10UF/16V electrolytic

C6= 0.1 UF /50V ceramic

Q1= 2n3904, 2n2222A etc

R2= 10 Ohm

R3= 100 KOhm

note:

YES, you should be able to power the both from the same 6 volt supply

without oscilattions/motorboating.

happy home brewing

---

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pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

--------------1EB13D525104
Content-Type: image/x-MS-bmp; name="regen.bmp"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="regen.bmp"

<encoded_portion_removed>
//////////////////////////+AAAA
--------------1EB13D525104--

# 2048. WHAT'S DEFECT ON MY AUDIOSYSTEM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: nautilus@worldaccess.nl
Message-ID: <5thu3c$el7@halley.pi.net>
Source record: 91518

My motorbike-radio (not available anymore) has the following defect:
1) By turning the radio on, the speakers sounds a loud 'plop'-sound
and
2) the volume doesn't sound so loud as it use to be.

Everything else is funcioning normal.

Who can tell me what part is defect, if I can repair it and what it
will cost me ?

The radio is good servicable (modulair) and about 12 years old.
I can't replace it because it also regulates my on board
intercom-system.

Thanks for your reply.

Bob

# 2049. Old QST articles from The Old Man

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <33fd0526.89794482@news.flash.net>
Source record: 91519

Does anybody have any of Hiram Percy Maxim's articles under the pen name of The Old Man in electronic form? I tried to explain them to some younger hams, but didn't have anything to show them.
Thanks,
Kerry Miller, WD5ABC
kmiller@flash.net

# 2050. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970822000900.UAA11628@ladder02.news.aol.com>
Source record: 91520

There are a lot of ways to control temparature of a crystal. If you are looking for somthing simple and easy try this. Enclose the crystal in a small container, an old metal cased octal tube is great for this. to 2 of the pins connect the crystal to 2 more of the pins connect a positive temp coefficent thermistor. the thermistor will heat to its Curie temp and stabilize there. it is self reguating. I had some thermistors that would do this a about 120F with about 12 volts applied.

## 2051. Re: Fast O'scope for tiny Homebrewer budget

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <34071155.7473768@eskinews.eskimo.com>
Source record: 91521

mgkepner@facstaff.wisc.edu (Melissa & Jim) wrote:

>af389@lafn.ORG (David Shalita) wrote:
>
>>I am desperate for a replacement usable used or new scope, TINY BUDGET,
>>for checking QRP RF ckts and for checking 100 mhz ECL and TTL logic.
>>This is for my home shop shack.
>>
>>What scope are you folks using that are small, light weight for checking
>>RF and for checking high speed digital logic?
>
>I believe the most popular series of scopes that Tek ever made was the
>465, 475, 485 series, along with the later 465B. The 465s and 465Bs
>are 100MHz, plentyful, becoming cheaper every day, and there should be
>parts available, for those willing to scrounge, for decades.
>
>I love my 465B.
>
<><><><><><><><><><><><><><><><><><><><><><><><><><><><>
I was a test technician on the Tektronix 400 series production line
back in the '70s and '80s. We built so many of those we felt every
house in America must have one. Thanks for the kind words!

73, Bill W7TI

# 2052. Info on /decoderdecoding EMWIM/EAS weather service

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <HOBBPEA3BU$zEwsu@pacsat.demon.co.uk>
Source record: 91522

```
The following urls might help those who were recently looking for
decoder information for the NOAA EAS/EMWIN weather services:

www.nws.noaa.gov/oso/oso1/oso12/document/emwin.htm

www.weathernode.com

www.skywin.com

www.big-z.com

iwin.nws.noaa.gov

the first url in the list gives details of schematics and free software!
gotta be worth a look!

73 Simon

+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+
```

# 2053. WTB RF amp for 11M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: country@music.com
Message-ID: <872238276.442260@moon.aa.net>
Source record: 91523

Hello, I am looking for a linear amplifier to buy for my midland radio I use in my Semi truck. Preferable around 300-400 watts output with 4 watts input. Would prefer UPS cod. willing to pay up to $400 - only for really output, not a label name.
Mike ,
aka KC7KEM
PS. I am using a fellow hams account so please call , don't email- he is a wimp and is faking his address, one of those afraid of the FCC types. Not ME! call me at 964-2458

# 2054. FS TR7 w/ PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: country@music.com
Message-ID: <872239279.62842@moon.aa.net>
Source record: 91524

Hello, I am in need of moola for my VHF and higher class hobby.
I have a Drake TR 7 in mint condition for sale. Best offer will get
this excellant rig + the P/S. I am looking for around $700 or the
highest bid that comes in. Willing to dicker so if any one has any
trades- give it a try. I work days so calls after 6pm and before 5am
should be the best time to try to call.
Mike ,
aka KC7KEM
PS. I am using a fellow hams account so please call ,
call me at 509 964-2458

# 2055. Re: WTB RF amp for 11M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: country@music.com
Message-ID: <872239691.664791@moon.aa.net>
Source record: 91525

country@music.com wrote:

>Hello, I am looking for a linear amplifier to buy for my midland radio
>I use in my Semi truck. Preferable around 300-400 watts output with 4
>watts input. Would prefer UPS cod. willing to pay up to $400 - only
>for really output, not a label name.
> Mike ,
>aka KC7KEM
>PS. I am using a fellow hams account so please call , don't email- he
>is a wimp and is faking his address, one of those afraid of the FCC
>types. Not ME! call me at 964-2458
Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
time to call- I sleep light so no problem with late/ early calls, That
is Washington state time.

# 2056. Re: Accurate measurement of low level RF in the VHF region

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <33FD4885.86A519FA@rl.ac.uk>
Source record: 91526

Tom Bruhns wrote:

> L. DE BRUIJN (CBS5LD@leeds.ac.uk) wrote:
>
> : Same situation, I'm thinking of building something using the LT1088,
> or
> : AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't
> find
> : datasheet (FARNELL server claims to have them but then says they
> aren't
> : there!)). I'll let you know what I find. Else if anyone has a
> MARCONI tft
> : PowerMeter head (working) going on the cheap I'd be interested. TIA

I have built one of these. It is an RF millivoltmeter, based around a
pair
of shottkey diodes. One is used for reference, the other has the signal
applied. Ideally they should be mounted so they are thermally coupled.

The diode voltages are differentially measured using an op-amp. With no
signal,
the difference is zero. Common mode signals (like temperature drift) are

rejected.

The beauty of this scheme is that you can calibrate it using DC and
measure
down to say -20dBm. Frequency response depends on construction. VHF
certainly, UHF is possible. Microwave - difficult.

If you want more sensitivity, you can bias the diodes in a perfect
recitifer
configuration. This will easily allow you to measure -50dBm in 50 ohms.
If you
want much less than this you need a preamp.

Don't put too much power in or the signal diode will warm up. Use
attenuators.

--
Mike

(Remove the space from the Email address to reply)

# 2057. Re: taming HF preamp, why

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <33FD4A6E.D191324C@rl.ac.uk>
Source record: 91527

P. Singh wrote:

>
>
> Also Noise figure is not very important at HF.

Yes it is. Matching the noise figure to the band is very important
across the
spectrum. What would you make of a receiver with a noise figure of 100
dB? It
would be deaf even on 160m.

Noise figures of less than (say) 10 dB are unnecessary. If you have a 2
dB noise
figure on 80m and a good, large antenna, a 10 dB or even a 20 dB pad on
the input could improve the overall dynamic range.

There are other good reasons for using a pre-amp on HF - for example to
match
a short whip to the receiver. I use one on 73 kHz.

--
Mike

(Remove the space from the Email address to reply)

# 2058. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <33FD8034.72CD@erols.com>
Source record: 91528

jason zawodny wrote:
> 
> Well the question this week goes as such. Computer power supplies
> supply both 5V and 12V, and there are plenty laying around at work that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars
> I've seen radio power supplies going for...
> 
> Thanks
> 
> jtz
> 
> 
> --
> -----------------------------------------------------------------------------
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> -----------------------------------------------------------------------------
Don't hook any 12 volt power supply directly across a 12 volt battery.
When the battery charge is low the supply will send too much current to
the battery. You need to use a switching diode and a charging circuit to
limit current to the battery.

## 2059. RE: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: efbrya@acxiom.COM
Message-ID:
<c=US%a=_%p=Acxiom_Corporati%l=PO-CONWAY-1-970822123734Z-137371@po-conway-1.conway.acxiom.com>
Source record: 91529

PWM may not be the best thing to do. These coolers do not like the square waveforms. I think it causes physical stresses in the device as the unit turns on/off. You either need to integrate the PWM before going to your power amplifier or use some other method.

Eric Bryan
efbrya@acxiom.com

## 2060. re:cheap decent 12..

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FD4C41.26F0@NOSPAM.exit109.com>
Source record: 91530

Computer power supplies are offline switchers that
produce too much RFI/EMI that could interfere
with the operation of (atleast) HF radio receivers.

Linear power supplies are much quiter.

-- Bob Lewis wrote:
>
> jason zawodny wrote:
> >
> > Well the question this week goes as such. Computer power supplies
> > supply both 5V and 12V, and there are plenty laying around at work that
> > I could rig to produce the necessary current (and have backup) for
> > my VHF/UHF rig. Do you think that these supplies, powering a car battery
> > which provides that actual feed (and emergency backup power) to the
> > radio would be sufficient? Im trying to avoid spending the 130 dollars
> > I've seen radio power supplies going for...
> >
> > Thanks
> >
> > jtz
> >
> >
> > --
> > ---------------------------------------------------------------------------
> > Jason T. Zawodny; U of Notre Dame; Computer Engineer
> > zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> > Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> > ---------------------------------------------------------------------------
> Don't hook any 12 volt power supply directly across a 12 volt battery.
> When the battery charge is low the supply will send too much current to
> the battery. You need to use a switching diode and a charging circuit to
> limit current to the battery.

---------------------------------------------------------------------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---------------------------------------------------------------------

# 2061. FS: Tubes (7868, 7591 + others)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <33FDB748.32A4@ix.netcom.com>
Source record: 91531
Cross-posted to: rec.music.makers.marketplace,alt.guitar.amps,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

8/22

For Sale:

2 x 7868 used Bogen test and work well

$40.00 for both + shipping

2 x 7591 used Matsushita test and work well

$40.00 for both + shipping

--00--

Will not separate on the following:

NOS-

RCA- 6am4 / 3hm5(ha5)marked Holland / 6md8 /5u5 /6mk8 / 8ba11 / 6hb7 /
6mq8 / 6cg8a / 3dt6/ 6gm6 / 8bm11 / 6ja6 / 6bh8 / 5aq5 / 3au6 / 6mu8 /
6aq5a / 2cy5 / 3x-5cL8a/
12hg7 / 6n7a /6jc6a
Zalytron- 2as2 / 3ha5 / 2x 4bz6 6ea8 / 6ba11 / 6hg8 / 17jn6
Raytheon- 12cn5/ 2x-6ak5 / 2x 10gk6
GE- 3a3c(aw3/b2) / 13z10 / 6gm6
Westinghouse- 2x-6k6gt
Sylvania- 2cy5 / 10gk6
Realistic- 6bn6
Clarostat -60-92-a
Zenith - 13z10
Hytron -1269
Tung Sol 6eu8
Mullard- 15cw5/PL84

Used-

RCA- 2x-6fq7(cg7) / 6hq5 / 4x 6bq6gtb / 6cu6 / 6gm6 / 12d4 / 17jn6 /
8am8 / 12L6gt / 6ea8 / 6dr7 / 6cj3(ch3)
GE- 6cj3 / 6dw4b / 6bk4 / 6eL4a
Tung Sol- 6bj6 / 6bq6gtb(cu6)
Sylvania- 6le8 / 6ea3
Connectron 5u8 / 6gy6
Raytheon- 2x-22bw3
Magnavox 6hq5 / 6dt6a
Zalytron- 17jn6

$60.00 for all + shippping

Please reply to:

rl1856@ix.netcom.com

Thank you,

Ross Lipman

--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

# 2062. Re: Accurate measurement of low level RF in the VHF region

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: blombard@bogusity.iu.net
Message-ID: <5tkfob$1l6g$1@news.gate.net>
Source record: 91532

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>
>>Thanks
>>
>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at
the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty
good chip. There are easier ways (i.e., more ham like). Pretty sure that
Solid State Design for the Radio Amateur covers these if you'd rather.
They involve using differential hot carrier diodes driving an op amp,
with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |

Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

# 2063. FS: Tube Equipment and parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <33FDE599.71AD@ix.netcom.com>
Source record: 91533
Cross-posted to: rec.music.makers.marketplace,alt.guitar.amps,rec.radio.amateur.homebrew

8/22

+++ Possible duplicate post; if so I am sorry! +++

For Sale:

Sherwood S-1000-III mono Integrated amp
-excellent working and cosmetic condition
-2 x 6eu7 / 1 x 6k11 included
-has 2 mic inputs AND 4/8/16 ohm taps and 70v
-with metal cabinet

$40.00 + shipping

Sherwood S-3000-III FM-stereo capable Tuner
-excellent working condition; in good alignment; very sensitive;
accurate tracking
-no MPX-operating mono/ proprietary jack easily modded into universal
MPX out
-original Sherwood branded tubes
-the tuner sounds wonderfull!!
-with metal cabinet
-excellent cosmetic condition

$80.00 + shipping

Both Sherwood units for $110.00 + shipping

NOS Oil Caps

11 Westcap 1uf 400v
8 Sangamo 1uf 300v

$60.00 for all + shipping

Please reply to:

rl1856@ix.netcom.com

Thank you,

Ross Lipman

--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

## 2064. parabolic microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: burbridg@pe.net
Message-ID: <33fda45a.4506918@news.pe.net>
Source record: 91534

I am interested in making a parabolic microphone for birding. Does anyone have simple plans they could draw for me to build such a device? Thanks for any help.

# 2065. Re: Yaesu AZ -EL rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: gary <gwatts@qni.com>
Message-ID: <01bcaf46$4ac92900$260195d0@gary.ns.mci.com>
Source record: 91535

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

# 2066. Re: PNP transistor, VCEO highest possible - looking for

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.97Aug22180853@colossus.stdavids.picker.com>
Source record: 91536
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

300 or 400 V seem to be fairly common - you may be able to cascade several
to boost the voltage compliance range.

This approach is used in HV regulators (helium neon laser power supplies,
for example).

What are you trying to do?

Why do you require PNP types?

--- sam : Sci.Electronics.Repair FAQ: http://www.paranoia.com/~filipg/REPAIR/
Coming soon to a computer screen near you: http://www.repairfaq.org/
Preview of V3.00 (ASCII): http://www.pacwest.net/byron13/sammenu.htm

In article <lychabwsyaqru.pminews@frank.chem.utoronto.ca> "Frank Bures"
<fbures@address.in.the.sig> writes:

I am trying to locate a PNP transistor with highest available VCEO value, ideally
up to 1kV.

ICmax or Pw is not too important, neither is hFE.

So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does not
seem to be available anywhere in North America.

Any advice would be greatly appreciated.

Thanks

Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
fbures@alchemy.chem.utoronto.ca (use this address for replies)

## 2067. parabolic microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: burbridg@pe.net
Message-ID: <33fda1d4.3861104@news.pe.net>
Source record: 91537

I am interested in making a parabolic microphone for birding. Does anyone have simple plans they could draw for me to build such a device? Thanks for any help.

## 2068. parabolic microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: burbridg@pe.net
Message-ID: <33fda05b.3484257@news.pe.net>
Source record: 91538

I am interested in making a parabolic microphone for birding. Does anyone have simple plans they could draw for me to build such a device? Thanks for any help.

# 2069. Re: Regen and DC Receivers - ARRL doesn't like them!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33FE2121.65DE@larc.nasa.gov>
Source record: 91539

Overall, I agree with your comments. However, I feel that I should point out that successful SSB receivers have been built using direct conversion with the phasing method of detection. The old ARRL Single Sideband books carried a direct conversion phasing receiver with reasonable sideband supression and a while back QST carried a couple of articles on direct conversion receivers. The last article(s) dealt with direct conversion sideband reception using phasing techniques. This merely supports your statements that direct conversion techniques are indeed useful.
John WA4WDL

# 2070. Re: Regen and DC Receivers - ARRL doesn't like them!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcaf4f$e9dec820$6195f5ce@wa6vse.fast.net>
Source record: 91540

Peter Parker <parkerp@pcug.org.auNOSPAM> wrote in article
<33fe0c12.0@newshost.pcug.org.au>...
> Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception.

Either the phasing or "Weaver" techniques can be used to build a
simple "single signal" receiver and a SSB transmitter, too ... it is
possible to obtain substantial undesired sideband suppression without
too much difficulty ... especially with DSP techniques ...

Carl - wa6vse
wa6vse@fast.net

## 2071. Re: Help.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: rod7rg@aol.com
Message-ID: <19970822235401.TAA28619@ladder02.news.aol.com>
Source record: 91541

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature from the Canadian or Ametuer Radio Relay Leagues. They should be able to provide you some contacts.

Rod
KL7RG/8

# 2072. Re: WTB RF amp for 11M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5tkvhm$6no$1@rosenews.rose.hp.com>
Source record: 91542

country@music.com wrote:
: country@music.com wrote:

: >Hello, I am looking for a linear amplifier to buy for my midland radio
: >I use in my Semi truck. Preferable around 300-400 watts output with 4
: >watts input. Would prefer UPS cod. willing to pay up to $400 - only
: >for really output, not a label name.
: > Mike ,
: >aka KC7KEM
: >PS. I am using a fellow hams account so please call , don't email- he
: >is a wimp and is faking his address, one of those afraid of the FCC
: >types. Not ME! call me at 964-2458
: Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
: time to call- I sleep light so no problem with late/ early calls, That
: is Washington state time.

This is a troll. Let's all not start a thread.
I wouldn't call that number either.

I can hear landmines.

sheeesh. some peoples kids, eh?

Your radio pal Tony

# 2073. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-22 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33FE6D4D.33E3@crpl.cedar-rapids.lib.ia.us>
Source record: 91543

Mike Willis wrote:
>
> Paul Kein&#65533;nen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >
> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large currents. DC has no radiation losses, which is also significant at 50 Hz over long distances. For a given RMS, DC has a 30% smaller peak current and peak voltage. DC has no capacitively coupled current loss (not the same as leakage current) therefore power factor loss, through the insulation into the salt water. This capacitive current can cause electrolysis effects.

Bill W0IYH.

# 2074. Re: Regen and DC Receivers - ARRL doesn't like them!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: provero@connix.com
Message-ID: <5tnbiq$dnm@beast.connix.com>
Source record: 91462

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker <parkerp@pcug.org.auNOSPAM> writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).
>
>I'm amazed how negative they are about regenerative & DC receivers. On
>regen receivers, I quote:
>

The new Rockwell Collins 95S-1 (or something like that) covers
5 KHz to 2 GHz. It is called a "homodyne"; it is *essentially*
direct conversion. DSP processing for detection of just about
every mode and bandwidth imaginable. A very nice receiver....

Costs around $11K commercial, $6K GSA contract.

P.J. "Josh" Rovero email: provero@connix.com
Oceanographer work: rovero@sonalysts.com
Meteorologist radio: KK1D
Curmudgeon at large web: http://www.connix.com/~provero/

# 2075. Re: Silver plating question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33FF33D5.31E3@kfa-juelich.de>
Source record: 91463

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some
> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the
> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver
> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick
almost any metal into the solution the silver ions will pick up an
electron from the metal and become metallic silver while one of the
substrate ions will go into solution. This is the secret of

"electroless" plating. Sounds wonderful, but it is not; the metal deposited this way is poorly bonded and can be often wiped off with a rag. It is also porous. Metals going into solution include copper, zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually, it probably could be made to work, if you are good and work fast. The problem is that the melting point of silver is lower than the melting point of copper (probably higher than for brass), but not a lot lower (a bit over 100 degrees C.) You are at risk of melting the copper if you heat with a tourch. It would work better with a silver bath (want to melt a liter of silver in the kitchen?) with good temperature control. There is another problem; the silver and copper rapidly alloy to form a lower melting point alloy. If you do not work fast this process can cause holes to develop as the alloy forms ever deeper into the substrate. This is something you will understand better if you ever did soldering on fine copper wire with lead-tin solder. The wire disappears if you are too slow. The silver/copper process will be faster. You will get a great bond, if you are good enough.

Bob

# 2076. Re: ceramic resonators? 80m VFO - repostrd

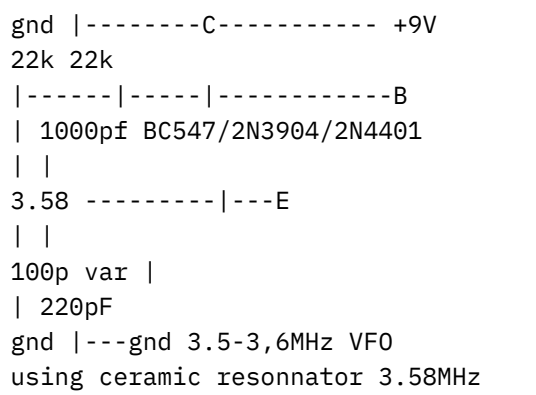
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33ff33f7.651794@news.online.no>
Source record: 91464

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?

I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin




Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 2077. F.S. - Tubes, books, much misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970823195700.PAA24598@ladder01.news.aol.com>
Source record: 91465

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

# 2078. measuring VVC-diodes, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33ff3cba.2894767@news.online.no>
Source record: 91466

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.
I have a Radiometer Q-meter, but I would prefer an easier way than
measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 2079. QEX - info please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: Peter Barville <peter@barville.demon.co.uk>
Message-ID: <CaQYBCAd1x$zEw9P@barville.demon.co.uk>
Source record: 91467

I understand that QEX has resumed publication, with a July 1997 edition.
I am particularly interested in a couple of the articles from this
issue, and would like to know how to get hold of a copy. I would also
welcome any information with regard to how I can subscribe to the
magazine.

If you're able to help, many thanks.
--
73, Peter G3XJS ( G-QRP 3001, QRP ARCI 8572 )

# 2080. Re: QEX - info please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33FF7122.BC3@crpl.cedar-rapids.lib.ia.us>
Source record: 91468

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

# 2081. Re: 2 meter antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: altavoz <altavo19@mail.idt.net>
Message-ID: <33FFCC1F.FD@mail.idt.net>
Source record: 91469
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

altavoz:
Get off the idea that you must make the lower radiator match the upper exactly . It need not be a tube . It can be 4 wires , same len' as the upper radiator , angled down at a 15 deg angle and a small cap hat on the upper rad' . The pattern ends up the same !

_____thread below_____

I've just finished building a variation on this sleeve antenna which seems to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I can compare it to the J-Pole I've been using. My question is, should the two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the feeding coax, with the braid shorted to the pipe at the midpoint of the antenna. The other half the dipole is base loaded to be electrically 3/4 wavelength long and physically 5/8 wavelength (I used a section of 1/8" steel rod with the coil making up the remainder of the length... I used a piece of solid phenolic plastic rod that plugs the end of the copper pipe and extends up as the coil form, and drilled out the center of the rod to set the steel element in). I am currently feeding the base of the loading coil with the coax center conductor, and do NOT have the two halves shorted... is this correct?

TIA,
Jason, N7IME

# 2082. Re: Help!: Taming HF preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <33FF9B96.1BEFB0A7@imaxx.net>
Source record: 91470

David Newkirk wrote:

> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
>
> > I went ahead and built a little grounded gate FET pre amp circuit.
> > The circuit comes out of W1FB's Design Notebook.
>
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
> > breaks into oscillation whenever I put them both at their resonant
> > points. If I back off a bit on the input tank, the oscillation goes
>
> > away, sensitivity remains sufficiently high and the 22 meter gang
> > continues to be blocked. I suspect I may have failed to use a
> > sufficiently short PC board trace to ground for the FET gate.
> >
> > Anyway, is this worth fixing or should I just leave it as it is?
> Is
> > it normal for grounded gate FET preamps to behave this way? Am I
> > losing performance by operating the input circuit slightly off
> > resonant frequency? Can someone explain WHY this circuit is doing
> > this (Too much gain? Why would the lead length matter?)
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its
> input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I
> as
> grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy
>
> JFET, so if you tap the I/O tuned circuits down far enough and/or
> stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or
> O,
> the circuit may not oscillate.
>
> That circuit also disserves you by getting much less selectivity out
> of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered

> for
> predictable gain and stability. One recommendation is the
> single-40673
> amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s
> "Progressive Communications Receiver," later carried in many
> subsequent
> ARRL *Handbook*s under the title "High-Performance Communications
> Receiver"
> (it's in the 1992 edition, for instance). (Yes, 40673s are now "new
> old
> stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK
> [Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be
> passe
> over in the US, but in Japan and Europe they're still very much
> viable.
> The Japanese in particular have taken receive-class JFETs and MOSFETs
> much
> further than manufacturers here; even the [old] 2SK125, for instance,
> is
> much better than the best [J310/U310] generally available here.)
>
> When you combine Hayward's amplifier with the appropriate
> double-tuned-circuit output filter (described in the same article that
>
> describes the amplifier), you'll have good, predictable gain (10 dB)
> *and*
> the selectivity you need. Wes's circuit isn't the only possible
> solution
> to your problem, of course, but it has withstood the tests of time and
> use
> that the other circuit hasn't.
>
> Regards,
>
> David Newkirk, W9VES

For additional info on preamp design you can review my user guide for
the
ASP 4.0 Program (Freeware) on my Web Site directly at;

http://www.imaxx.net/~kd9jq /asp.html

73 Chuck KD9JQ

# 2083. Re: PNP transistor, VCEO highest possible - looking for

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: hill@rowland.org
Message-ID: <5tmglh$cd8@fridge-nf0.shore.net>
Source record: 91471
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can
suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/
Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
_/ _/ _/ _/ _/
http://www.artofelectronics.com/ _/ _/ _/_/ _/_/_/_/

# 2084. Re: 50 V alternators/generators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <wiLzl9ARFi$zEwIT@two-way.demon.co.uk>
Source record: 91544

>> This is what happens when too much of the original post is clipped.
>> Yes, you're not the first to suggest a portable welder.
>> But I need to drive this off the crank or prop, I don't want to have to
>> carry a genny in the back of the van.
>> Lestek alternators in Texas have contacted me saying they produce 48V
>> units so even if I have to strap a pair of 100A units together that
>> should do the job nicely.
>> Phil G4ZOW/M
>
>
> I missed the original post, so I don't know the full circumstances,
>but I ought to comment that generators designed for welding are often
>rather specialised, designed to have a lot of leakage flux and to have
>what approaches a constant current output, rather than the more usual
>constant-voltage aim for a power generation type generator.
>
> There are welding generators sold to be added to vehicle engines, you
>aren't limited to just the combined engine-generator units.
>
>
> Car alternators can be rewound for whatever voltage you want,
>though for 50v you'd need a different rectifier arrangement and make
>some changes to the regulator sensing. Hmm, a PAIR of 100A units at 50v
>= 10kW so about 5kW of RF ought to be possible... is this for a mobile
>demonstrator for St Elmo's fire ?
Hi David,
Thanks for your reply.
You taught me something new re welding generators!
With regards the regulator, I'd probably run with an external battery
sensing system.
On my 14v system I run an Adverc alternator controller which controls
the charging of the batteries to 100% instead of the normal 60-70% it
also takes into consideration any voltage drop across my 195A diode
splitter. I run with a seperate 240Ah deep cycle unit which looks after
the current amplifier.
St Elmo's fire I think not. Corona may of been fine in the good old days
of tube powered amps in the mobile but as it severely knocks the antenna
off tune, it could of course seriously damage ones amplifier so I just
run with a decent size corona ball.

(((73)))

Phil G4ZOW/M
All my amplifiers are of course only ever driven up to the UK legal
limit.

PS. You could probably run to 6-7KW PEP for short duration work and with a bank of batteries to help take the shock as a buffer as well as leaving long gaps between overs so as to let the alternator cool down.

# 2085. Re: Pixie 2 Transceiver - Where can I get one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: pegsollek@aol.com
Message-ID: <19970823030801.XAA05173@ladder01.news.aol.com>
Source record: 91545

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne NB6M

# 2086. Re: Pixie 2 Transceiver - Where can I get one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: pegsollek@aol.com
Message-ID: <19970823031501.XAA13217@ladder02.news.aol.com>
Source record: 91546

That kit is available from HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne, NB6M

# 2087. Re: Fast O'scope for tiny Homebrewer budget

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <33fe5f22.12941218@news.doit.wisc.edu>
Source record: 91547

wrt@eskimo.com (Bill Turner) wrote:

>I was a test technician on the Tektronix 400 series production line
>back in the '70s and '80s. We built so many of those we felt every
>house in America must have one. Thanks for the kind words!
>
>73, Bill W7TI

Thanks for those wonderful, beautiful scopes!

Jim

---

Melissa Kepner Jim Adney
Laura Kepner-Adney
mgkepner@facstaff.wisc.edu
Madison, Wisconsin

---

# 2088. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5tl9ni$ppn@apple.telalink.net>
Source record: 91548

jzawodny@pim.cse.nd.edu (jason zawodny) wrote:
> Well the question this week goes as such. Computer power supplies
>supply both 5V and 12V, and there are plenty laying around at work that
>I could rig to produce the necessary current (and have backup) for
>my VHF/UHF rig. Do you think that these supplies, powering a car battery
>which provides that actual feed (and emergency backup power) to the
>radio would be sufficient? Im trying to avoid spending the 130 dollars
>I've seen radio power supplies going for...

It should work, in fact I've got one powering a Motorola commercial rig atop Tennessee's second tallest building right now. (for work..)

I'm not so sure you want to float the car battery directly across it. I'd use steering diodes, and if you run the car battery down, use a (car) battery charger to recharge it.

Do be aware that computer supplies require a MINIMUM load from the 5V supply. This could be a problem for your application since you aren't planning on using 5 volts for anything. (in my case, I also have 3 amps worth of industrial control boards) You might have to hang an obsolete hard drive or 8088 motherboard off a spare plug to get things to work. Of course, a resistor or light bulb will also work..

73 DOug

# 2089. Antenna rotator control box schematic needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5tlsjr$bp2$3@nr1.toronto.istar.net>
Source record: 91549

I am looking for plans for a tv antenna rotator. It is one of the ones that the antenna mast goes through. It is a 4 wire, with the wires connected internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO
3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if possible.

Gary Tait,VE3VBF

# 2090. Re: Room Temp "Oven" for Quartz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <7nm4JDA6$i$zEwIt@ddwyer.demon.co.uk>
Source record: 91550

In article <33FB23CA.7095@hnvr.com>, Kenneth M Gianino <ken@hnvr.com>
writes
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).
>
>I'm looking for a simple but effective scheme to improve stability
>without spending a lot of money. I'd like match Yaesu's 2ppm while
>retaining the original crystal. It is 10-point-something-MHz and I'm
>not likely to find a surplus TCXO or OCXO.
Im a bit late on the scene with this thread however:
If you have power available and dont mind the warm up time its easier to
make an oven than a TCXO. A peltier heater is unnecessary as the crystal
will hace a minimum temperature coefficient above 27C
Your crystal will be an AT (lazy Z) cut optimised for minimum deviation
over the whole band. If you temperature control just the crystal it
should be possible to raise the temperature by using a servo heater to
where the crystal reaches its minimum frequencey with luck and if the
crystal is correctly cut this will be about 35C.
The Maintaining circuit will still be sensitive to temperature and will
limit any crystal only control to +-0.5ppm or so.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

## 2091. re:regen and DC reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FEB9C8.1A98@NOSPAM.exit109.com>
Source record: 91551

Peter Parker wrote:
>
> Have just been looking through the Receivers section of my 1988 ARRL
> H/book (page 12-7).
>
> I'm amazed how negative they are about regenerative & DC receivers. On
> regen receivers, I quote:
>
> Then there is reference to the radiation of regen receivers. Most
> books/articles say that adding an RF amp cuts down the radiation a lot.
> But not the ARRL - it's mentioned that these receivers can cause
> interference for several miles. I wonder if this assumes a valve receiver
> and an efficient antenna? If so, it is out of touch with more modern
> techniques, such as the use of FETS. I suspect the author of that piece
> was active in the 1930s and had a bad experience with a ham down the road
> causing interference to him because he would let his regen receiver
> oscillate - otherwise he might not have been so disparaging about regen
> receivers.

you are right.

Can I ask how RFI does a ordinary superhet radiate? After all, the
superhet has 1-5 oscilators going.

HOW much RFI does a typical computer radiate? It radiates enough
RFI to generate S-9 noise on all HF bands.

HOW much RFI does a TV set radiate? Enough to blank out the LF bands
below 500 KHZ.

So, RFI generated by a regen receiver is like the least of the
problems today.

YES, the RFI radited by regen RX can be reduced by proper design.
1. Operate the regen at very low poer levels( microwatts)
2. Use a loosely coupled antenna.

The use of RF amp to isolate the regen from the antenna is not
recommended because:-
1. It worsens the overload and cross-modulation problem.
2. Does not provide a lot more isolation than a loosely couple antenna
can provide.
3. RF amp degrades the noise performance of the regen RX.
My regen is a lot more sensitive than my superhet RX SONY
ICF 2001. In fact I use the regen as a regenerative antenna
amplifier/ Q multiplier at the signal frequency for the SUPERHET.

> Then we go to DC receivers (page 12-8). I quote "direct conversion
> receivers are not especially suitable above 14 MHz because it is
> difficult to secure adequate BFO stability at such high a frequency". The
> same would be true of a superhet too (if it used a 455 or 1600 kHz IF).
> Thus the problem is not inherently due to direct conversion. Apart from
> the mixer-VFO solution suggested, a VXO or a 2-transistor front-end
> converter could overcome this problem.
>
> Another quote: "Direct conversion receivers are ideal for use in simple
> transceivers .... provided the appropriate frequency offset is included
> between transmit and receive to permit copy of SSB and CW signals without
> readjusting the BFO".
>
> This is correct for CW (where an 800 Hz offset is required), but not for
> SSB. Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception. DSB
> transmission goes with DC receivers, and transceivers are simple but this
> is not mentioned. I have several rigs of this type, and as soon as you
> have tuned in the transmitting station properly, you are automatically
> spot on frequency - no offset required.
>
> Microphonics and hum are suggested as major difficulties, which would
> tend to discourage the builder. Though it is true that they can cause
> difficulty, the advent of chips like the NE602 has made things much
> easier. In the end, it is the audio image that is the main limitation of
> the DC receiver. Though for most builders the comments re the use of
> phasing networks for single signal reception are probably valid,

COLLINS now a part of ROCKWELL(military contractor) has a DC
reciever using DSP techniques as its top product. This DSP/DC
reciever can recieve AM,FSK among all the usual SSB, CW etc.
I believe if collins thinks that the DC/DSP reciever is the way
to GO for military technology, that really may be the way to
go for the future.

I still have to get my R2 reciever running.
I guess I will. someday.

They problem, as far as I am concerned with DC recievers, is the
90 degrees phase shifted I-Q VFO signals needed.

I think that a R2 driven by a DDS VFO may be the best bet.

May be ,all the I-Q filtering/signal done in OPAMPS in the R2
should probably be done by a motorola DSP 56000.
(Does any one know where to buy a motorola DSP 56000 devlopment kit?)

>I'm not
> sure if all designers/experimenters agree, and, besides the purpose of
> the Handbook should be to stimulate experimentation, and not discourage
> the use of certain techniques.
> Though most comments in the book are accurate (and helpful), I

YES, It is not just the negative tone, it is the very casual and
less than a good engineering approach of the handbook which does
more harm than good.
Advances in radio engineering are still possible and happening
today. But they are more or less happening in the corporations etc.

( All the information about (ROCKWELL COLLINS) was taken from their
web-page as I remember it. So, look at their web page for more
information)

--
---------------------------------------------------------------------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---------------------------------------------------------------------

# 2092. VCO , paralleling Varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FEBCB1.FF5@NOSPAM.exit109.com>
Source record: 91552

Does anybody know why paralelling another varactor across
the varactor of a LC Voltage controlled oscilator not increase
the tuning range of the VCO?

Both the varactors are reverse biased by the tuning voltage,
as varactors should be. So, connecting another varactor
across the LC tank circuit of a VCO should increase the freq
range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts
or so. The DC bias voltage for the varactor is about 1-10 volts or so.
So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

## 2093. re:help taming HF : some thoughts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Message-ID: <33FEC689.4CCD@NOSPAM.exit109.com>
Source record: 91553

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as grounding a
vacuum tube's grid can do.)
>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
> the circuit may not oscillate.
>
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as
to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the
top or the hot end of the antenna.
2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine
tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.
I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2094. Re: MRF 479 Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <33FF042F.A68F5614@sj.bigger.net>
Source record: 91554

Try RF Parts...in San Marco, CA for your transistor.
friend,
Lute

James R. Binkley wrote:

> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.
>
> Thanks Bob w4aos@his.com

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

# 2095. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5tmvnb$iog@news.teleplex.net>
Source record: 91555

In article <19970819234401.TAA19821@ladder01.news.aol.com>,
johnsonhe@aol.com says...
>
>>
>>Why do power companies use DC to transmitt power. 400KV, 500MW. What
kind
>>of equipment is used to transform from AC to DC and DC to AC?
>>Could it be power factor?
>>73 and TIA
>
>The main reason is that DC is subject to only the resistance losses in
the conductors. The line inductance and capacitance does not cause
reactive voltage drop is a DC transmission line. In an AC line these
losses are serious and must be corrected wth very expensive capacitor
banks.

The reason that DC is not often used is that the cost of the high
voltage solid state conversion systems have been very expensive in the
past. Recently these cost have dropped and more DC transmission lines
are being considered and will be built.

The merits of DC vs AC power generation,transmission, and distribution
were highly debated at the turn of the century by Edison (DC) and Tesla
(AC). Tesla eventually won the debate, but with the changes in
technology of the next century, Edison and DC may be exonerated.

Pat Bunn

# 2096. Re: Silver plating, how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5tn082$iog@news.teleplex.net>
Source record: 91556

In article <01bca730$b2f068e0$LocalHost@w9dmk.crosslink.net>,
w9dmk@crosslink.net says...
>
>How could their be any silver in photographic developing solution? The
>silver is in the emulsion. If you want silver in your developing
solution
>you have to first develop a hell of a lot of prints or film. OK?

The silver is all removed when the film is "fixed". The sodium
thiosulfate fixer after it has been used, contains the silver, not the
developer.

My experience is silver plating is that using spent fixer doesn't work
well. The only method I have found , that works is to use a sodium
cyanide process. This involves disolving silver in nitric acid to adding
salt to generate a cheap silver halide salt and then disolving it in
water with the cyanide. The plating is done electrolytically.

I did it once and don't recommend it. The silver plating was beautiful
BUT... The cyanide gas can easily kill you.

Pat Bunn, N4LTA
>
>73 de w9dmk
>

# 2097. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <ow4qQiATnq$zEwLm@pacsat.demon.co.uk>
Source record: 91557

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen <allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new >SOT gull-wing or even surface mount packages? The "pin" spacing on >some of these is getting awfully small. I've gotten a few samples of >some nice IC's I's like to evaluate, but etching and soldering at >those line widths makes me wonder if at some point the amateur >homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work. There is no real problems, any more than with other type, the R's and C's take a bit of geting used to (they fly round the shack really well if you get the mounting wrong!), but it just requires new skills to be learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM

+----------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------------+

# 2098. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <33FF082A.58D51AA@sj.bigger.net>
Source record: 91558

These cheap switching power supplies are terrible choices for radio use,
far too noisy. Best is battery ONLY...a decent 12V Lead Acid car battery
used AS-IS (sans charger) then when you switch OFF your set up...you
turn ON the charger.
Simple, Cheap, loads of current and, best of all, quiet.
friend,
Lute

jason zawodny wrote:

> Well the question this week goes as such. Computer power
> supplies
> supply both 5V and 12V, and there are plenty laying around at work
> that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car
> battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars
>
> I've seen radio power supplies going for...
>
> Thanks
>
> jtz
>
>
> --
> --
> ------------------------------------------------------------------------
>
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ------------------------------------------------------------------
> --------

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA

OptCamel@sj.bigger.net
8:36 AM 5/25/97

# 2099. Looking for homebrew Boat Anchor transportation Minnesota to S.C.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: kr4wm@sccoast!.net
Message-ID: <MPG.e68df6fa0f684bd9896ba@news.infoave.net>
Source record: 91559

Anyone travelling from Minnesota to South Carolina? I have a home brew boat anchor I need transported...73, Web

Remove the ! from my e-mail address to reply.

# 2100. Re: VCO , paralleling Varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <33FF17E3.3620@larc.nasa.gov>
Source record: 91560

What is important is the maximum to minimum capacitance ratio of the varactor. If the maximum capacitance is 100 pF and the minimum is 10 pF, the ratio is of course 100/10 = 10. Paralleling two varactors produces a new ratio of 200/20 = 10, no change. Since the resonant frequency is equal to 1 divided by 2 pi times the square root of L times C, the change in frequency is proportional to 1 over the square root of the change in the LC product. In this case the frequency range is the square root of 10. One way to help see this is to insert values into the equation and see what happens. Pick an inductor, calculate the minimum and maximum frequency for the minimum and maximum capacitance with one varactor. Then repeat for two.
Does this help?
John

# 2101. Re: power transmission (electric)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-23 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <DA7132BCEC0D2589.9BCB7E38D3A435E4.0EE0B101459CE6C6@library-proxy.airnews.net>
Source record: 91561

pbunn624@teleplex.net (Pat Bunn) wrote:
>The merits of DC vs AC power generation,transmission, and distribution
>were highly debated at the turn of the century by Edison (DC) and Tesla
>(AC). Tesla eventually won the debate

Well, really it was George Westinghouse who fronted the bills for
Edison's "AC is to dangerous to use" campaign. Edison fought as dirty
as he could. He arranged for NY state to receive a Westinghouse
Alternator which was used the first electrocution, a rather botched
affair. Edison had gone around NY state county fairs showing AC was
lethal by dispatching farm animals with an alternator. The critical
event that decided the issue was the award of the power plant at
Niagara Falls to the AC system. The issue turned on distribution and
AC clearly had the advantage there. I believe--but am not sure--that
a 25 Hz system is still in use at the falls.

Fred, W8OY
jfriley@airmail.net

## 2102. Need plans Alliance U100 Rotator control box.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: tait@primeline.net
Message-ID: <5to144$mji$1@nr1.toronto.istar.net>
Source record: 91472

I have what I have been told is an Alliance U-100 Rotator, I need a control box for, but don't wish to shell out the bucks for one.

Does anybody have plans for a solid state box, I could build out of TTL or cmos gates (other than the motor control circuitry of course.)

Gary Tait,VE3VBF

# 2103. Re: MRF 479 Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970824012701.VAA16052@ladder01.news.aol.com>
Source record: 91473

Hi--

If you can't get a 479, try a 2SC3133. Good for 15W PEP.

Rick K1BQT

# 2104. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5to36h$dpa@cletus.bright.net>
Source record: 91474

Dow key relays can be used for much more than switching from transmit to receive in boatanchors. Some uses are:

switching between 2 antennas
switching in/out a preamplifier at the antenna
switching transverters to a common IF
switching rigs to a SWR meter

and many more.

Norman N8RGR

# 2105. FS: Mil Spec Teflon Covered Wire #20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <33ff9e0a.0@207.168.31.4>
Source record: 91475
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,rec.antiques.radio+phono

I have the following colors and sizes available. This wire is stranded tinned copper with a Teflon jacket. Limit is 100ft./size/color for each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

## 2106. F.S. - Tubes, books, much misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970824024701.WAA29279@ladder02.news.aol.com>
Source record: 91476

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

# 2107. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC502A8.238B000006CA.uuout@mandic.com.br>
Source record: 91477

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
From owner-ham-homebrew@ucsd.edu Sun Aug 24 00:20:24 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id AAA19939; Sun, 24 Aug 1997 00:20:23 -0300
Received: from mailbox1.ucsd.edu (mailbox.ucsd.edu [132.239.1.53])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id AAA13635
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 00:28:04 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id TAA12248 for <ham-homebrew-list@mailbox.ucsd.edu>; Sat, 23 Aug
1997 19:22:05 -0700 (PDT)
Received: by mail.ucsd.edu; id TAA02682
sendmail 8.8.5/UCSD8.3
Sat, 23 Aug 1997 19:16:11 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id TAA02638
sendmail 8.8.5/UCSD8.3
Sat, 23 Aug 1997 19:16:03 -0700 (PDT)
Message-Id: <199708240216.TAA02638@mail.ucsd.edu>
Date: Sat, 23 Aug 97 19:16:01 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #477
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 477

Today's Topics:
2 meter antenna
Bounced Mail -> User Not Found
Double Sided PC Boards

Ham-Homebrew Digest V97 #476
Help Looking for A HP 1820-0736
MRF 479 Needed
Need plans Alliance U100 Rotator control box.
QEX - info please

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems
to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I
can compare it to the J-Pole I've been using. My question is, should the
two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the
feeding coax, with the braid shorted to the pipe at the midpoint of the
antenna. The other half the dipole is base loaded to be electrically 3/4
wavelength long and physically 5/8 wavelength (I used a section of 1/8"
steel rod with the coil making up the remainder of the length... I used a
piece of solid phenolic plastic rod that plugs the end of the copper pipe
and extends up as the coil form, and drilled out the center of the rod to
set the steel element in). I am currently feeding the base of the loading
coil with the coax center conductor, and do NOT have the two halves
shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br

Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work.
There is no real problems, any more than with other type, the R's and
C's take a bit of geting used to (they fly round the shack really well
if you get the mounting wrong!), but it just requires new skills to be
learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM
+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

---

Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:
<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp
Help.
help taming HF : some thoughts
measuring VVC-diodes, how?

PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit
Regen and DC Receivers - ARRL doesn't like them!
Room Temp "Oven" for Quartz? (2 msgs)
WTB RF amp for 11M

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 23 Aug 97 16:31:04 GMT
From: NORMANMO@miavx1.acs.muohio.EDU
Subject: <no subject>

add

------------------------------

Date: Wed, 20 Aug 1997 12:49:37 -0500
From: K0PW <pwentzel@minn.net>
Subject: Diathermy Machine $100.00

I have a friend who has a working diathermy machine for sale. I tore one
of these apart a couple of eons ago, and harvested an excellent HV power
supply for a linear -- also some heavy duty RF components. This is too
heavy to ship. If anyone is interested, send me an e-mail and I'll pass
along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

------------------------------

Date: Sat, 23 Aug 1997 07:02:26 GMT
From: allent@mnsinc.com (David Allen)
Subject: Double Sided PC Boards

stevem@vax.area.com (Stephen E. Muther) wrote:

>I do a lot of hobby boards and my employer's prototypes on a milling
>machine. Typically I drill the holes first (before etching or milling)
>then take the board in the back door of a cooperative board house

>for plating. If I am in a hurry or if the board house is too busy to
>deal with me, I use small brass or tin eyelets that I get at the
>local hobby/model shop. They are easy to push in and solder and
>require no cutting or trimming unlike wires.
>
>Steve M.
>

On a tangential issue, has anyone done much hobby work with the new
SOT gull-wing or even surface mount packages? The "pin" spacing on
some of these is getting awfully small. I've gotten a few samples of
some nice IC's I's like to evaluate, but etching and soldering at
those line widths makes me wonder if at some point the amateur
homebrewer is going to get scraped off.

Dave Allen
WA2BSL
Falls Church, VA

---

Date: 23 Aug 1997 19:57:00 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 1997 06:03:04 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Fast O'scope for tiny Homebrewer budget

> wrt@eskimo.com (Bill Turner) wrote:

> >I was a test technician on the Tektronix 400 series production line
> >back in the '70s and '80s. We built so many of those we felt every
> >house in America must have one. Thanks for the kind words!
> >
> >73, Bill W7TI

I was issued a 454 when I joined a research project at the University
of Essex in 1970. The only more beautiful thing was the young lady
who came with it. (The 454 is no longer with me).

---

Date: 23 Aug 1997 12:22:45 GMT
From: "David Newkirk" <dnewkirk@bellatlantic.net>

Subject: Help!: Taming HF preamp

Bill Meara <wmeara@erols.com> wrote in article
<33f95b77.1710144@news.erols.com>...

> I went ahead and built a little grounded gate FET pre amp circuit.
> The circuit comes out of W1FB's Design Notebook.

[deletions]

> I have one problem that I would like to ask the group about: As I
> tweak the two tuned circuits (input and output) in the pre amp, it
> breaks into oscillation whenever I put them both at their resonant
> points. If I back off a bit on the input tank, the oscillation goes
> away, sensitivity remains sufficiently high and the 22 meter gang
> continues to be blocked. I suspect I may have failed to use a
> sufficiently short PC board trace to ground for the FET gate.
>
> Anyway, is this worth fixing or should I just leave it as it is? Is
> it normal for grounded gate FET preamps to behave this way? Am I
> losing performance by operating the input circuit slightly off
> resonant frequency? Can someone explain WHY this circuit is doing
> this (Too much gain? Why would the lead length matter?)

The lead length doesn't matter so much as the circuit's design. The
problem with that circuit is that it's inherently unstable when its input
and output are tuned. (Grounding a JFET's gate doesn't shield O from I as
grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy
JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
the circuit may not oscillate.

That circuit also disserves you by getting much less selectivity out of two
tuned circuits than can easily be achieved with them.

A better approach is to close that book and use a circuit engineered for
predictable gain and stability. One recommendation is the single-40673
amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s
"Progressive Communications Receiver," later carried in many subsequent
ARRL *Handbook*s under the title "High-Performance Communications Receiver"
(it's in the 1992 edition, for instance). (Yes, 40673s are now "new old
stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK
[Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be passe
over in the US, but in Japan and Europe they're still very much viable.
The Japanese in particular have taken receive-class JFETs and MOSFETs much
further than manufacturers here; even the [old] 2SK125, for instance, is
much better than the best [J310/U310] generally available here.)

When you combine Hayward's amplifier with the appropriate
double-tuned-circuit output filter (described in the same article that
describes the amplifier), you'll have good, predictable gain (10 dB) *and*
the selectivity you need. Wes's circuit isn't the only possible solution
to your problem, of course, but it has withstood the tests of time and use

that the other circuit hasn't.

Regards,

David Newkirk, W9VES

---

Date: 22 Aug 1997 23:54:00 GMT
From: rod7rg@aol.com (ROD7RG)
Subject: Help.

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature
from the Canadian or Ametuer Radio Relay Leagues. They should be able to
provide you some contacts.

Rod
KL7RG/8

---

Date: Sat, 23 Aug 1997 07:16:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: help taming HF : some thoughts

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as gr
ounding a vacuum tube's grid can do.)
>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
> the circuit may not oscillate.
>
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as

to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the
top or the hot end of the antenna.
2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine
tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.
I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
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---

Date: Sat, 23 Aug 1997 20:02:36 GMT
From: la8ak@online.no (J M Noeding)
Subject: measuring VVC-diodes, how?

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.
I have a Radiometer Q-meter, but I would prefer an easier way than
measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: Fri, 22 Aug 1997 08:39:55 -0400
From: Zack Lau <zlau@arrl.org>
Subject: PAGER NOISE HELP

John Clarke wrote:
>
> Help requested, for a amateur located in the valley below a commercial
> tower site briselling with pager antenna, so any 2 metre signals are
> flatened by the data streams.
> Would a high Q tunable notch filter help? Any circuits or pointers will be

Not much, if there are a lots of different pagers in different
frequencies.

A good choice might be a sharp bandpass filter--the bigger the
better. One the size of a loaf of bread might do the trick, though

people have made them out of 20 gallon garbage cans... Zack W1VT

> much appreciated. Cheers and thank you in advance, John

---

Date: Fri, 22 Aug 1997 14:28:45 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

---

Date: Fri, 22 Aug 1997 14:21:43 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

---

Date: 23 Aug 1997 03:08:01 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try
calling them at 1-800-442-5833.

Wayne NB6M

---

Date: 23 Aug 1997 11:13:53 GMT
From: hill@rowland.org (Winfield Hill)
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can
suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/

Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
_/ _/ _/ _/ _/
http://www.artofelectronics.com/ _/ _/ _/_/ _/_/_/_/

---

Date: 23 Aug 1997 15:30:51 GMT
From: pbunn624@teleplex.net (Pat Bunn)
Subject: power transmission (electric)

In article <19970819234401.TAA19821@ladder01.news.aol.com>,
johnsonhe@aol.com says...
>
>>
>>Why do power companies use DC to transmitt power. 400KV, 500MW. What
kind
>>of equipment is used to transform from AC to DC and DC to AC?
>>Could it be power factor?
>>73 and TIA
>
>The main reason is that DC is subject to only the resistance losses in
the conductors. The line inductance and capacitance does not cause
reactive voltage drop is a DC transmission line. In an AC line these
losses are serious and must be corrected wth very expensive capacitor
banks.

The reason that DC is not often used is that the cost of the high
voltage solid state conversion systems have been very expensive in the
past. Recently these cost have dropped and more DC transmission lines
are being considered and will be built.

The merits of DC vs AC power generation,transmission, and distribution
were highly debated at the turn of the century by Edison (DC) and Tesla
(AC). Tesla eventually won the debate, but with the changes in
technology of the next century, Edison and DC may be exonerated.

Pat Bunn

---

Date: 22 Aug 1997 23:24:49 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: RAMSEY SR-1 SW kit

: I dont see much change in the tuning
: slugs of the RF, IF and OSC cans unless
: I'm at the extremes.

Sorry, the OSC can changes the tuning
range just fine.

---

Date: 22 Aug 1997 23:07:17 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Regen and DC Receivers - ARRL doesn't like them!

Peter Parker <parkerp@pcug.org.auNOSPAM> wrote in article
<33fe0c12.0@newshost.pcug.org.au>...
> Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception.

Either the phasing or "Weaver" techniques can be used to build a
simple "single signal" receiver and a SSB transmitter, too ... it is
possible to obtain substantial undesired sideband suppression without
too much difficulty ... especially with DSP techniques ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sat, 23 Aug 1997 06:08:53 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Room Temp "Oven" for Quartz?

In message <Pine.GSO.3.94.970822142932.16140A-100000@Stratus.CAM.ORG>
Michael Black <blackm00@CAM.ORG> writes:

> Another possibility, though not for portable operation, is to bury the
> oscillator in the ground. I remember some articles in the ham magazines
> about this about 35 years ago, back when moonbounce was first getting
> attention and transmitters consisted of a low frequency oscillator
> followed by divider chains. Burying the oscillator in the ground puts it
> at a constant temperature. Its the same concept used when houses are
> buried for insulation purposes. The temperature isn't warm, but it is
> constant and isolated. Coax would be run to the shack, and DC voltage
> would be sent down to the transistorized oscillator along the coax.
>
> Michael VE2BVW

G3LTF used to do this.

73 de G3PAI

---

Date: Sat, 23 Aug 1997 01:34:02 +0100
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Subject: Room Temp "Oven" for Quartz?

In article <33FB23CA.7095@hnvr.com>, Kenneth M Gianino <ken@hnvr.com>
writes
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).

>
>I'm looking for a simple but effective scheme to improve stability
>without spending a lot of money. I'd like match Yaesu's 2ppm while
>retaining the original crystal. It is 10-point-something-MHz and I'm
>not likely to find a surplus TCXO or OCXO.
Im a bit late on the scene with this thread however:
If you have power available and dont mind the warm up time its easier to

# 2108. Heathkit "Seneca" Model VHF-1..Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5tocrk$hub$1@bigdog.eli.net>
Source record: 91478
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.ham.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a SENECA VHF-1. When you turn it on, the relays click and the
in-line fuses blow. I've checked the caps and power transformer.
There is a 1N1239 can type diode (?) stuck in the socket that th 5R4
(v8) goes into. Any ideas? THis rig has had extensive modifications made
to it... all annotated in the schematic and manual, but I swear....

Greg
KB6WKW

PS I'm not a Tech yet. I just like diddling with the circuits...
Any ideas?

## 2109. Relay needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: ron ab6zx <dom@shocking.com>
Message-ID: <01bcb052$3094db80$7acc77cc@JeanneAngle.csuchico.edu>
Source record: 91479

Looking to buy a used antenna relay capable of 800-1000 watts, can be open frame or coaxial, speed not necessary as not for QSK. Will be used for temporary bench tests only.

--

ron ab6zx chico ca
email: dom@shocking.com

# 2110. Re: VCO, paralelling varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3401e1ec.89126346@news.sci.fi>
Source record: 91480

"P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

<clip>

>I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
>
>I dont really know, but, I think that the one varactor VCO
>drives the varactors in a highly non-linear way.There will be 5-10
>volts RF/AC across the varactor, and 1-10 volts DC to tune it.
>Thus, I believe that varactor will be working in a highly nonlinear
>way. Also, Q is rather low for these types of varactors.

Sounds like the conditions are similar to the parametric amplifier or varactor tripler :-).

If the high RF voltage across the varactor is your problem, then why not use a varactor with large maximum capacitance (a tuning range from ,say, 25 pF to 250 pF) in series with a small (say 100 pF) fixed capacitor. The two capacitances will form a capacitive voltage divider, at the minimum capacitance the AC voltage across the varactor is only slightly reduced but at maximum capacitance only a very small fraction of the RF voltage is across the varactor (2/7 in this case). This greatly reduces the risk for forward biasing at low tuning voltages.

Your problem seem to be the large parallel capacitance, so it is quite unrealistic to expect to get any large tuning range with varactors with low maximum capacitance. With values in my example, you would get sqrt ( (100+71)pF/(100+20)pF ) = 1.19 or 19 %. Using a larger series capacitance would make the tuning range even larger, but it would also increase the RF voltage across the varactor.

Paul OH3LWR

# 2111. WTB AZ-EL ROTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5tpb3h$o5b@cletus.bright.net>
Source record: 91481

Hi all...

I am looking for an AZ-EL rotor. dead or alive. Need not be a big one as
the use is not EME. What have you?

Norman Hockler
N8RGR

# 2112. Re: VCO , paralleling Varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970824133301.JAA25386@ladder02.news.aol.com>
Source record: 91482

Hi

THis was done succesfully in the Uniden President Jackson CB
radio.Looking at the schematic there are actually two pair of varactors
in addition to the main varactor used in the VCO circuit to extend the range.

The aux pairs are switched in by the channel selector at
a specific programming word.

Hope this helps...

Carl
The2x4

# 2113. FS: Antique Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5tpfhs$ljr$24@ha1.rdc1.occa.home.com>
Source record: 91483

ANTIQUE TUBES, USED, pulled from old radios and equipment, UNTESTED.

qty manuf. tube type shape price each

1 EO 2A5 ST ( shoulder ) $7.50
1 Philco 2A6 ST ( shoulder ) $2.50
1 CBS 5Z3 ST ( shoulder ) $2.50
1 GE 6A7 ST ( shoulder ) $4.00
1 Philco 6A7 ST ( shoulder ) $4.00
1 Raytheon 6A7 ST ( shoulder ) $4.00
1 Tung-Sol 6A7 ST ( shoulder ) $4.00
1 Raytheon 6AB5/6N5 Tubular $5.00
1 Raytheon 6B7 ST ( shoulder ) $2.25
2 Nat. Union 6D6 ST ( shoulder ) $1.75
1 Raytheon 6D6 ST ( shoulder ) $1.75
1 Sylvania 6E5 Tubular $7.50
1 Silvertone 6F5G ST ( shoulder ) $7.50
1 Zenith 6K7G ST ( shoulder ) $2.00
1 Silvertone 6K8G ST ( shoulder ) $2.00
1 Tung-Sol 24 ST ( shoulder ) $2.00
1 GE 24-A ST ( shoulder ) $2.00
1 Ken-Rad 24-A ST ( shoulder ) $2.00
1 Nat. Union 24-A ST ( shoulder ) $2.00
1 Raytheon 24-A ST ( shoulder ) $2.00
2 RCA 24-A ST ( shoulder ) $2.00
1 Kadette 25B5 ST ( shoulder ) $4.00
1 Sylvania 25Z5 ST ( shoulder ) $1.75
1 Raytheon 25Z5 Tubular $1.50
1 Cunningham 26 ST ( shoulder ) $2.00
1 Raytheon 26 ST ( shoulder ) $2.00
1 Sylvania 26 ST ( shoulder ) $2.00
1 Cunningham 27 ST ( shoulder ) $1.50
5 Gibraltar 27 ST ( shoulder ) $1.50
1 Nat. Union 27 ST ( shoulder ) $1.50
3 Raytheon 27 ST ( shoulder ) $1.50
4 RCA 27 ST ( shoulder ) $1.50
1 Sylvania 27 ST ( shoulder ) $1.50
2 RCA 35 ST ( shoulder ) $2.00
1 Cunningham C35 Globe $5.00
1 RCA 36 ST ( shoulder ) $2.00
1 Raytheon 37 ST ( shoulder ) $2.00
1 RCA 37 ST ( shoulder ) $2.00
1 Cunningham 38 ST ( shoulder ) $1.75
1 GE 39/44 ST ( shoulder ) $1.00
2 Sylvania 39/44 ST ( shoulder ) $1.00

2 Philco 41 ST ( shoulder ) $2.50
3 RCA 41 ST ( shoulder ) $2.50
1 Cunningham 42 ST ( shoulder ) $4.00
2 Raytheon 42 ST ( shoulder ) $4.00
1 Raytheon 43 ST ( shoulder ) $2.00
1 RCA 43 ST ( shoulder ) $2.00
1 Delco 47 ST ( shoulder ) $4.00
1 Cunningham 57 ST ( shoulder ) $2.00
1 RCA 57 ST ( shoulder ) $2.00
1 Nat. Union 75 ST ( shoulder ) $2.50
1 Ken-Rad 75 ST ( shoulder ) $2.50
1 Cunningham 76 ST ( shoulder ) $3.00
1 Philco 76 ST ( shoulder ) $3.00
1 Tung-Sol 76 ST ( shoulder ) $3.00
1 RCA 77 ST ( shoulder ) $1.50
1 Ratheon 80 ST ( shoulder ) $4.00
1 Nat. Union 85 ST ( shoulder ) $1.50
1 Raytheon 85 ST ( shoulder ) $1.50
1 Triad T-224 Globe $15.00
1 EO 247 Globe $15.00
1 Silvertone 251 Globe $10.00
1 Sllvania SX-280 Globe $15.00
2 Cunningham C327 Globe $5.00
1 Cunningham 380 Globe $15.00

Shipping in USA: 1 - 6 tubes $4.00, 7 or more shipping free.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

# 2114. Re: Relay needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970824151001.LAA22734@ladder01.news.aol.com>
Source record: 91484

>
>Looking to buy a used antenna relay capable of 800-1000 watts, can be
open
>frame or coaxial, speed not necessary as not for QSK. Will be used for
>temporary bench tests only.
>--

I have 4 each, new Dow-Keys with N connectors, the Rx isolation button, and DPDT external contacts. They have 12 volt DC coils (which are replaceable if you don't like 12 VDC) Bought 15 years ago when I was into moonbounce. They handle KW at 432 MHz, although I don't think they are rated for it.

$50 each

W4ZCB

## 2115. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC557B2.737E00000737.uuout@mandic.com.br>
Source record: 91485

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Sun Aug 24 12:27:02 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id MAA28015; Sun, 24 Aug 1997 12:27:01 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id MAA10036
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 12:35:01 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id CAA17955 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 02:52:04 -0700 (PDT)
Received: by mail.ucsd.edu; id CAA28499
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 02:23:59 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id CAA28465
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 02:23:53 -0700 (PDT)
Message-Id: <199708240923.CAA28465@mail.ucsd.edu>
Date: Sun, 24 Aug 97 02:23:52 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #479
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 479

Today's Topics:
Accurate measurement of low level RF in the VHF/UHF region
Antenna rotator control box schematic needed.
ceramic resonators? 80m VFO - repostrd
```

Cheap/decent 12V supply?
Double Sided PC Boards
FS: Mil Spec Teflon Covered Wire #20,22,24,26
Pixie 2 Transceiver - Where can I get one?
power transmission (electric) (2 msgs)
QEX - info please
Relay needed
Silver plating question
VCO, paralelling varactors (2 msgs)
VCO , paralleling Varactors

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up
>>>to 150Mhz.
>>>
>>>Levels will range between -20dBm and +20dBm.
>>>
>>>Has anyone got any suggestions for a suitable
>>>instrument and will a RF Millivoltmeter be more
>>>flexible than an RF Powermeter.
>>>
>>>Thanks
>>>
>>>Niels Montanana
>>>G8RWG
>>>
>>>nielsm@lcpub.co.uk
>>

>>Same situation, I'm thinking of building something using the LT1088, or
>>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>>datasheet (FARNELL server claims to have them but then says they aren't
>>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>>PowerMeter head (working) going on the cheap I'd be interested. TIA
>>
>> 73 de Laurens M1CCO
>
>Do you have web access? Analog Devices home page has a search engine at
>the opening screen. I entered AD737 and got it. They're www.analog.com.
>
>I've used the 737 in a signal measuring setup before, and it's a pretty
>good chip. There are easier ways (i.e., more ham like). Pretty sure that
>Solid State Design for the Radio Amateur covers these if you'd rather.
>They involve using differential hot carrier diodes driving an op amp,
>with perhaps some bias to get down to the -20 dBm level.
>
>
>
>73,
>Bob
>
>
>
it is fairly easy to go much further down than this!
With 2x 1N270, or better AA119 type germanium diodes and CA3140E
OP-amp you can measure down below -46dBm up to at least 600MHz.

I made a correction amplifier using several 1N4148 for each range, but
today, I would have tried a CA3140E buffer, with a possible log.amp
and connect this to a datalogger, which may be calibrated for every
10dB range, with some possible frequency calibration (like the one you
have on SHF power meters). With this circuit you might measure below
-40dBm on 1,296GHz, and still have useful sensitivity above 2.320 GHz.
But you have to calibrate the circuit yourself. This is accomplished
by borrowing a signal generator from work or from a friend (most SHF
friends have some sort of reliable signal generators)

73

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: Sat, 23 Aug 97 05:24:56 GMT
From: tait@primeline.net (Gary Tait)
Subject: Antenna rotator control box schematic needed.

I am looking for plans for a tv antenna rotator. It is one of the ones that
the antenna mast goes through. It is a 4 wire, with the wires connected

internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO
3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if possible.

Gary Tait,VE3VBF

---

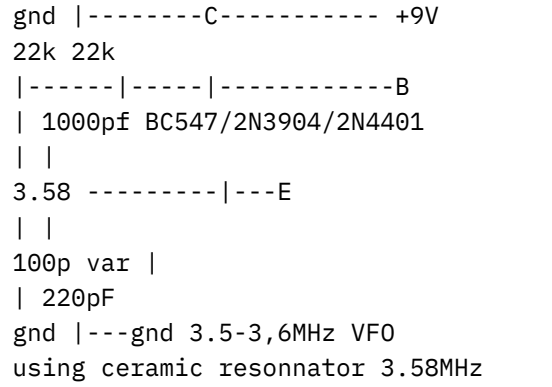
Date: Sat, 23 Aug 1997 19:04:37 GMT
From: la8ak@online.no (J M Noeding)
Subject: ceramic resonators? 80m VFO - repostrd

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon

>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?
I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin

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RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 24 Aug 97 07:22:57 GMT
From: k3ky@juno.COM (David E Sinclair)
Subject: Cheap/decent 12V supply?

Using the 12V supply only from a 5V/12V computer supply probably would
not
work well for charging a 12V lead/acid car battery. More voltage is
needed. If
the two supplies in the computer unit are not ground referenced, then
they
could be series-connected for 17V. Some simple circuitry could be used to
control or limit the battery charge current. There are several approaches
such as constant voltage, constant current, taper charging, etc. I will

be glad
to supply references/schematics, etc. on request. Some other writers have
pointed out correctly that a linear supply would be a better choice than
a
noisy computer switching supply, and that one or both supplies in the
switch-
ing unit may have a minimum current requirement. That can be easily met
with
various types of loads added in parallel with the supply needing it.

David Sinclair K3KY
e-mail: k3ky@juno.com

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Date: Sat, 23 Aug 1997 09:51:48 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes
>stevem@vax.area.com (Stephen E. Muther) wrote:
>
>
>>I do a lot of hobby boards and my employer's prototypes on a milling
>>machine. Typically I drill the holes first (before etching or milling)
>>then take the board in the back door of a cooperative board house
>>for plating. If I am in a hurry or if the board house is too busy to
>>deal with me, I use small brass or tin eyelets that I get at the
>>local hobby/model shop. They are easy to push in and solder and
>>require no cutting or trimming unlike wires.
>>
>>Steve M.
>>
>
>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

For RF prototyping where I used to work, they used little single-sided
PCBs about 1" square, with adhesive backing, with a surface mount
pattern for a single chip brought out to wider pads. These were
positioned on the Cu side of a piece of PCB laminate and the circuit
wired up directly on the Cu ground plane with wire-wrap wire or self-
fluxing magnet wire. I'll ask someone there where they got the things
from. They were very cheaply made, and were free issue in the lab. I
should have liberated a few before I left. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

---

Date: Sun, 24 Aug 1997 05:35:03 GMT
From: radiodale@dclink.com (Dale B. Allen)
Subject: FS: Mil Spec Teflon Covered Wire #20,22,24,26

I have the following colors and sizes available. This wire is stranded
tinned copper with a Teflon jacket. Limit is 100ft./size/color for
each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

---

Date: 23 Aug 1997 03:15:55 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit is available from HSC Electronics for $9.95. Try calling them at
1-800-442-5833.

Wayne, NB6M

---

Date: Fri, 22 Aug 1997 23:55:41 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: power transmission (electric)

Mike Willis wrote:
>
> Paul KeinEnen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >
> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large currents. DC has no radiation losses, which is also significant at 50 Hz over long distances. For a given RMS, DC has a 30% smaller peak current and peak voltage. DC has no capacitively coupled current loss (not the same as leakage current) therefore power factor loss, through the insulation into the salt water. This capacitive current can cause electrolysis effects.

Bill W0IYH.

---

Date: 22 Aug 1997 16:04:03 GMT
From: n4mxf@aol.com (N4MXF)
Subject: power transmission (electric)

Hi,
I've been an engineer (manager) in the undersea cable business for 30 years and know of only a few DC cable projects for very specific applications. DC would not be an effective way to transmit power. High voltage pluse cables for digital transmission (very low current) are the only cables I know fit your discription. These are not power cables. Undersea power transmission are larger cables and are usually 5,15,35,64,130kv cables having conductors with thousands of circular mils and range from 4" to 8" diameters. There are some even larger. Cables usually contain 3 or 4 main conductors and are operated in a three phase (balanced) configuration. Today, many undersea power cables contain optical light guides (fiber optics) for signal transmission. Corona is normally controlled by proper shielding and the use of semi-con materials. External damage is the major cable failure although the we still like to get excited over the effects of "treeing" (crack propagation within a dielectric due to electro stress). If you would like any more details on cable or cable useage, drop me an email. Oxford,William & Associates: Cable Systems Consultants. wjoxford@aol.com or N4MXF@aol.com. 73 Bill

---

Date: 24 Aug 1997 03:56:29 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: QEX - info please

>. I would also
>welcome any information with regard to how I can subscribe to the
>magazine.
>
>If you're able to help, many thanks.
>--

Well, you might consider subscribing. You can do it through the League at their regular address or FAX number, or even I suspect thru their bulletin board.

It probably gets about as sticky though as we have it getting RadComm across the pond.

W4ZCB

---

Date: 24 Aug 1997 05:54:30 GMT
From: "ron ab6zx" <dom@shocking.com>
Subject: Relay needed

Looking to buy a used antenna relay capable of 800-1000 watts, can be open frame or coaxial, speed not necessary as not for QSK. Will be used for temporary bench tests only.
--
ron ab6zx chico ca
email: dom@shocking.com

---

Date: Sat, 23 Aug 1997 21:02:45 +0200
From: Bob Mueller <r.mueller@kfa-juelich.de>
Subject: Silver plating question

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some
> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the
> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver
> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick
almost any metal into the solution the silver ions will pick up an
electron from the metal and become metallic silver while one of the
substrate ions will go into solution. This is the secret of
"electroless" plating. Sounds wonderful, but it is not; the metal
deposited this way is poorly bonded and can be often wiped off with a
rag. It is also porous. Metals going into solution include copper,
zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually,
it probably could be made to work, if you are good and work fast. The
problem is that the melting point of silver is lower than the melting
point of copper (probably higher than for brass), but not a lot lower (a
bit over 100 degrees C.) You are at risk of melting the copper if you
heat with a tourch. It would work better with a silver bath (want to
melt a liter of silver in the kitchen?) with good temperature control.
There is another problem; the silver and copper rapidly alloy to form
a lower melting point alloy. If you do not work fast this process can
cause holes to develop as the alloy forms ever deeper into the
substrate. This is something you will understand better if you ever did
soldering on fine copper wire with lead-tin solder. The wire disappears
if you are too slow. The silver/copper process will be faster. You will
get a great bond, if you are good enough.

Bob

---

Date: Sat, 23 Aug 1997 11:13:05 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO, paralelling varactors

FRANK,

I guess I was not as clear as I should have been.

1 varactor VCO ( MV109)
case 1: CFIXED = 100 PF
CVARACTOR= 2-20PF
CTOTAL= 102-120 PF
Cmax/cmin= 1.176
FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%

2 paralell Varactor VCO( 2*MV 109)
case 2: CFIXED = 100 PF
CVARACTOR= 4-40PF : 2 varactors in parallel
CTOTAL= 104 to 140 PF

Cmax/Cmin= 140/104= 1.346
FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%

Thus the max to min capacity should change.

But I could not detect the change in frequency coverage
after adding the second varactor.
(Maybe I made an error in my experiment.)

I guess that my question was, is the maximum capacity really
going to double when you paralell another varactor across the
varactor of a VCO. I am specificall talking about (1 varactor
VCO) and NOT the 2 back-to-back varactor VCO.

I dont really know, but, I think that the one varactor VCO
drives the varactors in a highly non-linear way.There will be 5-10
volts RF/AC across the varactor, and 1-10 volts DC to tune it.
Thus, I believe that varactor will be working in a highly nonlinear
way. Also, Q is rather low for these types of varactors.

Anyway, I try this varactor paralleling again, and hopefully I had
done something wrong earlier, and paralelling varactors really
does increase their max capacity in case of a VCO.

Thanks for your thoughts.

John M. Franke wrote:
>
> What is important is the maximum to minimum capacitance ratio of the
> varactor. If the maximum capacitance is 100 pF and the minimum is 10
> pF, the ratio is of course 100/10 = 10. Paralleling two varactors
> produces a new ratio of 200/20 = 10, no change. Since the resonant
> frequency is equal to 1 divided by 2 pi times the square root of L times
> C, the change in frequency is proportional to 1 over the square root of
> the change in the LC product. In this case the frequency range is the
> square root of 10. One way to help see this is to insert values into
> the equation and see what happens. Pick an inductor, calculate the
> minimum and maximum frequency for the minimum and maximum capacitance
> with one varactor. Then repeat for two.
> Does this help?
> John

--
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pay me US $500 for each SPAM or Junk-Mail message you send to me.
---------------------------------------------------------------------

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Date: Sun, 24 Aug 1997 08:19:58 GMT
From: keinanen@sci.fi (Paul KeinEnen)
Subject: VCO, paralelling varactors

"P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

<clip>

>I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
>
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>volts RF/AC across the varactor, and 1-10 volts DC to tune it.
>Thus, I believe that varactor will be working in a highly nonlinear
>way. Also, Q is rather low for these types of varactors.

Sounds like the conditions are similar to the parametric amplifier or varactor tripler :-).

If the high RF voltage across the varactor is your problem, then why not use a varactor with large maximum capacitance (a tuning range from ,say, 25 pF to 250 pF) in series with a small (say 100 pF) fixed capacitor. The two capacitances will form a capacitive voltage divider, at the minimum capacitance the AC voltage across the varactor is only slightly reduced but at maximum capacitance only a very small fraction of the RF voltage is across the varactor (2/7 in this case). This greatly reduces the risk for forward biasing at low tuning voltages.

Your problem seem to be the large parallel capacitance, so it is quite unrealistic to expect to get any large tuning range with varactors with low maximum capacitance. With values in my example, you would get sqrt ( (100+71)pF/(100+20)pF ) = 1.19 or 19 %. Using a larger series capacitance would make the tuning range even larger, but it would also increase the RF voltage across the varactor.

Paul OH3LWR

---

Date: Sat, 23 Aug 1997 06:34:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO , paralleling Varactors

Does anybody know why paralelling another varactor across
the varactor of a LC Voltage controlled oscilator not increase
the tuning range of the VCO?

Both the varactors are reverse biased by the tuning voltage,
as varactors should be. So, connecting another varactor
across the LC tank circuit of a VCO should increase the freq
range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts
or so. The DC bias voltage for the varactor is about 1-10 volts or so.
So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

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End of Ham-Homebrew Digest V97 #479
******************************

# 2116. WTB AZ-EL ROTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5tpoq9$fb@cletus.bright.net>
Source record: 91486

Hi...

I am looking to buy and AZ-EL rotor. Not for EME so I dont need anything
very big. What have you?

Norman
N8RGR

# 2117. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC56653.063A000007C9.uuout@mandic.com.br>
Source record: 91487

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%

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range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts
or so. The DC bias voltage for the varactor is about 1-10 volts or so.
So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

---------------------------------------------------------------------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---------------------------------------------------------------------

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End of Ham-Homebrew Digest V97 #479
******************************

------------------------------

Date: 24 Aug 1997 01:27:37 GMT
From: k1bqt@aol.com (K1BQT)
Subject: MRF 479 Needed

Hi--

If you can't get a 479, try a 2SC3133. Good for 15W PEP.

Rick K1BQT

------------------------------

Date: Sun, 24 Aug 1997 00:39:12 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures wrote:
>

> I am trying to locate a PNP transistor with highest available VCEO value, ide
ally
> up to 1kV.
>
> ICmax or Pw is not too important, neither is hFE.
>
> So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does no
t
> seem to be available anywhere in North America.
>
> Any advice would be greatly appreciated.
>
> Thanks
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
> fbures@alchemy.chem.utoronto.ca (use this address for replies)

You might try NTE for a direct substitute? They have a searchable table
for all kinds of semiconductors at http://www.nte.com/

---

Date: Sat, 23 Aug 1997 18:38:57 -0700
From: laura halliday <ve7ldh@direct.ca>
Subject: Regen and DC Receivers - ARRL doesn't like them!

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker
<parkerp@pcug.org.auNOSPAM> writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).
>
>I'm amazed how negative they are about regenerative & DC receivers. On
>regen receivers, I quote:
> (snip)

Maybe you should have a look at a more recent issue? My latest
copy (1996) discusses regens as primarily a historical thing, but
considers direct conversion receivers to be an effective way of
receiving signals.

I can think of a number of important designs between 1988 and 1996
that would have changed the perception of DC receivers as cute toys,
but not serious receivers...

As always, you get what you pay for. An extremely simple receiver
will get the job done under some circumstances, but may not
hold up under extreme conditions.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

---

Date: 24 Aug 1997 01:36:16 GMT
From: norman <norsan@bright.net>
Subject: Value of Dow-Key relay?

Dow key relays can be used for much more than switching from transmit to receive in boatanchors. Some uses are:

switching between 2 antennas
switching in/out a preamplifier at the antenna
switching transverters to a common IF
switching rigs to a SWR meter

and many more.

Norman N8RGR

---

Date: Sun, 24 Aug 1997 09:45:13 GMT
From: ttwist@online.no (Tom Twist)
Subject: VCO, paralelling varactors

On Sat, 23 Aug 1997 11:13:05 -0400, "P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

>FRANK,
>
>I guess I was not as clear as I should have been.
>
>1 varactor VCO ( MV109)
>case 1: CFIXED = 100 PF
> CVARACTOR= 2-20PF
> CTOTAL= 102-120 PF
> Cmax/cmin= 1.176
> FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%
>
>2 paralell Varactor VCO( 2*MV 109)
>case 2: CFIXED = 100 PF
> CVARACTOR= 4-40PF : 2 varactors in parallel
> CTOTAL= 104 to 140 PF
> Cmax/Cmin= 140/104= 1.346
> FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%
>
>Thus the max to min capacity should change.
>
>But I could not detect the change in frequency coverage
>after adding the second varactor.
>(Maybe I made an error in my experiment.)
>
>I guess that my question was, is the maximum capacity really
>going to double when you paralell another varactor across the
>varactor of a VCO. I am specificall talking about (1 varactor

>VCO) and NOT the 2 back-to-back varactor VCO.
<snip>

Perhaps the problem with paralleling two varactors is that the two diodes is not matched, resulting in more current flowing in one of the diodes.
Try using two resistors (and RFCs), to separate the bias voltages, and use two (relatively) large capacitors in series with the HF path. I'm too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

------------------------------

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

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End of Ham-Homebrew Digest V97 #481
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## 2118. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC56653.7C78000007C8.uuout@mandic.com.br>
Source record: 91488

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Sun Aug 24 14:29:36 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id OAA07559; Sun, 24 Aug 1997 14:29:36 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id OAA29025
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 14:37:37 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id IAA26641 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 08:52:06 -0700 (PDT)
Received: by mail.ucsd.edu; id IAA19738
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 08:37:35 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id IAA19707
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 08:37:29 -0700 (PDT)
Message-Id: <199708241537.IAA19707@mail.ucsd.edu>
Date: Sun, 24 Aug 97 08:37:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #481
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 481

Today's Topics:
11volts from 12 volts...
Bounced Mail -> User Not Found
Cheap/decent 12V supply?
```

Ham-Homebrew Digest V97 #479
MRF 479 Needed
PNP transistor, VCEO highest possible - looking for
Regen and DC Receivers - ARRL doesn't like them!
Value of Dow-Key relay?
VCO, paralelling varactors
Yaesu AZ -EL rotator

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Fri, 22 Aug 1997 03:23:28 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: 11volts from 12 volts...

Hi bill,

Almost every 12 volt supply I have built using a 3 terminal
fixed regulator puts out about 11.5 volts or so. It seems
that the 12 volt regulators are manufactured with WIDE
tolerances.

Just use a diode or two in the ground lead of your 3 terminal reg
to increase output 11 volts to 12 volts or so.

D1, D2= In4001
C1= 10uf/16volts electrolytic

D2

```
|-----------------|<|----------------
| |
| |------------ |
| | 7812 |--------------------
--------|-----------| | |
|------------ |
| |
--- | +
\ / D1 ---
---- ---C1
| |
-------------------------------------------------------
```

In article <33efbc98.11731760@news.erols.com>, Bill Meara
<wmeara@erols.com> writes

>
>I'm thinking that I simply bought an 11 volt regulator in 12 volt
>clothing! Tomorrow I'll try a new part (and will report back on
>results).
>
>Thanks again. 73 Bill N2CQR

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: 24 Aug 97 14:28:20 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 08:56:27 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: Cheap/decent 12V supply?

These cheap switching power supplies are terrible choices for radio use,
far too noisy. Best is battery ONLY...a decent 12V Lead Acid car battery
used AS-IS (sans charger) then when you switch OFF your set up...you
turn ON the charger.
Simple, Cheap, loads of current and, best of all, quiet.
friend,
Lute

jason zawodny wrote:

> Well the question this week goes as such. Computer power
> supplies
> supply both 5V and 12V, and there are plenty laying around at work
> that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car
> battery
> which provides that actual feed (and emergency backup power) to the

> radio would be sufficient? Im trying to avoid spending the 130 dollars
>
> I've seen radio power supplies going for...
>
> Thanks
>
> jtz
>
>
> --
> --
> ------------------------------------------------------------------------
>
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ------------------------------------------------------------------
> --------

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

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Date: Sun, 24 Aug 97 02:23:52 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #479

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 479

Today's Topics:
Accurate measurement of low level RF in the VHF/UHF region
Antenna rotator control box schematic needed.
ceramic resonators? 80m VFO - repostrd
Cheap/decent 12V supply?
Double Sided PC Boards
FS: Mil Spec Teflon Covered Wire #20,22,24,26
Pixie 2 Transceiver - Where can I get one?
power transmission (electric) (2 msgs)
QEX - info please
Relay needed
Silver plating question
VCO, paralelling varactors (2 msgs)
VCO , paralleling Varactors

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up
>>>to 150Mhz.
>>>
>>>Levels will range between -20dBm and +20dBm.
>>>
>>>Has anyone got any suggestions for a suitable
>>>instrument and will a RF Millivoltmeter be more
>>>flexible than an RF Powermeter.
>>>
>>>Thanks
>>>
>>>Niels Montanana
>>>G8RWG
>>>
>>>nielsm@lcpub.co.uk
>>
>>Same situation, I'm thinking of building something using the LT1088, or
>>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>>datasheet (FARNELL server claims to have them but then says they aren't
>>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>>PowerMeter head (working) going on the cheap I'd be interested. TIA
>>
>> 73 de Laurens M1CCO
>
>Do you have web access? Analog Devices home page has a search engine at
>the opening screen. I entered AD737 and got it. They're www.analog.com.
>
>I've used the 737 in a signal measuring setup before, and it's a pretty

>good chip. There are easier ways (i.e., more ham like). Pretty sure that
>Solid State Design for the Radio Amateur covers these if you'd rather.
>They involve using differential hot carrier diodes driving an op amp,
>with perhaps some bias to get down to the -20 dBm level.
>
>
>
>73,
>Bob
>
>
>
it is fairly easy to go much further down than this!
With 2x 1N270, or better AA119 type germanium diodes and CA3140E
OP-amp you can measure down below -46dBm up to at least 600MHz.

I made a correction amplifier using several 1N4148 for each range, but
today, I would have tried a CA3140E buffer, with a possible log.amp
and connect this to a datalogger, which may be calibrated for every
10dB range, with some possible frequency calibration (like the one you
have on SHF power meters). With this circuit you might measure below
-40dBm on 1,296GHz, and still have useful sensitivity above 2.320 GHz.
But you have to calibrate the circuit yourself. This is accomplished
by borrowing a signal generator from work or from a friend (most SHF
friends have some sort of reliable signal generators)

73

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: Sat, 23 Aug 97 05:24:56 GMT
From: tait@primeline.net (Gary Tait)
Subject: Antenna rotator control box schematic needed.

I am looking for plans for a tv antenna rotator. It is one of the ones that
the antenna mast goes through. It is a 4 wire, with the wires connected
internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO
3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if
possible.

Gary Tait,VE3VBF

---

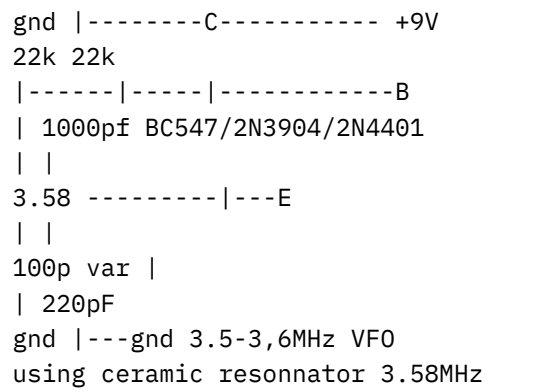
Date: Sat, 23 Aug 1997 19:04:37 GMT
From: la8ak@online.no (J M Noeding)
Subject: ceramic resonators? 80m VFO - repostrd

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?
I have made experiments with oscillators using ceramic resonators for

250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin



using ceramic resonnator 3.58MHz

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 24 Aug 97 07:22:57 GMT
From: k3ky@juno.COM (David E Sinclair)
Subject: Cheap/decent 12V supply?

Using the 12V supply only from a 5V/12V computer supply probably would
not
work well for charging a 12V lead/acid car battery. More voltage is
needed. If
the two supplies in the computer unit are not ground referenced, then
they
could be series-connected for 17V. Some simple circuitry could be used to
control or limit the battery charge current. There are several approaches
such as constant voltage, constant current, taper charging, etc. I will
be glad
to supply references/schematics, etc. on request. Some other writers have
pointed out correctly that a linear supply would be a better choice than
a
noisy computer switching supply, and that one or both supplies in the
switch-
ing unit may have a minimum current requirement. That can be easily met
with
various types of loads added in parallel with the supply needing it.

David Sinclair K3KY
e-mail: k3ky@juno.com

---

Date: Sat, 23 Aug 1997 09:51:48 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes
>stevem@vax.area.com (Stephen E. Muther) wrote:
>
>
>>I do a lot of hobby boards and my employer's prototypes on a milling
>>machine. Typically I drill the holes first (before etching or milling)
>>then take the board in the back door of a cooperative board house
>>for plating. If I am in a hurry or if the board house is too busy to
>>deal with me, I use small brass or tin eyelets that I get at the
>>local hobby/model shop. They are easy to push in and solder and
>>require no cutting or trimming unlike wires.
>>
>>Steve M.
>>
>
>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

For RF prototyping where I used to work, they used little single-sided
PCBs about 1" square, with adhesive backing, with a surface mount
pattern for a single chip brought out to wider pads. These were
positioned on the Cu side of a piece of PCB laminate and the circuit
wired up directly on the Cu ground plane with wire-wrap wire or self-
fluxing magnet wire. I'll ask someone there where they got the things
from. They were very cheaply made, and were free issue in the lab. I
should have liberated a few before I left. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

---

Date: Sun, 24 Aug 1997 05:35:03 GMT
From: radiodale@dclink.com (Dale B. Allen)
Subject: FS: Mil Spec Teflon Covered Wire #20,22,24,26

I have the following colors and sizes available. This wire is stranded
tinned copper with a Teflon jacket. Limit is 100ft./size/color for

each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

---

Date: 23 Aug 1997 03:15:55 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit is available from HSC Electronics for $9.95. Try calling them at
1-800-442-5833.

Wayne, NB6M

---

Date: Fri, 22 Aug 1997 23:55:41 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: power transmission (electric)

Mike Willis wrote:
>
> Paul KeinEnen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >
> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large
currents. DC has no radiation losses, which is also significant at 50 Hz
over long distances. For a given RMS, DC has a 30% smaller peak current
and peak voltage. DC has no capacitively coupled current loss (not the
same as leakage current) therefore power factor loss, through the
insulation into the salt water. This capacitive current can cause
electrolysis effects.

Bill W0IYH.

---

Date: 22 Aug 1997 16:04:03 GMT
From: n4mxf@aol.com (N4MXF)

Subject: power transmission (electric)

Hi,
I've been an engineer (manager) in the undersea cable business for 30 years and know of only a few DC cable projects for very specific applications. DC would not be an effective way to transmit power. High voltage pluse cables for digital transmission (very low current) are the only cables I know fit your discription. These are not power cables. Undersea power transmission are larger cables and are usually 5,15,35,64,130kv cables having conductors with thousands of circular mils and range from 4" to 8" diameters. There are some even larger. Cables usually contain 3 or 4 main conductors and are operated in a three phase (balanced) configuration. Today, many undersea power cables contain optical light guides (fiber optics) for signal transmission. Corona is normally controlled by proper shielding and the use of semi-con materials. External damage is the major cable failure although the we still like to get excited over the effects of "treeing" (crack propagation within a dielectric due to electro stress). If you would like any more details on cable or cable useage, drop me an email. Oxford,William & Associates: Cable Systems Consultants. wjoxford@aol.com or N4MXF@aol.com. 73 Bill

---

Date: 24 Aug 1997 03:56:29 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: QEX - info please

>. I would also
>welcome any information with regard to how I can subscribe to the
>magazine.
>
>If you're able to help, many thanks.
>--

Well, you might consider subscribing. You can do it through the League at their regular address or FAX number, or even I suspect thru their bulletin board.

It probably gets about as sticky though as we have it getting RadComm across the pond.

W4ZCB

---

Date: 24 Aug 1997 05:54:30 GMT
From: "ron ab6zx" <dom@shocking.com>
Subject: Relay needed

Looking to buy a used antenna relay capable of 800-1000 watts, can be open frame or coaxial, speed not necessary as not for QSK. Will be used for temporary bench tests only.
--

ron ab6zx chico ca
email: dom@shocking.com

---

Date: Sat, 23 Aug 1997 21:02:45 +0200
From: Bob Mueller <r.mueller@kfa-juelich.de>
Subject: Silver plating question

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some
> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the
> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver
> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick
almost any metal into the solution the silver ions will pick up an

electron from the metal and become metallic silver while one of the substrate ions will go into solution. This is the secret of "electroless" plating. Sounds wonderful, but it is not; the metal deposited this way is poorly bonded and can be often wiped off with a rag. It is also porous. Metals going into solution include copper, zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually, it probably could be made to work, if you are good and work fast. The problem is that the melting point of silver is lower than the melting point of copper (probably higher than for brass), but not a lot lower (a bit over 100 degrees C.) You are at risk of melting the copper if you heat with a tourch. It would work better with a silver bath (want to melt a liter of silver in the kitchen?) with good temperature control. There is another problem; the silver and copper rapidly alloy to form a lower melting point alloy. If you do not work fast this process can cause holes to develop as the alloy forms ever deeper into the substrate. This is something you will understand better if you ever did soldering on fine copper wire with lead-tin solder. The wire disappears if you are too slow. The silver/copper process will be faster. You will get a great bond, if you are good enough.

Bob

---

Date: Sat, 23 Aug 1997 11:13:05 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO, paralelling varactors

FRANK,

I guess I was not as clear as I should have been.

1 varactor VCO ( MV109)
case 1: CFIXED = 100 PF
CVARACTOR= 2-20PF
CTOTAL= 102-120 PF
Cmax/cmin= 1.176
FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%

2 paralell Varactor VCO( 2*MV 109)
case 2: CFIXED = 100 PF
CVARACTOR= 4-40PF : 2 varactors in parallel
CTOTAL= 104 to 140 PF
Cmax/Cmin= 140/104= 1.346

# 2119. Re: VCO , paralleling Varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: "P. Singh" <screwed@nospam.net>
Message-ID: <34003E43.58BA@nospam.net>
Source record: 91489

<Two pairs> of varactors paired connected in paralell.
Does a pair of varactors mean two varactors wired back-to-back?
This might work if you are paralelling back to back pairs of
varactors .

I tried to paralell single varactors across a LC tank of
a VCO.

Also, the circuit where I tried this varactor paralelling is in
the VCO that comes in the Ten-TEC QRP CW kit model 1340 .

The tuning range of the VCO inside this kit at 40 M is 70 KHZ.

This VCO drifts like crazy. (yes I have glued the toroid to the
PCB with hot melt glue)

This VCO uses 1 tuning diode MV2109 for tuning it. This VCO
tunes DOWN i.e. 4.00 to 3.930 for covering 7.00 to 7.070 .

I figured that sticking another varactor diode across the
already present MV2109 should make it tune something like
7010 to 7110 or so.

Boy, was I wrong! It hardly changed anything .

Anyway, how do you bias a varactor high enough at about
20-30 volts so that it does not draw current from the LC
tank circuit of the VCO and still have enough tuning range!

Well , you might use a large varactor like 100 PF varactor
and use a 20 PF bias range around 20-30 volts or.
Didnt someone tell me that large varactors have LOW Q
inherently.Also, large varactors are noisier.

Also, generating a 20-30 volt tuning voltage is a problem
in gear like this.

So, we are back to where we started.

The Ten-Tec guys do get a terrific tuning range at about 70 KHZ
on 40 M for their 1 varactor VCO, with a tuning voltage of
1-6.8 volts I think.

Well, they used to used 2 back to back varactor at one time for
VCO etc, but that increases the cost 4:1 for varactors.

I think it is nowadays more fashionable to use 1 varactors for
LC tank of VCO, even though that will reduce the circuit Q and
stability. I guess that the resultant lower cost and the use

of the VCO with a synthesizer chip is the reason for this.

So, it seems like that the varactor is drawing current from the
tuned circuit!
Well that must be shooting down the LC circuit Q as well, and,
resulting in drifting etc.

The2X4 wrote:
>
> Hi
>
> THis was done succesfully in the Uniden President Jackson CB
> radio.Looking at the schematic there are actually two pair of varactors
> in addition to the main varactor used in the VCO circuit to extend the range.
>
> The aux pairs are switched in by the channel selector at
> a specific programming word.
>
> Hope this helps...
>
> Carl
> The2x4

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

## 2120. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC56B0B.5880000007EB.uuout@mandic.com.br>
Source record: 91490

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Regen and DC Receivers - ARRL doesn't like them!
Room Temp "Oven" for Quartz? (2 msgs)
WTB RF amp for 11M

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 23 Aug 97 16:31:04 GMT
From: NORMANMO@miavx1.acs.muohio.EDU
Subject: <no subject>

add

---

Date: Wed, 20 Aug 1997 12:49:37 -0500
From: K0PW <pwentzel@minn.net>
Subject: Diathermy Machine $100.00

I have a friend who has a working diathermy machine for sale. I tore one
of these apart a couple of eons ago, and harvested an excellent HV power
supply for a linear -- also some heavy duty RF components. This is too
heavy to ship. If anyone is interested, send me an e-mail and I'll pass
along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

---

Date: Sat, 23 Aug 1997 07:02:26 GMT
From: allent@mnsinc.com (David Allen)
Subject: Double Sided PC Boards

stevem@vax.area.com (Stephen E. Muther) wrote:

>I do a lot of hobby boards and my employer's prototypes on a milling
>machine. Typically I drill the holes first (before etching or milling)
>then take the board in the back door of a cooperative board house
>for plating. If I am in a hurry or if the board house is too busy to
>deal with me, I use small brass or tin eyelets that I get at the
>local hobby/model shop. They are easy to push in and solder and
>require no cutting or trimming unlike wires.
>
>Steve M.
>

On a tangential issue, has anyone done much hobby work with the new SOT gull-wing or even surface mount packages? The "pin" spacing on some of these is getting awfully small. I've gotten a few samples of some nice IC's I's like to evaluate, but etching and soldering at those line widths makes me wonder if at some point the amateur homebrewer is going to get scraped off.

Dave Allen
WA2BSL
Falls Church, VA

---

Date: 23 Aug 1997 19:57:00 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 1997 06:03:04 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Fast O'scope for tiny Homebrewer budget

> wrt@eskimo.com (Bill Turner) wrote:

> >I was a test technician on the Tektronix 400 series production line
> >back in the '70s and '80s. We built so many of those we felt every
> >house in America must have one. Thanks for the kind words!
> >

> >73, Bill W7TI

I was issued a 454 when I joined a research project at the University
of Essex in 1970. The only more beautiful thing was the young lady
who came with it. (The 454 is no longer with me).

---

Date: 23 Aug 1997 12:22:45 GMT
From: "David Newkirk" <dnewkirk@bellatlantic.net>
Subject: Help!: Taming HF preamp

Bill Meara <wmeara@erols.com> wrote in article
<33f95b77.1710144@news.erols.com>...

> I went ahead and built a little grounded gate FET pre amp circuit.
> The circuit comes out of W1FB's Design Notebook.

[deletions]

> I have one problem that I would like to ask the group about: As I
> tweak the two tuned circuits (input and output) in the pre amp, it
> breaks into oscillation whenever I put them both at their resonant
> points. If I back off a bit on the input tank, the oscillation goes
> away, sensitivity remains sufficiently high and the 22 meter gang
> continues to be blocked. I suspect I may have failed to use a
> sufficiently short PC board trace to ground for the FET gate.
>
> Anyway, is this worth fixing or should I just leave it as it is? Is
> it normal for grounded gate FET preamps to behave this way? Am I
> losing performance by operating the input circuit slightly off
> resonant frequency? Can someone explain WHY this circuit is doing
> this (Too much gain? Why would the lead length matter?)

The lead length doesn't matter so much as the circuit's design. The
problem with that circuit is that it's inherently unstable when its input
and output are tuned. (Grounding a JFET's gate doesn't shield O from I as
grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy
JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
the circuit may not oscillate.

That circuit also disserves you by getting much less selectivity out of two
tuned circuits than can easily be achieved with them.

A better approach is to close that book and use a circuit engineered for
predictable gain and stability. One recommendation is the single-40673
amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s
"Progressive Communications Receiver," later carried in many subsequent
ARRL *Handbook*s under the title "High-Performance Communications Receiver"
(it's in the 1992 edition, for instance). (Yes, 40673s are now "new old
stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK
[Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be passe

over in the US, but in Japan and Europe they're still very much viable. The Japanese in particular have taken receive-class JFETs and MOSFETs much further than manufacturers here; even the [old] 2SK125, for instance, is much better than the best [J310/U310] generally available here.)

When you combine Hayward's amplifier with the appropriate double-tuned-circuit output filter (described in the same article that describes the amplifier), you'll have good, predictable gain (10 dB) *and* the selectivity you need. Wes's circuit isn't the only possible solution to your problem, of course, but it has withstood the tests of time and use that the other circuit hasn't.

Regards,

David Newkirk, W9VES

---

Date: 22 Aug 1997 23:54:00 GMT
From: rod7rg@aol.com (ROD7RG)
Subject: Help.

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature from the Canadian or Ametuer Radio Relay Leagues. They should be able to provide you some contacts.

Rod
KL7RG/8

---

Date: Sat, 23 Aug 1997 07:16:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: help taming HF : some thoughts

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as gr
ounding a vacuum tube's grid can do.)
>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,

> the circuit may not oscillate.
>
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as
to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the
top or the hot end of the antenna.
2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine
tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.

I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
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Date: Sat, 23 Aug 1997 20:02:36 GMT
From: la8ak@online.no (J M Noeding)
Subject: measuring VVC-diodes, how?

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.
I have a Radiometer Q-meter, but I would prefer an easier way than
measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #482
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# 2121. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC56B0B.76B8000007EA.uuout@mandic.com.br>
Source record: 91491

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Sun Aug 24 15:11:59 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id PAA10189; Sun, 24 Aug 1997 15:11:57 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id PAA00843
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 15:19:35 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id JAA27393 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 09:22:04 -0700 (PDT)
Received: by mail.ucsd.edu; id IAA20731
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 08:52:15 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id IAA20695
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 08:52:07 -0700 (PDT)
Message-Id: <199708241552.IAA20695@mail.ucsd.edu>
Date: Sun, 24 Aug 97 08:52:06 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #482
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 482

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #478
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Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 14:39:15 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
Date: Fri, 22 Aug 1997 08:39:55 -0400
From: Zack Lau <zlau@arrl.org>
Subject: PAGER NOISE HELP

John Clarke wrote:
>
> Help requested, for a amateur located in the valley below a commercial
> tower site briselling with pager antenna, so any 2 metre signals are
> flatened by the data streams.
> Would a high Q tunable notch filter help? Any circuits or pointers will be

Not much, if there are a lots of different pagers in different
frequencies.

A good choice might be a sharp bandpass filter--the bigger the
better. One the size of a loaf of bread might do the trick, though
people have made them out of 20 gallon garbage cans... Zack W1VT

> much appreciated. Cheers and thank you in advance, John

------------------------------

Date: Fri, 22 Aug 1997 14:28:45 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a

device? Thanks for any help.

---

Date: Fri, 22 Aug 1997 14:21:43 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

---

Date: 23 Aug 1997 03:08:01 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try
calling them at 1-800-442-5833.

Wayne NB6M

---

Date: 23 Aug 1997 11:13:53 GMT
From: hill@rowland.org (Winfield Hill)
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can
suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/
Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
_/ _/ _/ _/ _/
http://www.artofelectronics.com/ _/ _/ _/_/ _/_/_/_/

---

Date: 23 Aug 1997 15:30:51 GMT
From: pbunn624@teleplex.net (Pat Bunn)
Subject: power transmission (electric)

In article <19970819234401.TAA19821@ladder01.news.aol.com>,
johnsonhe@aol.com says...

>
>>
>>Why do power companies use DC to transmitt power. 400KV, 500MW. What
kind
>>of equipment is used to transform from AC to DC and DC to AC?
>>Could it be power factor?
>>73 and TIA
>
>The main reason is that DC is subject to only the resistance losses in
the conductors. The line inductance and capacitance does not cause
reactive voltage drop is a DC transmission line. In an AC line these
losses are serious and must be corrected wth very expensive capacitor
banks.

The reason that DC is not often used is that the cost of the high
voltage solid state conversion systems have been very expensive in the
past. Recently these cost have dropped and more DC transmission lines
are being considered and will be built.

The merits of DC vs AC power generation,transmission, and distribution
were highly debated at the turn of the century by Edison (DC) and Tesla
(AC). Tesla eventually won the debate, but with the changes in
technology of the next century, Edison and DC may be exonerated.

Pat Bunn

---

Date: 22 Aug 1997 23:24:49 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: RAMSEY SR-1 SW kit

: I dont see much change in the tuning
: slugs of the RF, IF and OSC cans unless
: I'm at the extremes.

Sorry, the OSC can changes the tuning
range just fine.

---

Date: 22 Aug 1997 23:07:17 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Regen and DC Receivers - ARRL doesn't like them!

Peter Parker <parkerp@pcug.org.auNOSPAM> wrote in article
<33fe0c12.0@newshost.pcug.org.au>...
> Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception.

Either the phasing or "Weaver" techniques can be used to build a
simple "single signal" receiver and a SSB transmitter, too ... it is
possible to obtain substantial undesired sideband suppression without

too much difficulty ... especially with DSP techniques ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sat, 23 Aug 1997 06:08:53 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Room Temp "Oven" for Quartz?

In message <Pine.GSO.3.94.970822142932.16140A-100000@Stratus.CAM.ORG>
Michael Black <blackm00@CAM.ORG> writes:

> Another possibility, though not for portable operation, is to bury the
> oscillator in the ground. I remember some articles in the ham magazines
> about this about 35 years ago, back when moonbounce was first getting
> attention and transmitters consisted of a low frequency oscillator
> followed by divider chains. Burying the oscillator in the ground puts it
> at a constant temperature. Its the same concept used when houses are
> buried for insulation purposes. The temperature isn't warm, but it is
> constant and isolated. Coax would be run to the shack, and DC voltage
> would be sent down to the transistorized oscillator along the coax.
>
> Michael VE2BVW

G3LTF used to do this.

73 de G3PAI

---

Date: Sat, 23 Aug 1997 01:34:02 +0100
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Subject: Room Temp "Oven" for Quartz?

In article <33FB23CA.7095@hnvr.com>, Kenneth M Gianino <ken@hnvr.com>
writes
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).
>
>I'm looking for a simple but effective scheme to improve stability
>without spending a lot of money. I'd like match Yaesu's 2ppm while
>retaining the original crystal. It is 10-point-something-MHz and I'm
>not likely to find a surplus TCXO or OCXO.
Im a bit late on the scene with this thread however:
If you have power available and dont mind the warm up time its easier to

---

Date: Sat, 23 Aug 1997 17:35:20 GMT
From: rwclark@rwclark.seanet.com (Richard Clark)

Subject: Shortwave RX Antenna

On Mon, 18 Aug 1997 09:25:23 -0700, "hf.broekhuizen (SBKM-ME/C3)"
<hf.broekhuizen@navy.disp.mindef.nl> wrote:

>I do not have specs of your receiver, but I agree with Gary KE4ZV: the
>pre-amp for your HF-RX should not make a difference, since there is no
>improvement in SNR (N being mainly the atmospheric noise on HF).
>
>More likely by adding the pre-amp you overload the input of your
>HF-receiver with too strong signals, thus creating stations as products
>on frequencies they never have been.
>I.e.: by non-linearity in the high part of the dynamic range (1 dB
>compression point etc.) of the receiver reciprocal mixing occurs. As a
>result frequencies are generated as (f1+f2) and (f1-f2), but also
>higher-order products.
>The operator will now notice stations on frequencies never radiated by
>any transmitter, so on a different location in the frequency band.
>
>--
Hi all,

The principle problem with the responses to this topic is that
amateurs employ what is called "pre-amps". Much of what follows this
presumption is correct, but inappropriate to SWL (due to the presumed
application of the "pre-amp").

Modestly priced receivers often used by SWL'ers do NOT need wideband
amplification, and their receivers are not atmospheric noise limited.
As already identified, filtering pays off and post-amplification would
return the filter's loss with perhaps some overall gain improvement.
The term for such a device is Pre-selector. Hams having been for
years passive in construction practices have allowed commercial
vendors to dominate design issues by virtue of offering "features."

A good receiver has front end tuning, often several tuned RF stages
prior to the first mixer. These stages are rare in current designs
having been consigned to the dust-bin by marketing department design
choices. Simply put they view that the Ham would rather have his hand
wither than reach for a "tuning" knob. That it isn't built into the
VFO knob is again a marketing issue in that cost issues arrise.
Tracking and alignment problems abound requiring the parts count to
push against the profit margin.

I have three friends with front-end overload problems from a nearyby
AM commercial station. Their rigs are top of line Kenwoods and they
suffer the same as my lowly DX-440 which cost an eighth of their
price. Both the DX-440 and these Kenwoods suffer the same design
shortfall: wide open front ends (OK so they are Band filtered, they
suffer all the same!). Pre-selectors would solve the problems all
around, but I already know my friends would shudder to have to reach
for a second knob (much less tuner). They conform to the expectations

of Marketeers and their purchases have validated the entropy of
design.

SWL'ers look for construction projects for Pre-selectors or tuned
pre-amps. This is the single greatest improvement you can make
outside of building IF ancillaries such as Q-multipliers, crystal
lattice filters, or another stage of mixing to a lower, narrower IF.
Also, do not neglect the Tuner as the cheapest means to reject noise
and interfering stations. Sophisticated tuning networks with reject
notches also keep cost low. Much of this material was present in the
ARRL Handbooks of the '60's. I hope these common engineering issues
haven't become folk-lore through neglect.

73's
Richard Clark, KB7QHC, WPE0EPH

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End of Ham-Homebrew Digest V97 #478
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Date: 24 Aug 97 14:39:14 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 97 20:26:34 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #478

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 478

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
F.S. - Tubes, books, much misc...
Ham-Homebrew Digest V97 #477
Shortwave RX Antenna

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 02:22:42 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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make an oven than a TCXO. A peltier heater is unnecessary as the crystal
will hace a minimum temperature coefficient above 27C
Your crystal will be an AT (lazy Z) cut optimised for minimum deviation
over the whole band. If you temperature control just the crystal it
should be possible to raise the temperature by using a servo heater to
where the crystal reaches its minimum frequencey with luck and if the
crystal is correctly cut this will be about 35C.
The Maintaining circuit will still be sensitive to temperature and will
limit any crystal only control to +-0.5ppm or so.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

------------------------------

Date: 22 Aug 1997 21:15:34 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: WTB RF amp for 11M

country@music.com wrote:
: country@music.com wrote:

: >Hello, I am looking for a linear amplifier to buy for my midland radio
: >I use in my Semi truck. Preferable around 300-400 watts output with 4
: >watts input. Would prefer UPS cod. willing to pay up to $400 - only
: >for really output, not a label name.
: > Mike ,
: >aka KC7KEM

: >PS. I am using a fellow hams account so please call , don't email- he
: >is a wimp and is faking his address, one of those afraid of the FCC
: >types. Not ME! call me at 964-2458
: Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
: time to call- I sleep light so no problem with late/ early calls, That
: is Washington state time.

This is a troll. Let's all not start a thread.
I wouldn't call that number either.

I can hear landmines.

sheeesh. some peoples kids, eh?

Your radio pal Tony

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End of Ham-Homebrew Digest V97 #476
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Date: Fri, 22 Aug 1997 14:20:44 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: Help Looking for A HP 1820-0736

I need a HP 1820 - 0736 divide by 2 Prescaler chip for my
HP 5303B 525 MHZ Counter

HP in canada ain't much help

Thanks in advance
de
ve6nap@oanet.com

------------------------------

Date: Sat, 23 Aug 1997 08:39:28 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: MRF 479 Needed

Try RF Parts...in San Marco, CA for your transistor.
friend,
Lute

James R. Binkley wrote:

> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.
>
> Thanks Bob w4aos@his.com

--
I am:

Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

---

Date: Sun, 24 Aug 97 00:53:57 GMT
From: tait@primeline.net (Gary Tait)
Subject: Need plans Alliance U100 Rotator control box.

I have what I have been told is an Alliance U-100 Rotator, I need a control box for, but don't wish to shell out the bucks for one.

Does anybody have plans for a solid state box, I could build out of TTL or cmos gates (other than the motor control circuitry of course.)

Gary Tait,VE3VBF

---

Date: Sat, 23 Aug 1997 18:26:53 +0100
From: Peter Barville <peter@barville.demon.co.uk>
Subject: QEX - info please

I understand that QEX has resumed publication, with a July 1997 edition. I am particularly interested in a couple of the articles from this issue, and would like to know how to get hold of a copy. I would also welcome any information with regard to how I can subscribe to the magazine.

If you're able to help, many thanks.
--
73, Peter G3XJS ( G-QRP 3001, QRP ARCI 8572 )

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End of Ham-Homebrew Digest V97 #477
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Date: 24 Aug 97 02:22:41 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: 24 Aug 1997 02:47:52 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 97 19:16:01 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #477

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 477

Today's Topics:
2 meter antenna
Bounced Mail -> User Not Found
Double Sided PC Boards
Ham-Homebrew Digest V97 #476
Help Looking for A HP 1820-0736
MRF 479 Needed
Need plans Alliance U100 Rotator control box.
QEX - info please

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available (by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I can compare it to the J-Pole I've been using. My question is, should the two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the feeding coax, with the braid shorted to the pipe at the midpoint of the antenna. The other half the dipole is base loaded to be electrically 3/4 wavelength long and physically 5/8 wavelength (I used a section of 1/8" steel rod with the coil making up the remainder of the length... I used a piece of solid phenolic plastic rod that plugs the end of the copper pipe and extends up as the coil form, and drilled out the center of the rod to set the steel element in). I am currently feeding the base of the loading coil with the coax center conductor, and do NOT have the two halves shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen <allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work. There is no real problems, any more than with other type, the R's and C's take a bit of geting used to (they fly round the shack really well if you get the mounting wrong!), but it just requires new skills to be learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM

+----------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------+

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Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:

<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp
Help.
help taming HF : some thoughts
measuring VVC-diodes, how?
PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit

# 2122. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC5752A.057F00000836.uuout@mandic.com.br>
Source record: 91492

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Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up
>>>to 150Mhz.
>>>
>>>Levels will range between -20dBm and +20dBm.
>>>
>>>Has anyone got any suggestions for a suitable
>>>instrument and will a RF Millivoltmeter be more
>>>flexible than an RF Powermeter.
>>>
>>>Thanks
>>>
>>>Niels Montanana
>>>G8RWG
>>>
>>>nielsm@lcpub.co.uk
>>
>>Same situation, I'm thinking of building something using the LT1088, or
>>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>>datasheet (FARNELL server claims to have them but then says they aren't
>>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft

>>PowerMeter head (working) going on the cheap I'd be interested. TIA
>>
>> 73 de Laurens M1CCO
>
>Do you have web access? Analog Devices home page has a search engine at
>the opening screen. I entered AD737 and got it. They're www.analog.com.
>
>I've used the 737 in a signal measuring setup before, and it's a pretty
>good chip. There are easier ways (i.e., more ham like). Pretty sure that
>Solid State Design for the Radio Amateur covers these if you'd rather.
>They involve using differential hot carrier diodes driving an op amp,
>with perhaps some bias to get down to the -20 dBm level.
>
>
>
>73,
>Bob
>
>
>
it is fairly easy to go much further down than this!
With 2x 1N270, or better AA119 type germanium diodes and CA3140E
OP-amp you can measure down below -46dBm up to at least 600MHz.

I made a correction amplifier using several 1N4148 for each range, but
today, I would have tried a CA3140E buffer, with a possible log.amp
and connect this to a datalogger, which may be calibrated for every
10dB range, with some possible frequency calibration (like the one you
have on SHF power meters). With this circuit you might measure below
-40dBm on 1,296GHz, and still have useful sensitivity above 2.320 GHz.
But you have to calibrate the circuit yourself. This is accomplished
by borrowing a signal generator from work or from a friend (most SHF
friends have some sort of reliable signal generators)

73

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: Sat, 23 Aug 97 05:24:56 GMT
From: tait@primeline.net (Gary Tait)
Subject: Antenna rotator control box schematic needed.

I am looking for plans for a tv antenna rotator. It is one of the ones that
the antenna mast goes through. It is a 4 wire, with the wires connected
internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO

3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if possible.

Gary Tait,VE3VBF

---

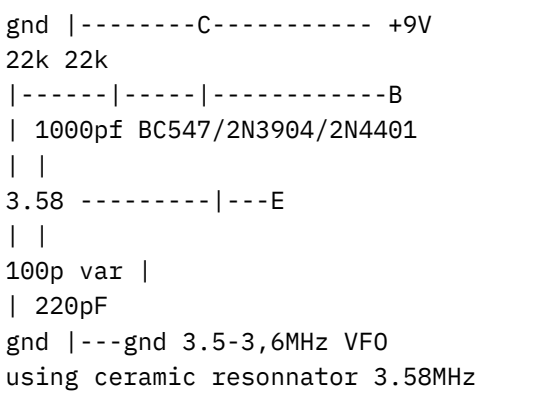
Date: Sat, 23 Aug 1997 19:04:37 GMT
From: la8ak@online.no (J M Noeding)
Subject: ceramic resonators? 80m VFO - repostrd

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424

>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?
I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin



using ceramic resonnator 3.58MHz

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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Date: 24 Aug 97 07:22:57 GMT
From: k3ky@juno.COM (David E Sinclair)
Subject: Cheap/decent 12V supply?

Using the 12V supply only from a 5V/12V computer supply probably would
not
work well for charging a 12V lead/acid car battery. More voltage is
needed. If
the two supplies in the computer unit are not ground referenced, then
they
could be series-connected for 17V. Some simple circuitry could be used to
control or limit the battery charge current. There are several approaches
such as constant voltage, constant current, taper charging, etc. I will
be glad
to supply references/schematics, etc. on request. Some other writers have
pointed out correctly that a linear supply would be a better choice than

a
noisy computer switching supply, and that one or both supplies in the
switch-
ing unit may have a minimum current requirement. That can be easily met
with
various types of loads added in parallel with the supply needing it.

David Sinclair K3KY
e-mail: k3ky@juno.com

---

Date: Sat, 23 Aug 1997 09:51:48 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes
>stevem@vax.area.com (Stephen E. Muther) wrote:
>
>
>>I do a lot of hobby boards and my employer's prototypes on a milling
>>machine. Typically I drill the holes first (before etching or milling)
>>then take the board in the back door of a cooperative board house
>>for plating. If I am in a hurry or if the board house is too busy to
>>deal with me, I use small brass or tin eyelets that I get at the
>>local hobby/model shop. They are easy to push in and solder and
>>require no cutting or trimming unlike wires.
>>
>>Steve M.
>>
>
>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

For RF prototyping where I used to work, they used little single-sided
PCBs about 1" square, with adhesive backing, with a surface mount
pattern for a single chip brought out to wider pads. These were
positioned on the Cu side of a piece of PCB laminate and the circuit
wired up directly on the Cu ground plane with wire-wrap wire or self-
fluxing magnet wire. I'll ask someone there where they got the things
from. They were very cheaply made, and were free issue in the lab. I
should have liberated a few before I left. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424

See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

---

Date: Sun, 24 Aug 1997 05:35:03 GMT
From: radiodale@dclink.com (Dale B. Allen)
Subject: FS: Mil Spec Teflon Covered Wire #20,22,24,26

I have the following colors and sizes available. This wire is stranded
tinned copper with a Teflon jacket. Limit is 100ft./size/color for
each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

---

Date: 23 Aug 1997 03:15:55 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit is available from HSC Electronics for $9.95. Try calling them at
1-800-442-5833.

Wayne, NB6M

---

Date: Fri, 22 Aug 1997 23:55:41 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: power transmission (electric)

Mike Willis wrote:
>
> Paul KeinEnen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >
> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large
currents. DC has no radiation losses, which is also significant at 50 Hz
over long distances. For a given RMS, DC has a 30% smaller peak current

and peak voltage. DC has no capacitively coupled current loss (not the same as leakage current) therefore power factor loss, through the insulation into the salt water. This capacitive current can cause electrolysis effects.

Bill W0IYH.

---

Date: 22 Aug 1997 16:04:03 GMT
From: n4mxf@aol.com (N4MXF)
Subject: power transmission (electric)

Hi,
I've been an engineer (manager) in the undersea cable business for 30 years and know of only a few DC cable projects for very specific applications. DC would not be an effective way to transmit power. High voltage pluse cables for digital transmission (very low current) are the only cables I know fit your discription. These are not power cables. Undersea power transmission are larger cables and are usually 5,15,35,64,130kv cables having conductors with thousands of circular mils and range from 4" to 8" diameters. There are some even larger. Cables usually contain 3 or 4 main conductors and are operated in a three phase (balanced) configuration. Today, many undersea power cables contain optical light guides (fiber optics) for signal transmission. Corona is normally controlled by proper shielding and the use of semi-con materials. External damage is the major cable failure although the we still like to get excited over the effects of "treeing" (crack propagation within a dielectric due to electro stress). If you would like any more details on cable or cable useage, drop me an email. Oxford,William & Associates: Cable Systems Consultants. wjoxford@aol.com or N4MXF@aol.com. 73 Bill

---

Date: 24 Aug 1997 03:56:29 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: QEX - info please

>. I would also
>welcome any information with regard to how I can subscribe to the
>magazine.
>
>If you're able to help, many thanks.
>--

Well, you might consider subscribing. You can do it through the League at their regular address or FAX number, or even I suspect thru their bulletin board.

It probably gets about as sticky though as we have it getting RadComm across the pond.

W4ZCB

---

Date: 24 Aug 1997 05:54:30 GMT
From: "ron ab6zx" <dom@shocking.com>
Subject: Relay needed

Looking to buy a used antenna relay capable of 800-1000 watts, can be open
frame or coaxial, speed not necessary as not for QSK. Will be used for
temporary bench tests only.
--
ron ab6zx chico ca
email: dom@shocking.com

---

Date: Sat, 23 Aug 1997 21:02:45 +0200
From: Bob Mueller <r.mueller@kfa-juelich.de>
Subject: Silver plating question

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some
> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the
> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver
> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick
almost any metal into the solution the silver ions will pick up an
electron from the metal and become metallic silver while one of the
substrate ions will go into solution. This is the secret of
"electroless" plating. Sounds wonderful, but it is not; the metal
deposited this way is poorly bonded and can be often wiped off with a
rag. It is also porous. Metals going into solution include copper,
zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually,
it probably could be made to work, if you are good and work fast. The
problem is that the melting point of silver is lower than the melting
point of copper (probably higher than for brass), but not a lot lower (a
bit over 100 degrees C.) You are at risk of melting the copper if you
heat with a tourch. It would work better with a silver bath (want to
melt a liter of silver in the kitchen?) with good temperature control.
There is another problem; the silver and copper rapidly alloy to form
a lower melting point alloy. If you do not work fast this process can
cause holes to develop as the alloy forms ever deeper into the
substrate. This is something you will understand better if you ever did
soldering on fine copper wire with lead-tin solder. The wire disappears
if you are too slow. The silver/copper process will be faster. You will
get a great bond, if you are good enough.

Bob

---

Date: Sat, 23 Aug 1997 11:13:05 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO, paralelling varactors

FRANK,

I guess I was not as clear as I should have been.

1 varactor VCO ( MV109)
case 1: CFIXED = 100 PF
CVARACTOR= 2-20PF
CTOTAL= 102-120 PF
Cmax/cmin= 1.176
FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%

2 paralell Varactor VCO( 2*MV 109)
case 2: CFIXED = 100 PF
CVARACTOR= 4-40PF : 2 varactors in parallel
CTOTAL= 104 to 140 PF

Cmax/Cmin= 140/104= 1.346

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End of Ham-Homebrew Digest V97 #483
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# 2123. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC5752A.22B500000835.uuout@mandic.com.br>
Source record: 91493

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Sun Aug 24 16:38:34 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id QAA15966; Sun, 24 Aug 1997 16:38:34 -0300
Received: from mailbox1.ucsd.edu (mailbox.ucsd.edu [132.239.1.53])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id QAA11663
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 16:46:22 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id KAA06346 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 10:52:03 -0700 (PDT)
Received: by mail.ucsd.edu; id KAA27815
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 10:43:46 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id KAA27781
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 10:43:37 -0700 (PDT)
Message-Id: <199708241743.KAA27781@mail.ucsd.edu>
Date: Sun, 24 Aug 97 10:43:36 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #483
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 483

Today's Topics:
Bounced Mail -> User Not Found (3 msgs)
Ham-Homebrew Digest V97 #480
Ham-Homebrew Digest V97 #481
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Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 14:58:50 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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------------------------------

Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%

Thus the max to min capacity should change.

But I could not detect the change in frequency coverage
after adding the second varactor.
(Maybe I made an error in my experiment.)

I guess that my question was, is the maximum capacity really
going to double when you paralell another varactor across the
varactor of a VCO. I am specificall talking about (1 varactor

VCO) and NOT the 2 back-to-back varactor VCO.

I dont really know, but, I think that the one varactor VCO
drives the varactors in a highly non-linear way.There will be 5-10
volts RF/AC across the varactor, and 1-10 volts DC to tune it.
Thus, I believe that varactor will be working in a highly nonlinear
way. Also, Q is rather low for these types of varactors.

Anyway, I try this varactor paralleling again, and hopefully I had
done something wrong earlier, and paralelling varactors really
does increase their max capacity in case of a VCO.

Thanks for your thoughts.

John M. Franke wrote:
>
> What is important is the maximum to minimum capacitance ratio of the
> varactor. If the maximum capacitance is 100 pF and the minimum is 10
> pF, the ratio is of course 100/10 = 10. Paralleling two varactors
> produces a new ratio of 200/20 = 10, no change. Since the resonant
> frequency is equal to 1 divided by 2 pi times the square root of L times
> C, the change in frequency is proportional to 1 over the square root of
> the change in the LC product. In this case the frequency range is the
> square root of 10. One way to help see this is to insert values into
> the equation and see what happens. Pick an inductor, calculate the
> minimum and maximum frequency for the minimum and maximum capacitance
> with one varactor. Then repeat for two.
> Does this help?
> John

--
---------------------------------------------------------------------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
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Date: Sun, 24 Aug 1997 08:19:58 GMT
From: keinanen@sci.fi (Paul KeinEnen)
Subject: VCO, paralelling varactors

"P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

<clip>

>I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
>
>I dont really know, but, I think that the one varactor VCO
>drives the varactors in a highly non-linear way.There will be 5-10
>volts RF/AC across the varactor, and 1-10 volts DC to tune it.
>Thus, I believe that varactor will be working in a highly nonlinear

>way. Also, Q is rather low for these types of varactors.

Sounds like the conditions are similar to the parametric amplifier or varactor tripler :-).

If the high RF voltage across the varactor is your problem, then why not use a varactor with large maximum capacitance (a tuning range from ,say, 25 pF to 250 pF) in series with a small (say 100 pF) fixed capacitor. The two capacitances will form a capacitive voltage divider, at the minimum capacitance the AC voltage across the varactor is only slightly reduced but at maximum capacitance only a very small fraction of the RF voltage is across the varactor (2/7 in this case). This greatly reduces the risk for forward biasing at low tuning voltages.

Your problem seem to be the large parallel capacitance, so it is quite unrealistic to expect to get any large tuning range with varactors with low maximum capacitance. With values in my example, you would get sqrt ( (100+71)pF/(100+20)pF ) = 1.19 or 19 %. Using a larger series capacitance would make the tuning range even larger, but it would also increase the RF voltage across the varactor.

Paul OH3LWR

---

Date: Sat, 23 Aug 1997 06:34:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO , paralleling Varactors

Does anybody know why paralelling another varactor across
the varactor of a LC Voltage controlled oscilator not increase
the tuning range of the VCO?

Both the varactors are reverse biased by the tuning voltage,
as varactors should be. So, connecting another varactor
across the LC tank circuit of a VCO should increase the freq
range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts
or so. The DC bias voltage for the varactor is about 1-10 volts or so.
So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

---
Sending me SPAM or Junk-Mail means that you have legally agreed to

pay me US $500 for each SPAM or Junk-Mail message you send to me.
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End of Ham-Homebrew Digest V97 #479
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Date: 24 Aug 1997 01:27:37 GMT
From: k1bqt@aol.com (K1BQT)
Subject: MRF 479 Needed

Hi--

If you can't get a 479, try a 2SC3133. Good for 15W PEP.

Rick K1BQT

------------------------------

Date: Sun, 24 Aug 1997 00:39:12 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures wrote:
>
> I am trying to locate a PNP transistor with highest available VCEO value, ide
ally
> up to 1kV.
>
> ICmax or Pw is not too important, neither is hFE.
>
> So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does no
t
> seem to be available anywhere in North America.
>
> Any advice would be greatly appreciated.
>
> Thanks
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
> fbures@alchemy.chem.utoronto.ca (use this address for replies)

You might try NTE for a direct substitute? They have a searchable table
for all kinds of semiconductors at http://www.nte.com/

------------------------------

Date: Sat, 23 Aug 1997 18:38:57 -0700
From: laura halliday <ve7ldh@direct.ca>
Subject: Regen and DC Receivers - ARRL doesn't like them!

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker
<parkerp@pcug.org.auNOSPAM> writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).
>
>I'm amazed how negative they are about regenerative & DC receivers. On
>regen receivers, I quote:
> (snip)

Maybe you should have a look at a more recent issue? My latest
copy (1996) discusses regens as primarily a historical thing, but
considers direct conversion receivers to be an effective way of
receiving signals.

I can think of a number of important designs between 1988 and 1996
that would have changed the perception of DC receivers as cute toys,
but not serious receivers...

As always, you get what you pay for. An extremely simple receiver
will get the job done under some circumstances, but may not
hold up under extreme conditions.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

---

Date: 24 Aug 1997 01:36:16 GMT
From: norman <norsan@bright.net>
Subject: Value of Dow-Key relay?

Dow key relays can be used for much more than switching from transmit to
receive in boatanchors. Some uses are:

switching between 2 antennas
switching in/out a preamplifier at the antenna
switching transverters to a common IF
switching rigs to a SWR meter

and many more.

Norman N8RGR

---

Date: Sun, 24 Aug 1997 09:45:13 GMT
From: ttwist@online.no (Tom Twist)
Subject: VCO, paralelling varactors

On Sat, 23 Aug 1997 11:13:05 -0400, "P. Singh"
<singhpk@NOSPAM.exit109.com> wrote:

>FRANK,
>
>I guess I was not as clear as I should have been.
>
>1 varactor VCO ( MV109)
>case 1: CFIXED = 100 PF
> CVARACTOR= 2-20PF
> CTOTAL= 102-120 PF
> Cmax/cmin= 1.176
> FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%
>
>2 paralell Varactor VCO( 2*MV 109)
>case 2: CFIXED = 100 PF
> CVARACTOR= 4-40PF : 2 varactors in parallel
> CTOTAL= 104 to 140 PF
> Cmax/Cmin= 140/104= 1.346
> FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%
>
>Thus the max to min capacity should change.
>
>But I could not detect the change in frequency coverage
>after adding the second varactor.
>(Maybe I made an error in my experiment.)
>
>I guess that my question was, is the maximum capacity really
>going to double when you paralell another varactor across the
>varactor of a VCO. I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
<snip>

Perhaps the problem with paralleling two varactors is that the two diodes is not matched, resulting in more current flowing in one of the diodes.
Try using two resistors (and RFCs), to separate the bias voltages, and use two (relatively) large capacitors in series with the HF path. I'm too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

---

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

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End of Ham-Homebrew Digest V97 #481
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Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 04:30:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #480

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 480

Today's Topics:
Accurate measurement of low level RF in the VHF region
QEX - info please
Room Temp "Oven" for Quartz?
YEASU FL/FR DX 400

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 22 Aug 1997 16:46:03 GMT
From: blombard@bogusity.iu.net (Bob Lombardi)
Subject: Accurate measurement of low level RF in the VHF region

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>
>>Thanks
>>
>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at
the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty
good chip. There are easier ways (i.e., more ham like). Pretty sure that
Solid State Design for the Radio Amateur covers these if you'd rather.
They involve using differential hot carrier diodes driving an op amp,
with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

---

Date: Sat, 23 Aug 1997 18:24:18 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: QEX - info please

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

---

Date: 23 Aug 1997 10:04:46 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Room Temp "Oven" for Quartz?

> transmitters consisted of a low frequency oscillator
>> followed by divider chains. Burying the oscillator in the ground puts
it
>> at a constant temperature. Its the same concept used when houses are
>> buried for insulation purposes. The temperature isn't warm, but it is
>> constant and isolated. Coax would be run to the shack, and DC voltage
>> would be sent down to the transistorized oscillator along the coax.
>>
>> Michael VE2BVW
>
>G3LTF used to do this.
>
>73 de G3PAI

I did too, but I always used multipliers in lieu of dividers.

W4ZCB

---

Date: Tue, 19 Aug 1997 11:11:24 -0230
From: George Andrews <vcmmcts@nlnet.nf.ca>
Subject: YEASU FL/FR DX 400

desperately need Schematic for the FL and FR DX 400 Transmitter and
Receiver. Cany anyone help????????

VO2AA/VO1VCM
vcmmcts@nlnet.nf.ca

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End of Ham-Homebrew Digest V97 #480
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Date: Sun, 24 Aug 97 08:37:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #481

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 481

Today's Topics:
11volts from 12 volts...
Bounced Mail -> User Not Found
Cheap/decent 12V supply?
Ham-Homebrew Digest V97 #479
MRF 479 Needed
PNP transistor, VCEO highest possible - looking for
Regen and DC Receivers - ARRL doesn't like them!
Value of Dow-Key relay?
VCO, paralelling varactors
Yaesu AZ -EL rotator

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: Fri, 22 Aug 1997 03:23:28 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: 11volts from 12 volts...

Hi bill,

Almost every 12 volt supply I have built using a 3 terminal
fixed regulator puts out about 11.5 volts or so. It seems
that the 12 volt regulators are manufactured with WIDE

tolerances.

Just use a diode or two in the ground lead of your 3 terminal reg
to increase output 11 volts to 12 volts or so.

D1, D2= In4001
C1= 10uf/16volts electrolytic

D2

```
|-----------------|<|----------------
| |
| |------------ |
| | 7812 |--------------------
--------|-----------| | |
|------------ |
| |
--- | +
\ / D1 ---
---- ---C1
| |
-------------------------------------------------------
```

In article <33efbc98.11731760@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>
>I'm thinking that I simply bought an 11 volt regulator in 12 volt
>clothing! Tomorrow I'll try a new part (and will report back on
>results).
>
>Thanks again. 73 Bill N2CQR

----------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
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---

Date: 24 Aug 97 14:28:20 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 08:56:27 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: Cheap/decent 12V supply?

These cheap switching power supplies are terrible choices for radio use,
far too noisy. Best is battery ONLY...a decent 12V Lead Acid car battery
used AS-IS (sans charger) then when you switch OFF your set up...you
turn ON the charger.
Simple, Cheap, loads of current and, best of all, quiet.
friend,
Lute

jason zawodny wrote:

> Well the question this week goes as such. Computer power
> supplies
> supply both 5V and 12V, and there are plenty laying around at work
> that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car
> battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars
>
> I've seen radio power supplies going for...
>
> Thanks
>
> jtz
>
>
> --
> --
> ------------------------------------------------------------------------
>
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ------------------------------------------------------------------
> --------

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

---

Date: Sun, 24 Aug 97 02:23:52 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #479

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 479

Today's Topics:
Accurate measurement of low level RF in the VHF/UHF region
Antenna rotator control box schematic needed.
ceramic resonators? 80m VFO - repostrd
Cheap/decent 12V supply?
Double Sided PC Boards
FS: Mil Spec Teflon Covered Wire #20,22,24,26
Pixie 2 Transceiver - Where can I get one?
power transmission (electric) (2 msgs)
QEX - info please
Relay needed
Silver plating question
VCO, paralelling varactors (2 msgs)
VCO , paralleling Varactors

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

# 2124. Extend frg on ICOM IC 737

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: Mega FX <cmsylvain@infonie.fr>
Message-ID: <01bcb0ca$e11ba920$3c1765c3@sylvain1>
Source record: 91494

Hi
How to have full coverage in TX on an IC 737 ?
Tnx
best 73
SYLVAIN
cmsylvain@infonie.fr

# 2125. Re: Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <34009cc8.1317870@news.online.no>
Source record: 91495

On 24 Aug 97 18:39:49 GMT, postmaster@mandic.COM.BR wrote:

>
> Este usuario nao existe em nosso cadastro (BOUNCED)...
> Bounced Mail, user not found...
>
> VOZ (011) 870-0888 FAX (011) 816-3245
> BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
> InterNet info@mandic.com.br
> http://www.mandic.com.br
> Telnet: bbs.mandic.com.br
>
>Text from original message follows:
>-----------------------------------

it was interesting to learn about the content of these bulletins, but
I will still not make any efforts to subscribe to this!

90% of the content is boreing to read, most is not homebrew, but sell
and buy. or is it just different in America? Homebrew means spending
$$$$$ .....?

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

## 2126. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC57D36.778F00000873.uuout@mandic.com.br>
Source record: 91496

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
years passive in construction practices have allowed commercial
vendors to dominate design issues by virtue of offering "features."

A good receiver has front end tuning, often several tuned RF stages
prior to the first mixer. These stages are rare in current designs
having been consigned to the dust-bin by marketing department design
choices. Simply put they view that the Ham would rather have his hand
wither than reach for a "tuning" knob. That it isn't built into the
VFO knob is again a marketing issue in that cost issues arrise.
Tracking and alignment problems abound requiring the parts count to
push against the profit margin.

I have three friends with front-end overload problems from a nearyby
AM commercial station. Their rigs are top of line Kenwoods and they
suffer the same as my lowly DX-440 which cost an eighth of their
price. Both the DX-440 and these Kenwoods suffer the same design
shortfall: wide open front ends (OK so they are Band filtered, they
suffer all the same!). Pre-selectors would solve the problems all
around, but I already know my friends would shudder to have to reach
for a second knob (much less tuner). They conform to the expectations
of Marketeers and their purchases have validated the entropy of
design.

SWL'ers look for construction projects for Pre-selectors or tuned
pre-amps. This is the single greatest improvement you can make
outside of building IF ancillaries such as Q-multipliers, crystal
lattice filters, or another stage of mixing to a lower, narrower IF.
Also, do not neglect the Tuner as the cheapest means to reject noise
and interfering stations. Sophisticated tuning networks with reject
notches also keep cost low. Much of this material was present in the
ARRL Handbooks of the '60's. I hope these common engineering issues
haven't become folk-lore through neglect.

73's
Richard Clark, KB7QHC, WPE0EPH

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End of Ham-Homebrew Digest V97 #478
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Date: 24 Aug 97 14:39:14 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 97 20:26:34 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #478

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 478

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
F.S. - Tubes, books, much misc...
Ham-Homebrew Digest V97 #477
Shortwave RX Antenna

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 02:22:42 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
make an oven than a TCXO. A peltier heater is unnecessary as the crystal
will hace a minimum temperature coefficient above 27C
Your crystal will be an AT (lazy Z) cut optimised for minimum deviation
over the whole band. If you temperature control just the crystal it
should be possible to raise the temperature by using a servo heater to
where the crystal reaches its minimum frequencey with luck and if the
crystal is correctly cut this will be about 35C.
The Maintaining circuit will still be sensitive to temperature and will
limit any crystal only control to +-0.5ppm or so.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

---

Date: 22 Aug 1997 21:15:34 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: WTB RF amp for 11M

country@music.com wrote:
: country@music.com wrote:

: >Hello, I am looking for a linear amplifier to buy for my midland radio
: >I use in my Semi truck. Preferable around 300-400 watts output with 4
: >watts input. Would prefer UPS cod. willing to pay up to $400 - only
: >for really output, not a label name.
: > Mike ,
: >aka KC7KEM
: >PS. I am using a fellow hams account so please call , don't email- he
: >is a wimp and is faking his address, one of those afraid of the FCC
: >types. Not ME! call me at 964-2458
: Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
: time to call- I sleep light so no problem with late/ early calls, That
: is Washington state time.

This is a troll. Let's all not start a thread.
I wouldn't call that number either.

I can hear landmines.

sheeesh. some peoples kids, eh?

Your radio pal Tony

---

End of Ham-Homebrew Digest V97 #476
******************************

---

Date: Fri, 22 Aug 1997 14:20:44 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: Help Looking for A HP 1820-0736

I need a HP 1820 - 0736 divide by 2 Prescaler chip for my
HP 5303B 525 MHZ Counter

HP in canada ain't much help

Thanks in advance
de
ve6nap@oanet.com

---

Date: Sat, 23 Aug 1997 08:39:28 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: MRF 479 Needed

Try RF Parts...in San Marco, CA for your transistor.
friend,
Lute

James R. Binkley wrote:

> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.
>
> Thanks Bob w4aos@his.com

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

---

Date: Sun, 24 Aug 97 00:53:57 GMT
From: tait@primeline.net (Gary Tait)
Subject: Need plans Alliance U100 Rotator control box.

I have what I have been told is an Alliance U-100 Rotator, I need a control
box for, but don't wish to shell out the bucks for one.

Does anybody have plans for a solid state box, I could build out of
TTL or cmos gates (other than the motor control circuitry of course.)

Gary Tait,VE3VBF

---

Date: Sat, 23 Aug 1997 18:26:53 +0100
From: Peter Barville <peter@barville.demon.co.uk>
Subject: QEX - info please

I understand that QEX has resumed publication, with a July 1997 edition.
I am particularly interested in a couple of the articles from this
issue, and would like to know how to get hold of a copy. I would also
welcome any information with regard to how I can subscribe to the
magazine.

If you're able to help, many thanks.
--
73, Peter G3XJS ( G-QRP 3001, QRP ARCI 8572 )

---

End of Ham-Homebrew Digest V97 #477
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Date: 24 Aug 97 02:22:41 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: 24 Aug 1997 02:47:52 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 97 19:16:01 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #477

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 477

Today's Topics:
2 meter antenna
Bounced Mail -> User Not Found
Double Sided PC Boards
Ham-Homebrew Digest V97 #476
Help Looking for A HP 1820-0736
MRF 479 Needed
Need plans Alliance U100 Rotator control box.
QEX - info please

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems
to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I
can compare it to the J-Pole I've been using. My question is, should the
two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the
feeding coax, with the braid shorted to the pipe at the midpoint of the
antenna. The other half the dipole is base loaded to be electrically 3/4
wavelength long and physically 5/8 wavelength (I used a section of 1/8"
steel rod with the coil making up the remainder of the length... I used a
piece of solid phenolic plastic rod that plugs the end of the copper pipe
and extends up as the coil form, and drilled out the center of the rod to
set the steel element in). I am currently feeding the base of the loading
coil with the coax center conductor, and do NOT have the two halves
shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work.
There is no real problems, any more than with other type, the R's and
C's take a bit of geting used to (they fly round the shack really well
if you get the mounting wrong!), but it just requires new skills to be
learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM
+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

---

Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:
<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp
Help.
help taming HF : some thoughts
measuring VVC-diodes, how?
PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit

---

End of Ham-Homebrew Digest V97 #484
******************************

# 2127. Sale: Philips BGY35Z (22W output) power modules for 132-156MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: Joakim Langlet <joakim@seaview.se>
Message-ID: <01bcb0d0$2b070de0$320564c3@farsan>
Source record: 91497

Dear Fellow Hams!
I have a few Philips power modules (BGY35Z) that should be used rather than be sitting on
a shelf. BGY35Z is a special selection of BGY35, which has a higher guaranteed output
power.

Input power is 300 mW and power supply is 12.5V.

I am offering these modules, which data sheet for $100 excluding freight and handling.
These are unused parts.

73 de SM0OET

Joakim Langlet

joakim@seaview.se

# 2128. Announcing 10 *NEW* Mailing Lists (Reflectors)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <3400AC8B.139@primenet.com>
Source record: 91498
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

```
Announcing 10 *NEW* Mailing Lists (Reflectors)
-----
1. MFJ-AMERITRON
2. GPS
3. STANDARD
4. SPECIAL EVENTS
5. ADI-PREMIER
6. REPEATERS
7. HAM-COMPUTERS
8. TVI-RFI-EMI
9. TEST-EQUIPMENT
10. YUPI
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MFJ-AMERITRON is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured by MFJ Enterprises
of Starkville, Ms and affiliates (Ameritron, Mirage, etc).

* Amateur Radio Equipment
* Multimode, Packet Data Controllers
* HF and VHF Amplifiers
* Accessories
* QRP, VHF, Test Instruments
* Buy, Sell
* Anything MFJ Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe MFJ-AMERITRON

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe MFJ-AMERITRON

To post to the mailing list, send email as follows:
TO: MFJ-AMERITRON@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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GPS is a mailing list (reflector) devoted to the
discussion of the Global Positioning System and
uses relating to amateur radio, experimenting, or
other activities.

* Hand Held GPS Units
* Trackers
* Amateur Radio Applications
* Interfacing
* Buy, Sell
* Anything GPS Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe GPS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe GPS

To post to the mailing list, send email as follows:
TO: GPS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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STANDARD is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured by Standard
Amateur Radio Products.

* VHF/UHF Radios, HTs, etc
* Buy, Sell
* Anything Standard Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe STANDARD

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe STANDARD

To post to the mailing list, send email as follows:
TO: STANDARD@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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SPECIAL-EVENTS is a mailing list (reflector) devoted to the
discussion of Amateur Radio Special Events and Operating Events.
Operating Events (like Field Day or State QSO Parties) while
at times competitive lack some of the characteristics of a
true Amateur Radio Contest, but any related discussion is quite
welcome here.

* QSO Parties
* Special Events Stations
* Expedition Announcements
* On The Air Activities

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe SPECIAL-EVENTS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe SPECIAL-EVENTS

To post to the mailing list, send email as follows:
TO: SPECIAL-EVENTS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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ADI-PREMIER is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured or distributed
by Premier Communications of Walnut, Ca.

* VHF/UHF Radios, HTs, etc
* Buy, Sell
* Anything ADI/Premier Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe ADI-PREMIER

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe ADI-PREMIER

To post to the mailing list, send email as follows:
TO: ADI-PREMIER@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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REPEATERS is a mailing list (reflector) devoted to the
discussion of Amateur Radio Repeaters.

* Repeater Owners
* Equipment, Sites
* Linking, Systems
* Coordination, Users
* Buy, Sell
* Anything Repeater Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe REPEATERS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe REPEATERS

To post to the mailing list, send email as follows:
TO: REPEATERS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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HAM-COMPUTERS is a mailing list (reflector) devoted to the
discussion of personal computers (or other) used for amateur
radio, communications, or experimenting.

* PCs, Macs, Amiga, etc
* Interfacing
* Upgrades
* Enhancements
* Buy, Sell
* Anything Ham Computer Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe HAM-COMPUTERS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:

BODY: unsubscribe HAM-COMPUTERS

To post to the mailing list, send email as follows:
TO: HAM-COMPUTERS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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TVI-RFI-EMI is a mailing list (reflector) devoted to the
discussion of interference of all types.

* Broadcast Interference (BCI)
* Television Interference (TVI)
* Radio Frequency Interference (RFI)
* Electromagnetic Interference (EMI)
* Detection, Location, Prevention
* Neighbor Solutions
* Telephone Problems
* Filters, Suppressors, Black Magic

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe TVI-RFI-EMI

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe TVI-RFI-EMI

To post to the mailing list, send email as follows:
TO: TVI-RFI-EMI@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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TEST-EQUIPMENT is a mailing list (reflector) devoted to the
discussion of the tools of the trade of electronics experimentation,
repair, analysis, design, construction, etc.

* VOMs, VTVMs, Oscilloscopes
* Spectrum Analyzers, Curve Tracers
* Tube Testers, Signal Generators
* Buy, Sell
* Anything Test Equipment Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe TEST-EQUIPMENT

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe TEST-EQUIPMENT

To post to the mailing list, send email as follows:
TO: TEST-EQUIPMENT@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

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YUPI is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured by Yupiteru
Industries Co Ltd, 12-33 Shibaura, 4-Chome, Minato-Ku,
Tokyo 108, Japan

* Very Desirable Scanning Equipment
* Buy/Sell
* Anything Yupi Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe YUPI

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe YUPI

To post to the mailing list, send email as follows:
TO: YUPI@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

# 2129. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC58792.1655000008B3.uuout@mandic.com.br>
Source record: 91499

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Sun Aug 24 19:15:17 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id TAA27829; Sun, 24 Aug 1997 19:15:17 -0300
Received: from mailbox1.ucsd.edu (mailbox.ucsd.edu [132.239.1.53])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id TAA29648
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 19:22:43 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id NAA11489 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 13:22:05 -0700 (PDT)
Received: by mail.ucsd.edu; id MAA06457
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 12:53:59 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id MAA06421
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 12:53:51 -0700 (PDT)
Message-Id: <199708241953.MAA06421@mail.ucsd.edu>
Date: Sun, 24 Aug 97 12:53:50 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #485
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 485

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #483
```

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
------------------------------------------------------------------------

Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up
>>>to 150Mhz.
>>>
>>>Levels will range between -20dBm and +20dBm.
>>>
>>>Has anyone got any suggestions for a suitable
>>>instrument and will a RF Millivoltmeter be more
>>>flexible than an RF Powermeter.
>>>
>>>Thanks
>>>
>>>Niels Montanana

>>>G8RWG
>>>
>>>nielsm@lcpub.co.uk
>>
>>Same situation, I'm thinking of building something using the LT1088, or
>>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>>datasheet (FARNELL server claims to have them but then says they aren't
>>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>>PowerMeter head (working) going on the cheap I'd be interested. TIA
>>
>> 73 de Laurens M1CCO
>
>Do you have web access? Analog Devices home page has a search engine at
>the opening screen. I entered AD737 and got it. They're www.analog.com.
>
>I've used the 737 in a signal measuring setup before, and it's a pretty
>good chip. There are easier ways (i.e., more ham like). Pretty sure that
>Solid State Design for the Radio Amateur covers these if you'd rather.
>They involve using differential hot carrier diodes driving an op amp,
>with perhaps some bias to get down to the -20 dBm level.
>
>
>
>73,
>Bob
>
>
>
it is fairly easy to go much further down than this!
With 2x 1N270, or better AA119 type germanium diodes and CA3140E
OP-amp you can measure down below -46dBm up to at least 600MHz.

I made a correction amplifier using several 1N4148 for each range, but
today, I would have tried a CA3140E buffer, with a possible log.amp
and connect this to a datalogger, which may be calibrated for every
10dB range, with some possible frequency calibration (like the one you
have on SHF power meters). With this circuit you might measure below
-40dBm on 1,296GHz, and still have useful sensitivity above 2.320 GHz.
But you have to calibrate the circuit yourself. This is accomplished
by borrowing a signal generator from work or from a friend (most SHF
friends have some sort of reliable signal generators)

73

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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Date: Sat, 23 Aug 97 05:24:56 GMT
From: tait@primeline.net (Gary Tait)

Subject: Antenna rotator control box schematic needed.

I am looking for plans for a tv antenna rotator. It is one of the ones that the antenna mast goes through. It is a 4 wire, with the wires connected internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO
3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if possible.

Gary Tait,VE3VBF

---

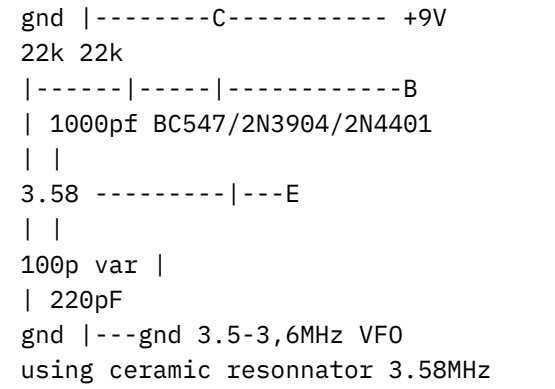
Date: Sat, 23 Aug 1997 19:04:37 GMT
From: la8ak@online.no (J M Noeding)
Subject: ceramic resonators? 80m VFO - repostrd

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they

>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?
I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin



using ceramic resonnator 3.58MHz

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 24 Aug 97 07:22:57 GMT
From: k3ky@juno.COM (David E Sinclair)
Subject: Cheap/decent 12V supply?

Using the 12V supply only from a 5V/12V computer supply probably would
not
work well for charging a 12V lead/acid car battery. More voltage is
needed. If
the two supplies in the computer unit are not ground referenced, then

they
could be series-connected for 17V. Some simple circuitry could be used to
control or limit the battery charge current. There are several approaches
such as constant voltage, constant current, taper charging, etc. I will
be glad
to supply references/schematics, etc. on request. Some other writers have
pointed out correctly that a linear supply would be a better choice than
a
noisy computer switching supply, and that one or both supplies in the
switch-
ing unit may have a minimum current requirement. That can be easily met
with
various types of loads added in parallel with the supply needing it.

David Sinclair K3KY
e-mail: k3ky@juno.com

------------------------------

Date: Sat, 23 Aug 1997 09:51:48 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes
>stevem@vax.area.com (Stephen E. Muther) wrote:
>
>
>>I do a lot of hobby boards and my employer's prototypes on a milling
>>machine. Typically I drill the holes first (before etching or milling)
>>then take the board in the back door of a cooperative board house
>>for plating. If I am in a hurry or if the board house is too busy to
>>deal with me, I use small brass or tin eyelets that I get at the
>>local hobby/model shop. They are easy to push in and solder and
>>require no cutting or trimming unlike wires.
>>
>>Steve M.
>>
>
>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

For RF prototyping where I used to work, they used little single-sided
PCBs about 1" square, with adhesive backing, with a surface mount
pattern for a single chip brought out to wider pads. These were
positioned on the Cu side of a piece of PCB laminate and the circuit
wired up directly on the Cu ground plane with wire-wrap wire or self-
fluxing magnet wire. I'll ask someone there where they got the things

from. They were very cheaply made, and were free issue in the lab. I
should have liberated a few before I left. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

---

Date: Sun, 24 Aug 1997 05:35:03 GMT
From: radiodale@dclink.com (Dale B. Allen)
Subject: FS: Mil Spec Teflon Covered Wire #20,22,24,26

I have the following colors and sizes available. This wire is stranded
tinned copper with a Teflon jacket. Limit is 100ft./size/color for
each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

---

Date: 23 Aug 1997 03:15:55 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit is available from HSC Electronics for $9.95. Try calling them at
1-800-442-5833.

Wayne, NB6M

---

Date: Fri, 22 Aug 1997 23:55:41 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: power transmission (electric)

Mike Willis wrote:
>
> Paul KeinEnen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >

> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large currents. DC has no radiation losses, which is also significant at 50 Hz over long distances. For a given RMS, DC has a 30% smaller peak current and peak voltage. DC has no capacitively coupled current loss (not the same as leakage current) therefore power factor loss, through the insulation into the salt water. This capacitive current can cause electrolysis effects.

Bill W0IYH.

---

Date: 22 Aug 1997 16:04:03 GMT
From: n4mxf@aol.com (N4MXF)
Subject: power transmission (electric)

Hi,
I've been an engineer (manager) in the undersea cable business for 30 years and know of only a few DC cable projects for very specific applications. DC would not be an effective way to transmit power. High voltage pluse cables for digital transmission (very low current) are the only cables I know fit your discription. These are not power cables. Undersea power transmission are larger cables and are usually 5,15,35,64,130kv cables having conductors with thousands of circular mils and range from 4" to 8" diameters. There are some even larger. Cables usually contain 3 or 4 main conductors and are operated in a three phase (balanced) configuration. Today, many undersea power cables contain optical light guides (fiber optics) for signal transmission. Corona is normally controlled by proper shielding and the use of semi-con materials. External damage is the major cable failure although the we still like to get excited over the effects of "treeing" (crack propagation within a dielectric due to electro stress). If you would like any more details on cable or cable useage, drop me an email. Oxford,William & Associates: Cable Systems Consultants. wjoxford@aol.com or N4MXF@aol.com. 73 Bill

---

Date: 24 Aug 1997 03:56:29 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: QEX - info please

>. I would also
>welcome any information with regard to how I can subscribe to the
>magazine.
>
>If you're able to help, many thanks.
>--

Well, you might consider subscribing. You can do it through the League at their regular address or FAX number, or even I suspect thru their bulletin board.

It probably gets about as sticky though as we have it getting RadComm across the pond.

W4ZCB

---

Date: 24 Aug 1997 05:54:30 GMT
From: "ron ab6zx" <dom@shocking.com>
Subject: Relay needed

Looking to buy a used antenna relay capable of 800-1000 watts, can be open frame or coaxial, speed not necessary as not for QSK. Will be used for temporary bench tests only.
--
ron ab6zx chico ca
email: dom@shocking.com

---

Date: Sat, 23 Aug 1997 21:02:45 +0200
From: Bob Mueller <r.mueller@kfa-juelich.de>
Subject: Silver plating question

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some
> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the
> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver

> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick
almost any metal into the solution the silver ions will pick up an
electron from the metal and become metallic silver while one of the
substrate ions will go into solution. This is the secret of
"electroless" plating. Sounds wonderful, but it is not; the metal
deposited this way is poorly bonded and can be often wiped off with a
rag. It is also porous. Metals going into solution include copper,
zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually,
it probably could be made to work, if you are good and work fast. The
problem is that the melting point of silver is lower than the melting
point of copper (probably higher than for brass), but not a lot lower (a
bit over 100 degrees C.) You are at risk of melting the copper if you
heat with a tourch. It would work better with a silver bath (want to
melt a liter of silver in the kitchen?) with good temperature control.
There is another problem; the silver and copper rapidly alloy to form
a lower melting point alloy. If you do not work fast this process can
cause holes to develop as the alloy forms ever deeper into the
substrate. This is something you will understand better if you ever did
soldering on fine copper wire with lead-tin solder. The wire disappears
if you are too slow. The silver/copper process will be faster. You will
get a great bond, if you are good enough.

Bob

---

Date: Sat, 23 Aug 1997 11:13:05 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO, paralelling varactors

FRANK,

I guess I was not as clear as I should have been.

1 varactor VCO ( MV109)
case 1: CFIXED = 100 PF
CVARACTOR= 2-20PF

CTOTAL= 102-120 PF
Cmax/cmin= 1.176
FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%

2 paralell Varactor VCO( 2*MV 109)
case 2: CFIXED = 100 PF
CVARACTOR= 4-40PF : 2 varactors in parallel
CTOTAL= 104 to 140 PF
Cmax/Cmin= 140/104= 1.346

---

End of Ham-Homebrew Digest V97 #483
**********

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Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sun, 24 Aug 97 10:43:36 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #483

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 483

Today's Topics:
Bounced Mail -> User Not Found (3 msgs)
Ham-Homebrew Digest V97 #480
Ham-Homebrew Digest V97 #481

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 14:58:50 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
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Text from original message follows:
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---

Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%

Thus the max to min capacity should change.

But I could not detect the change in frequency coverage
after adding the second varactor.
(Maybe I made an error in my experiment.)

I guess that my question was, is the maximum capacity really
going to double when you paralell another varactor across the
varactor of a VCO. I am specificall talking about (1 varactor
VCO) and NOT the 2 back-to-back varactor VCO.

I dont really know, but, I think that the one varactor VCO
drives the varactors in a highly non-linear way.There will be 5-10
volts RF/AC across the varactor, and 1-10 volts DC to tune it.
Thus, I believe that varactor will be working in a highly nonlinear
way. Also, Q is rather low for these types of varactors.

Anyway, I try this varactor paralleling again, and hopefully I had
done something wrong earlier, and paralelling varactors really
does increase their max capacity in case of a VCO.

Thanks for your thoughts.

John M. Franke wrote:
>
> What is important is the maximum to minimum capacitance ratio of the
> varactor. If the maximum capacitance is 100 pF and the minimum is 10
> pF, the ratio is of course 100/10 = 10. Paralleling two varactors
> produces a new ratio of 200/20 = 10, no change. Since the resonant
> frequency is equal to 1 divided by 2 pi times the square root of L times
> C, the change in frequency is proportional to 1 over the square root of
> the change in the LC product. In this case the frequency range is the
> square root of 10. One way to help see this is to insert values into
> the equation and see what happens. Pick an inductor, calculate the
> minimum and maximum frequency for the minimum and maximum capacitance
> with one varactor. Then repeat for two.
> Does this help?
> John

--
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Date: Sun, 24 Aug 1997 08:19:58 GMT
From: keinanen@sci.fi (Paul KeinEnen)
Subject: VCO, paralelling varactors

"P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

<clip>

>I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
>
>I dont really know, but, I think that the one varactor VCO

## 2130. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC58B48.4396000008C8.uuout@mandic.com.br>
Source record: 91500

Este usuario nao existe em nosso cadastro (BOUNCED)...
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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
further than manufacturers here; even the [old] 2SK125, for instance, is
much better than the best [J310/U310] generally available here.)

When you combine Hayward's amplifier with the appropriate
double-tuned-circuit output filter (described in the same article that
describes the amplifier), you'll have good, predictable gain (10 dB) *and*
the selectivity you need. Wes's circuit isn't the only possible solution
to your problem, of course, but it has withstood the tests of time and use
that the other circuit hasn't.

Regards,

David Newkirk, W9VES

---

Date: 22 Aug 1997 23:54:00 GMT
From: rod7rg@aol.com (ROD7RG)
Subject: Help.

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature
from the Canadian or Ametuer Radio Relay Leagues. They should be able to
provide you some contacts.

Rod
KL7RG/8

---

Date: Sat, 23 Aug 1997 07:16:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: help taming HF : some thoughts

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as gr
ounding a vacuum tube's grid can do.)
>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
> the circuit may not oscillate.
>
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as
to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the

top or the hot end of the antenna.
2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine
tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.
I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

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Date: Sat, 23 Aug 1997 20:02:36 GMT
From: la8ak@online.no (J M Noeding)
Subject: measuring VVC-diodes, how?

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.

I have a Radiometer Q-meter, but I would prefer an easier way than
measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #482
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Date: 24 Aug 97 17:13:26 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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---

Date: Sun, 24 Aug 97 08:52:06 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #482

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 482

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #478

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 14:39:15 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Date: Fri, 22 Aug 1997 08:39:55 -0400
From: Zack Lau <zlau@arrl.org>
Subject: PAGER NOISE HELP

John Clarke wrote:
>
> Help requested, for a amateur located in the valley below a commercial
> tower site briselling with pager antenna, so any 2 metre signals are
> flatened by the data streams.
> Would a high Q tunable notch filter help? Any circuits or pointers will be

Not much, if there are a lots of different pagers in different
frequencies.

A good choice might be a sharp bandpass filter--the bigger the
better. One the size of a loaf of bread might do the trick, though
people have made them out of 20 gallon garbage cans... Zack W1VT

> much appreciated. Cheers and thank you in advance, John

---

Date: Fri, 22 Aug 1997 14:28:45 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

---

Date: Fri, 22 Aug 1997 14:21:43 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does anyone have simple plans they could draw for me to build such a device? Thanks for any help.

---

Date: 23 Aug 1997 03:08:01 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne NB6M

---

Date: 23 Aug 1997 11:13:53 GMT
From: hill@rowland.org (Winfield Hill)
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/
Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
_/ _/ _/ _/ _/
http://www.artofelectronics.com/ _/ _/ _/_/ _/_/_/_/

---

Date: 23 Aug 1997 15:30:51 GMT
From: pbunn624@teleplex.net (Pat Bunn)
Subject: power transmission (electric)

In article <19970819234401.TAA19821@ladder01.news.aol.com>, johnsonhe@aol.com says...
>
>>
>>Why do power companies use DC to transmitt power. 400KV, 500MW. What kind
>>of equipment is used to transform from AC to DC and DC to AC?
>>Could it be power factor?
>>73 and TIA
>

>The main reason is that DC is subject to only the resistance losses in the conductors. The line inductance and capacitance does not cause reactive voltage drop is a DC transmission line. In an AC line these losses are serious and must be corrected wth very expensive capacitor banks.

The reason that DC is not often used is that the cost of the high voltage solid state conversion systems have been very expensive in the past. Recently these cost have dropped and more DC transmission lines are being considered and will be built.

The merits of DC vs AC power generation,transmission, and distribution were highly debated at the turn of the century by Edison (DC) and Tesla (AC). Tesla eventually won the debate, but with the changes in technology of the next century, Edison and DC may be exonerated.

Pat Bunn

---

Date: 22 Aug 1997 23:24:49 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: RAMSEY SR-1 SW kit

: I dont see much change in the tuning
: slugs of the RF, IF and OSC cans unless
: I'm at the extremes.

Sorry, the OSC can changes the tuning
range just fine.

---

Date: 22 Aug 1997 23:07:17 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Regen and DC Receivers - ARRL doesn't like them!

Peter Parker <parkerp@pcug.org.auNOSPAM> wrote in article
<33fe0c12.0@newshost.pcug.org.au>...
> Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception.

Either the phasing or "Weaver" techniques can be used to build a simple "single signal" receiver and a SSB transmitter, too ... it is possible to obtain substantial undesired sideband suppression without too much difficulty ... especially with DSP techniques ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sat, 23 Aug 1997 06:08:53 +0100
From: John Rabson <word.factory@zetnet.co.uk>

Subject: Room Temp "Oven" for Quartz?

In message <Pine.GSO.3.94.970822142932.16140A-100000@Stratus.CAM.ORG>
Michael Black <blackm00@CAM.ORG> writes:

> Another possibility, though not for portable operation, is to bury the
> oscillator in the ground. I remember some articles in the ham magazines
> about this about 35 years ago, back when moonbounce was first getting
> attention and transmitters consisted of a low frequency oscillator
> followed by divider chains. Burying the oscillator in the ground puts it
> at a constant temperature. Its the same concept used when houses are
> buried for insulation purposes. The temperature isn't warm, but it is
> constant and isolated. Coax would be run to the shack, and DC voltage
> would be sent down to the transistorized oscillator along the coax.
>
> Michael VE2BVW

G3LTF used to do this.

73 de G3PAI

---

Date: Sat, 23 Aug 1997 01:34:02 +0100
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Subject: Room Temp "Oven" for Quartz?

In article <33FB23CA.7095@hnvr.com>, Kenneth M Gianino <ken@hnvr.com>
writes
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).
>
>I'm looking for a simple but effective scheme to improve stability
>without spending a lot of money. I'd like match Yaesu's 2ppm while
>retaining the original crystal. It is 10-point-something-MHz and I'm
>not likely to find a surplus TCXO or OCXO.
Im a bit late on the scene with this thread however:
If you have power available and dont mind the warm up time its easier to

---

Date: Sat, 23 Aug 1997 17:35:20 GMT
From: rwclark@rwclark.seanet.com (Richard Clark)
Subject: Shortwave RX Antenna

On Mon, 18 Aug 1997 09:25:23 -0700, "hf.broekhuizen (SBKM-ME/C3)"
<hf.broekhuizen@navy.disp.mindef.nl> wrote:

>I do not have specs of your receiver, but I agree with Gary KE4ZV: the
>pre-amp for your HF-RX should not make a difference, since there is no
>improvement in SNR (N being mainly the atmospheric noise on HF).
>

>More likely by adding the pre-amp you overload the input of your
>HF-receiver with too strong signals, thus creating stations as products
>on frequencies they never have been.
>I.e.: by non-linearity in the high part of the dynamic range (1 dB
>compression point etc.) of the receiver reciprocal mixing occurs. As a
>result frequencies are generated as (f1+f2) and (f1-f2), but also
>higher-order products.
>The operator will now notice stations on frequencies never radiated by
>any transmitter, so on a different location in the frequency band.
>
>--
Hi all,

The principle problem with the responses to this topic is that
amateurs employ what is called "pre-amps". Much of what follows this
presumption is correct, but inappropriate to SWL (due to the presumed
application of the "pre-amp").

Modestly priced receivers often used by SWL'ers do NOT need wideband
amplification, and their receivers are not atmospheric noise limited.
As already identified, filtering pays off and post-amplification would
return the filter's loss with perhaps some overall gain improvement.
The term for such a device is Pre-selector. Hams having been for

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End of Ham-Homebrew Digest V97 #486
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# 2131. WTB Transmit/Recieve Relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5tqel8$637$1@bigdog.eli.net>
Source record: 91501
Cross-posted to: rec.radio.amateur.equipmnet,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchor,sci.electronics.components,sci.electronics.repair

Need the following for a NATIONAL NCX-3 20/40/80 Meter Tranciever:

Transmit/Receive Relay
Part Number A50798.

Greg KB6WKW

# 2132. Re: Heathkit "Seneca" Model VHF-1..Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5tqf84$637$2@bigdog.eli.net>
Source record: 91502
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.ham.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Problem solved. It was the Canned Diode (1N1239) inserted into the 5r4 octal socket. After trrouble shooting (dissconnect the caps, measure the resistance, measure the transformer winding resistances, etc, I looked at the socket that the diode can was plugged into. H.m.m.m still had the filament winding leads in place. So I replaced the diode with a tube from my handy dandy flea market stock and voila.... Now all I need is to uphgrade my license so I can work six and two meters. PS, when I powered it up I had an oil filled dummy load that my son helped me build one summer....

Greg
KB6WKW

## 2133. Weather Sats

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: "P.Jensen" <p.jensen@virgin.net>
Message-ID: <3400B30B.531F@virgin.net>
Source record: 91503

Hi
Thanks for reading this msg.

I came across an artical in one of the Radio Mags
(but can not remeber which one)
the artical gave details for rx geo weather sats 1.6ghz
converter.
By taking out the tuner of a bsb or dmac sat rx
(can not remember which) and building a discone
with a couple of preamp built into the discone.
the tuner has a 137mgz out put which is then connected
to a wide band rx.
i did have all the papper work which i have lost
the mag did do a follow up to build a rx to rx 137mhz
what i require is the name of the mag to get a back
issue or a photo copy
thanks again
Poul G7BTP
p.jensen@virgin.net

# 2134. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC59406.1EE500000916.uuout@mandic.com.br>
Source record: 91504

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Sun Aug 24 21:00:55 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id VAA04408; Sun, 24 Aug 1997 21:00:54 -0300
Received: from mailbox1.ucsd.edu (mailbox.ucsd.edu [132.239.1.53])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id VAA08964
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 21:08:39 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id PAA16131 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 15:52:05 -0700 (PDT)
Received: by mail.ucsd.edu; id PAA16641
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 15:30:24 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id PAA16600
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 15:30:16 -0700 (PDT)
Message-Id: <199708242230.PAA16600@mail.ucsd.edu>
Date: Sun, 24 Aug 97 15:30:14 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #487
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 487

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #485
```

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 21:16:54 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
-----------------------------------
>drives the varactors in a highly non-linear way.There will be 5-10
>volts RF/AC across the varactor, and 1-10 volts DC to tune it.
>Thus, I believe that varactor will be working in a highly nonlinear
>way. Also, Q is rather low for these types of varactors.

Sounds like the conditions are similar to the parametric amplifier or
varactor tripler :-).

If the high RF voltage across the varactor is your problem, then why
not use a varactor with large maximum capacitance (a tuning range from
,say, 25 pF to 250 pF) in series with a small (say 100 pF) fixed
capacitor. The two capacitances will form a capacitive voltage
divider, at the minimum capacitance the AC voltage across the varactor
is only slightly reduced but at maximum capacitance only a very small
fraction of the RF voltage is across the varactor (2/7 in this case).
This greatly reduces the risk for forward biasing at low tuning
voltages.

Your problem seem to be the large parallel capacitance, so it is quite
unrealistic to expect to get any large tuning range with varactors
with low maximum capacitance. With values in my example, you would get
sqrt ( (100+71)pF/(100+20)pF ) = 1.19 or 19 %. Using a larger series
capacitance would make the tuning range even larger, but it would also
increase the RF voltage across the varactor.

Paul OH3LWR

------------------------------

Date: Sat, 23 Aug 1997 06:34:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO , paralleling Varactors

Does anybody know why paralelling another varactor across
the varactor of a LC Voltage controlled oscilator not increase
the tuning range of the VCO?

Both the varactors are reverse biased by the tuning voltage,
as varactors should be. So, connecting another varactor
across the LC tank circuit of a VCO should increase the freq
range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts
or so. The DC bias voltage for the varactor is about 1-10 volts or so.
So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

---------------------------------------------------------------------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---------------------------------------------------------------------

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End of Ham-Homebrew Digest V97 #479
******************************

------------------------------

Date: 24 Aug 1997 01:27:37 GMT
From: k1bqt@aol.com (K1BQT)
Subject: MRF 479 Needed

Hi--

If you can't get a 479, try a 2SC3133. Good for 15W PEP.

Rick K1BQT

------------------------------

Date: Sun, 24 Aug 1997 00:39:12 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures wrote:
>

> I am trying to locate a PNP transistor with highest available VCEO value, ide
ally
> up to 1kV.
>
> ICmax or Pw is not too important, neither is hFE.
>
> So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does no
t
> seem to be available anywhere in North America.
>
> Any advice would be greatly appreciated.
>
> Thanks
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
> fbures@alchemy.chem.utoronto.ca (use this address for replies)

You might try NTE for a direct substitute? They have a searchable table
for all kinds of semiconductors at http://www.nte.com/

---

Date: Sat, 23 Aug 1997 18:38:57 -0700
From: laura halliday <ve7ldh@direct.ca>
Subject: Regen and DC Receivers - ARRL doesn't like them!

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker
<parkerp@pcug.org.auNOSPAM> writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).
>
>I'm amazed how negative they are about regenerative & DC receivers. On
>regen receivers, I quote:
> (snip)

Maybe you should have a look at a more recent issue? My latest
copy (1996) discusses regens as primarily a historical thing, but
considers direct conversion receivers to be an effective way of
receiving signals.

I can think of a number of important designs between 1988 and 1996
that would have changed the perception of DC receivers as cute toys,
but not serious receivers...

As always, you get what you pay for. An extremely simple receiver
will get the job done under some circumstances, but may not
hold up under extreme conditions.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

---

Date: 24 Aug 1997 01:36:16 GMT
From: norman <norsan@bright.net>
Subject: Value of Dow-Key relay?

Dow key relays can be used for much more than switching from transmit to receive in boatanchors. Some uses are:

switching between 2 antennas
switching in/out a preamplifier at the antenna
switching transverters to a common IF
switching rigs to a SWR meter

and many more.

Norman N8RGR

---

Date: Sun, 24 Aug 1997 09:45:13 GMT
From: ttwist@online.no (Tom Twist)
Subject: VCO, paralelling varactors

On Sat, 23 Aug 1997 11:13:05 -0400, "P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

>FRANK,
>
>I guess I was not as clear as I should have been.
>
>1 varactor VCO ( MV109)
>case 1: CFIXED = 100 PF
> CVARACTOR= 2-20PF
> CTOTAL= 102-120 PF
> Cmax/cmin= 1.176
> FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%
>
>2 paralell Varactor VCO( 2*MV 109)
>case 2: CFIXED = 100 PF
> CVARACTOR= 4-40PF : 2 varactors in parallel
> CTOTAL= 104 to 140 PF
> Cmax/Cmin= 140/104= 1.346
> FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%
>
>Thus the max to min capacity should change.
>
>But I could not detect the change in frequency coverage
>after adding the second varactor.
>(Maybe I made an error in my experiment.)
>
>I guess that my question was, is the maximum capacity really
>going to double when you paralell another varactor across the
>varactor of a VCO. I am specificall talking about (1 varactor

>VCO) and NOT the 2 back-to-back varactor VCO.
<snip>

Perhaps the problem with paralleling two varactors is that the two diodes is not matched, resulting in more current flowing in one of the diodes.
Try using two resistors (and RFCs), to separate the bias voltages, and use two (relatively) large capacitors in series with the HF path. I'm too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

------------------------------

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

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End of Ham-Homebrew Digest V97 #481
******************************

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Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sun, 24 Aug 97 04:30:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #480

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 480

Today's Topics:
Accurate measurement of low level RF in the VHF region
QEX - info please
Room Temp "Oven" for Quartz?
YEASU FL/FR DX 400

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 22 Aug 1997 16:46:03 GMT
From: blombard@bogusity.iu.net (Bob Lombardi)
Subject: Accurate measurement of low level RF in the VHF region

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>

>>Thanks
>>
>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at
the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty
good chip. There are easier ways (i.e., more ham like). Pretty sure that
Solid State Design for the Radio Amateur covers these if you'd rather.
They involve using differential hot carrier diodes driving an op amp,
with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

---

Date: Sat, 23 Aug 1997 18:24:18 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: QEX - info please

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

---

Date: 23 Aug 1997 10:04:46 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Room Temp "Oven" for Quartz?

> transmitters consisted of a low frequency oscillator
>> followed by divider chains. Burying the oscillator in the ground puts
it
>> at a constant temperature. Its the same concept used when houses are
>> buried for insulation purposes. The temperature isn't warm, but it is
>> constant and isolated. Coax would be run to the shack, and DC voltage
>> would be sent down to the transistorized oscillator along the coax.
>>
>> Michael VE2BVW
>
>G3LTF used to do this.
>
>73 de G3PAI

I did too, but I always used multipliers in lieu of dividers.

W4ZCB

---

Date: Tue, 19 Aug 1997 11:11:24 -0230
From: George Andrews <vcmmcts@nlnet.nf.ca>
Subject: YEASU FL/FR DX 400

desperately need Schematic for the FL and FR DX 400 Transmitter and
Receiver. Cany anyone help????????

VO2AA/VO1VCM
vcmmcts@nlnet.nf.ca

---

End of Ham-Homebrew Digest V97 #480
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Date: Sun, 24 Aug 97 08:37:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #481

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 481

Today's Topics:
11volts from 12 volts...
Bounced Mail -> User Not Found
Cheap/decent 12V supply?
Ham-Homebrew Digest V97 #479

MRF 479 Needed
PNP transistor, VCEO highest possible - looking for
Regen and DC Receivers - ARRL doesn't like them!
Value of Dow-Key relay?
VCO, paralelling varactors
Yaesu AZ -EL rotator

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: Fri, 22 Aug 1997 03:23:28 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: 11volts from 12 volts...

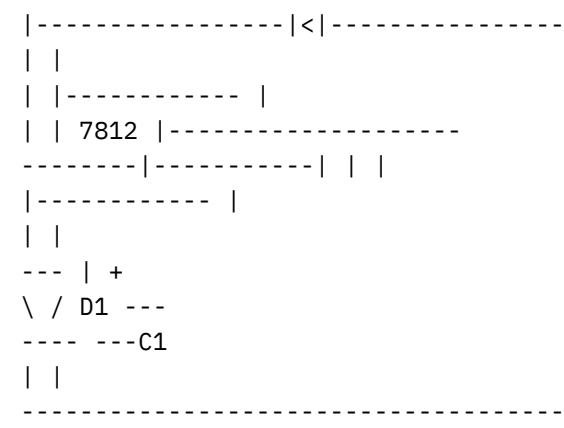
Hi bill,

Almost every 12 volt supply I have built using a 3 terminal
fixed regulator puts out about 11.5 volts or so. It seems
that the 12 volt regulators are manufactured with WIDE
tolerances.

Just use a diode or two in the ground lead of your 3 terminal reg
to increase output 11 volts to 12 volts or so.

D1, D2= In4001
C1= 10uf/16volts electrolytic

D2




In article <33efbc98.11731760@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>

>I'm thinking that I simply bought an 11 volt regulator in 12 volt
>clothing! Tomorrow I'll try a new part (and will report back on
>results).
>
>Thanks again. 73 Bill N2CQR

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: 24 Aug 97 14:28:20 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 08:56:27 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: Cheap/decent 12V supply?

These cheap switching power supplies are terrible choices for radio use,
far too noisy. Best is battery ONLY...a decent 12V Lead Acid car battery
used AS-IS (sans charger) then when you switch OFF your set up...you
turn ON the charger.
Simple, Cheap, loads of current and, best of all, quiet.
friend,
Lute

jason zawodny wrote:

> Well the question this week goes as such. Computer power
> supplies
> supply both 5V and 12V, and there are plenty laying around at work
> that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car
> battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars

>
> I've seen radio power supplies going for...
>
> Thanks
>
> jtz
>
>
> --
> --
> ------------------------------------------------------------------------
>
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ------------------------------------------------------------------
> --------

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

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Date: Sun, 24 Aug 97 02:23:52 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #479

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 479

Today's Topics:
Accurate measurement of low level RF in the VHF/UHF region
Antenna rotator control box schematic needed.
ceramic resonators? 80m VFO - repostrd
Cheap/decent 12V supply?
Double Sided PC Boards
FS: Mil Spec Teflon Covered Wire #20,22,24,26
Pixie 2 Transceiver - Where can I get one?
power transmission (electric) (2 msgs)
QEX - info please
Relay needed
Silver plating question
VCO, paralelling varactors (2 msgs)
VCO , paralleling Varactors

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End of Ham-Homebrew Digest V97 #485
******************************

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Date: 24 Aug 97 21:16:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 12:53:50 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #485

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 485

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #483

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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policies or positions of any party. Your mileage may vary. So there.

---

Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
---

Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up
>>>to 150Mhz.
>>>
>>>Levels will range between -20dBm and +20dBm.
>>>
>>>Has anyone got any suggestions for a suitable
>>>instrument and will a RF Millivoltmeter be more
>>>flexible than an RF Powermeter.
>>>
>>>Thanks
>>>
>>>Niels Montanana
>>>G8RWG
>>>

# 2135. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC59706.4BF900000921.uuout@mandic.com.br>
Source record: 91505

Este usuario nao existe em nosso cadastro (BOUNCED)...
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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Telnet: bbs.mandic.com.br

Text from original message follows:
---
make an oven than a TCXO. A peltier heater is unnecessary as the crystal
will hace a minimum temperature coefficient above 27C
Your crystal will be an AT (lazy Z) cut optimised for minimum deviation
over the whole band. If you temperature control just the crystal it
should be possible to raise the temperature by using a servo heater to
where the crystal reaches its minimum frequencey with luck and if the
crystal is correctly cut this will be about 35C.
The Maintaining circuit will still be sensitive to temperature and will
limit any crystal only control to +-0.5ppm or so.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

---

Date: 22 Aug 1997 21:15:34 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: WTB RF amp for 11M

country@music.com wrote:
: country@music.com wrote:

: >Hello, I am looking for a linear amplifier to buy for my midland radio
: >I use in my Semi truck. Preferable around 300-400 watts output with 4
: >watts input. Would prefer UPS cod. willing to pay up to $400 - only
: >for really output, not a label name.
: > Mike ,
: >aka KC7KEM
: >PS. I am using a fellow hams account so please call , don't email- he
: >is a wimp and is faking his address, one of those afraid of the FCC
: >types. Not ME! call me at 964-2458

: Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
: time to call- I sleep light so no problem with late/ early calls, That
: is Washington state time.

This is a troll. Let's all not start a thread.
I wouldn't call that number either.

I can hear landmines.

sheeesh. some peoples kids, eh?

Your radio pal Tony

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End of Ham-Homebrew Digest V97 #476
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Date: Fri, 22 Aug 1997 14:20:44 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: Help Looking for A HP 1820-0736

I need a HP 1820 - 0736 divide by 2 Prescaler chip for my
HP 5303B 525 MHZ Counter

HP in canada ain't much help

Thanks in advance
de
ve6nap@oanet.com

------------------------------

Date: Sat, 23 Aug 1997 08:39:28 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: MRF 479 Needed

Try RF Parts...in San Marco, CA for your transistor.
friend,
Lute

James R. Binkley wrote:

> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.
>
> Thanks Bob w4aos@his.com

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program

Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

---

Date: Sun, 24 Aug 97 00:53:57 GMT
From: tait@primeline.net (Gary Tait)
Subject: Need plans Alliance U100 Rotator control box.

I have what I have been told is an Alliance U-100 Rotator, I need a control box for, but don't wish to shell out the bucks for one.

Does anybody have plans for a solid state box, I could build out of TTL or cmos gates (other than the motor control circuitry of course.)

Gary Tait,VE3VBF

---

Date: Sat, 23 Aug 1997 18:26:53 +0100
From: Peter Barville <peter@barville.demon.co.uk>
Subject: QEX - info please

I understand that QEX has resumed publication, with a July 1997 edition. I am particularly interested in a couple of the articles from this issue, and would like to know how to get hold of a copy. I would also welcome any information with regard to how I can subscribe to the magazine.

If you're able to help, many thanks.
--
73, Peter G3XJS ( G-QRP 3001, QRP ARCI 8572 )

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End of Ham-Homebrew Digest V97 #477
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Date: 24 Aug 97 02:22:41 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: 24 Aug 1997 02:47:52 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 97 19:16:01 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #477

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 477

Today's Topics:
2 meter antenna
Bounced Mail -> User Not Found
Double Sided PC Boards
Ham-Homebrew Digest V97 #476
Help Looking for A HP 1820-0736
MRF 479 Needed
Need plans Alliance U100 Rotator control box.
QEX - info please

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available (by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I can compare it to the J-Pole I've been using. My question is, should the two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the feeding coax, with the braid shorted to the pipe at the midpoint of the antenna. The other half the dipole is base loaded to be electrically 3/4 wavelength long and physically 5/8 wavelength (I used a section of 1/8" steel rod with the coil making up the remainder of the length... I used a piece of solid phenolic plastic rod that plugs the end of the copper pipe and extends up as the coil form, and drilled out the center of the rod to set the steel element in). I am currently feeding the base of the loading coil with the coax center conductor, and do NOT have the two halves shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen <allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work. There is no real problems, any more than with other type, the R's and C's take a bit of geting used to (they fly round the shack really well if you get the mounting wrong!), but it just requires new skills to be learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM
+----------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------------+

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Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:
<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp
Help.
help taming HF : some thoughts
measuring VVC-diodes, how?
PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit

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End of Ham-Homebrew Digest V97 #484
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Date: 24 Aug 97 19:48:28 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 11:22:03 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #484

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 484

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #482

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 17:13:27 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Regen and DC Receivers - ARRL doesn't like them!
Room Temp "Oven" for Quartz? (2 msgs)
WTB RF amp for 11M

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 23 Aug 97 16:31:04 GMT
From: NORMANMO@miavx1.acs.muohio.EDU
Subject: <no subject>

add

---

Date: Wed, 20 Aug 1997 12:49:37 -0500
From: K0PW <pwentzel@minn.net>
Subject: Diathermy Machine $100.00

I have a friend who has a working diathermy machine for sale. I tore one of these apart a couple of eons ago, and harvested an excellent HV power supply for a linear -- also some heavy duty RF components. This is too heavy to ship. If anyone is interested, send me an e-mail and I'll pass along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

---

Date: Sat, 23 Aug 1997 07:02:26 GMT
From: allent@mnsinc.com (David Allen)
Subject: Double Sided PC Boards

stevem@vax.area.com (Stephen E. Muther) wrote:

>I do a lot of hobby boards and my employer's prototypes on a milling
>machine. Typically I drill the holes first (before etching or milling)
>then take the board in the back door of a cooperative board house
>for plating. If I am in a hurry or if the board house is too busy to
>deal with me, I use small brass or tin eyelets that I get at the
>local hobby/model shop. They are easy to push in and solder and
>require no cutting or trimming unlike wires.
>
>Steve M.
>

On a tangential issue, has anyone done much hobby work with the new SOT gull-wing or even surface mount packages? The "pin" spacing on some of these is getting awfully small. I've gotten a few samples of some nice IC's I's like to evaluate, but etching and soldering at those line widths makes me wonder if at some point the amateur homebrewer is going to get scraped off.

Dave Allen
WA2BSL
Falls Church, VA

---

Date: 23 Aug 1997 19:57:00 GMT
From: rog42@aol.com (Rog42)

Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 1997 06:03:04 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Fast O'scope for tiny Homebrewer budget

> wrt@eskimo.com (Bill Turner) wrote:

> >I was a test technician on the Tektronix 400 series production line
> >back in the '70s and '80s. We built so many of those we felt every
> >house in America must have one. Thanks for the kind words!
> >
> >73, Bill W7TI

I was issued a 454 when I joined a research project at the University
of Essex in 1970. The only more beautiful thing was the young lady
who came with it. (The 454 is no longer with me).

---

Date: 23 Aug 1997 12:22:45 GMT
From: "David Newkirk" <dnewkirk@bellatlantic.net>
Subject: Help!: Taming HF preamp

Bill Meara <wmeara@erols.com> wrote in article
<33f95b77.1710144@news.erols.com>...

> I went ahead and built a little grounded gate FET pre amp circuit.
> The circuit comes out of W1FB's Design Notebook.

[deletions]

> I have one problem that I would like to ask the group about: As I
> tweak the two tuned circuits (input and output) in the pre amp, it
> breaks into oscillation whenever I put them both at their resonant
> points. If I back off a bit on the input tank, the oscillation goes
> away, sensitivity remains sufficiently high and the 22 meter gang
> continues to be blocked. I suspect I may have failed to use a
> sufficiently short PC board trace to ground for the FET gate.
>
> Anyway, is this worth fixing or should I just leave it as it is? Is
> it normal for grounded gate FET preamps to behave this way? Am I
> losing performance by operating the input circuit slightly off
> resonant frequency? Can someone explain WHY this circuit is doing
> this (Too much gain? Why would the lead length matter?)

The lead length doesn't matter so much as the circuit's design. The problem with that circuit is that it's inherently unstable when its input and output are tuned. (Grounding a JFET's gate doesn't shield O from I as grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy JFET, so if you tap the I/O tuned circuits down far enough and/or stagger the I/O circuits' tuning, *and* there's sufficient loading at I and/or O, the circuit may not oscillate.

That circuit also disserves you by getting much less selectivity out of two tuned circuits than can easily be achieved with them.

A better approach is to close that book and use a circuit engineered for predictable gain and stability. One recommendation is the single-40673 amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s "Progressive Communications Receiver," later carried in many subsequent ARRL *Handbook*s under the title "High-Performance Communications Receiver" (it's in the 1992 edition, for instance). (Yes, 40673s are now "new old stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK [Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be passe over in the US, but in Japan and Europe they're still very much viable. The Japanese in particular have taken receive-class JFETs and MOSFETs much

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End of Ham-Homebrew Digest V97 #488
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## 2136. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC59406.080F00000917.uuout@mandic.com.br>
Source record: 91506

Este usuario nao existe em nosso cadastro (BOUNCED)...
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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
>>>nielsm@lcpub.co.uk
>>
>>Same situation, I'm thinking of building something using the LT1088, or
>>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>>datasheet (FARNELL server claims to have them but then says they aren't
>>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>>PowerMeter head (working) going on the cheap I'd be interested. TIA
>>
>> 73 de Laurens M1CCO
>
>Do you have web access? Analog Devices home page has a search engine at
>the opening screen. I entered AD737 and got it. They're www.analog.com.
>
>I've used the 737 in a signal measuring setup before, and it's a pretty
>good chip. There are easier ways (i.e., more ham like). Pretty sure that
>Solid State Design for the Radio Amateur covers these if you'd rather.
>They involve using differential hot carrier diodes driving an op amp,
>with perhaps some bias to get down to the -20 dBm level.
>
>
>
>73,
>Bob
>
>
>
it is fairly easy to go much further down than this!
With 2x 1N270, or better AA119 type germanium diodes and CA3140E
OP-amp you can measure down below -46dBm up to at least 600MHz.

I made a correction amplifier using several 1N4148 for each range, but
today, I would have tried a CA3140E buffer, with a possible log.amp
and connect this to a datalogger, which may be calibrated for every
10dB range, with some possible frequency calibration (like the one you

have on SHF power meters). With this circuit you might measure below
-40dBm on 1,296GHz, and still have useful sensitivity above 2.320 GHz.
But you have to calibrate the circuit yourself. This is accomplished
by borrowing a signal generator from work or from a friend (most SHF
friends have some sort of reliable signal generators)

73

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: Sat, 23 Aug 97 05:24:56 GMT
From: tait@primeline.net (Gary Tait)
Subject: Antenna rotator control box schematic needed.

I am looking for plans for a tv antenna rotator. It is one of the ones that
the antenna mast goes through. It is a 4 wire, with the wires connected
internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO
3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if
possible.

Gary Tait,VE3VBF

---

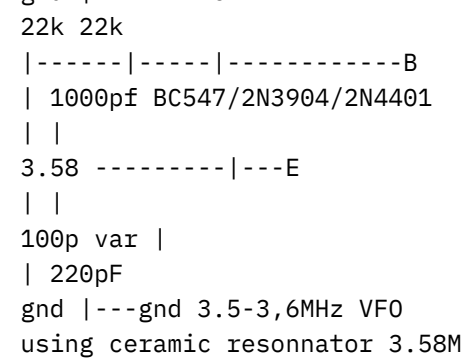
Date: Sat, 23 Aug 1997 19:04:37 GMT
From: la8ak@online.no (J M Noeding)
Subject: ceramic resonators? 80m VFO - repostrd

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>

>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?
I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin



using ceramic resonnator 3.58MHz

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 24 Aug 97 07:22:57 GMT
From: k3ky@juno.COM (David E Sinclair)
Subject: Cheap/decent 12V supply?

Using the 12V supply only from a 5V/12V computer supply probably would not
work well for charging a 12V lead/acid car battery. More voltage is needed. If
the two supplies in the computer unit are not ground referenced, then they
could be series-connected for 17V. Some simple circuitry could be used to
control or limit the battery charge current. There are several approaches
such as constant voltage, constant current, taper charging, etc. I will be glad
to supply references/schematics, etc. on request. Some other writers have
pointed out correctly that a linear supply would be a better choice than a
noisy computer switching supply, and that one or both supplies in the switch-
ing unit may have a minimum current requirement. That can be easily met with
various types of loads added in parallel with the supply needing it.

David Sinclair K3KY
e-mail: k3ky@juno.com

---

Date: Sat, 23 Aug 1997 09:51:48 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes
>stevem@vax.area.com (Stephen E. Muther) wrote:
>
>
>>I do a lot of hobby boards and my employer's prototypes on a milling
>>machine. Typically I drill the holes first (before etching or milling)
>>then take the board in the back door of a cooperative board house
>>for plating. If I am in a hurry or if the board house is too busy to
>>deal with me, I use small brass or tin eyelets that I get at the
>>local hobby/model shop. They are easy to push in and solder and
>>require no cutting or trimming unlike wires.
>>
>>Steve M.
>>

>
>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

For RF prototyping where I used to work, they used little single-sided PCBs about 1" square, with adhesive backing, with a surface mount pattern for a single chip brought out to wider pads. These were positioned on the Cu side of a piece of PCB laminate and the circuit wired up directly on the Cu ground plane with wire-wrap wire or self-fluxing magnet wire. I'll ask someone there where they got the things from. They were very cheaply made, and were free issue in the lab. I should have liberated a few before I left. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

---

Date: Sun, 24 Aug 1997 05:35:03 GMT
From: radiodale@dclink.com (Dale B. Allen)
Subject: FS: Mil Spec Teflon Covered Wire #20,22,24,26

I have the following colors and sizes available. This wire is stranded tinned copper with a Teflon jacket. Limit is 100ft./size/color for each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

---

Date: 23 Aug 1997 03:15:55 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit is available from HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne, NB6M

---

Date: Fri, 22 Aug 1997 23:55:41 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: power transmission (electric)

Mike Willis wrote:
>
> Paul KeinEnen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >
> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large currents. DC has no radiation losses, which is also significant at 50 Hz over long distances. For a given RMS, DC has a 30% smaller peak current and peak voltage. DC has no capacitively coupled current loss (not the same as leakage current) therefore power factor loss, through the insulation into the salt water. This capacitive current can cause electrolysis effects.

Bill W0IYH.

---

Date: 22 Aug 1997 16:04:03 GMT
From: n4mxf@aol.com (N4MXF)
Subject: power transmission (electric)

Hi,
I've been an engineer (manager) in the undersea cable business for 30 years and know of only a few DC cable projects for very specific applications. DC would not be an effective way to transmit power. High voltage pluse cables for digital transmission (very low current) are the only cables I know fit your discription. These are not power cables. Undersea power transmission are larger cables and are usually 5,15,35,64,130kv cables having conductors with thousands of circular mils and range from 4" to 8" diameters. There are some even larger. Cables usually contain 3 or 4 main conductors and are operated in a three phase (balanced) configuration. Today, many undersea power cables contain optical light guides (fiber optics) for signal transmission. Corona is normally controlled by proper shielding and the use of semi-con materials. External damage is the major cable failure although the we still like to get excited over the effects of "treeing" (crack propagation within a dielectric due to electro stress). If you would like any more details on cable or cable useage, drop me an email. Oxford,William & Associates: Cable Systems Consultants. wjoxford@aol.com or N4MXF@aol.com. 73 Bill

---

Date: 24 Aug 1997 03:56:29 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: QEX - info please

>. I would also
>welcome any information with regard to how I can subscribe to the
>magazine.
>
>If you're able to help, many thanks.
>--

Well, you might consider subscribing. You can do it through the League at their regular address or FAX number, or even I suspect thru their bulletin board.

It probably gets about as sticky though as we have it getting RadComm across the pond.

W4ZCB

---

Date: 24 Aug 1997 05:54:30 GMT
From: "ron ab6zx" <dom@shocking.com>
Subject: Relay needed

Looking to buy a used antenna relay capable of 800-1000 watts, can be open frame or coaxial, speed not necessary as not for QSK. Will be used for temporary bench tests only.
--
ron ab6zx chico ca
email: dom@shocking.com

---

Date: Sat, 23 Aug 1997 21:02:45 +0200
From: Bob Mueller <r.mueller@kfa-juelich.de>
Subject: Silver plating question

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some
> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the

> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver
> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick
almost any metal into the solution the silver ions will pick up an
electron from the metal and become metallic silver while one of the
substrate ions will go into solution. This is the secret of
"electroless" plating. Sounds wonderful, but it is not; the metal
deposited this way is poorly bonded and can be often wiped off with a
rag. It is also porous. Metals going into solution include copper,
zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually,
it probably could be made to work, if you are good and work fast. The
problem is that the melting point of silver is lower than the melting
point of copper (probably higher than for brass), but not a lot lower (a
bit over 100 degrees C.) You are at risk of melting the copper if you
heat with a tourch. It would work better with a silver bath (want to
melt a liter of silver in the kitchen?) with good temperature control.
There is another problem; the silver and copper rapidly alloy to form
a lower melting point alloy. If you do not work fast this process can
cause holes to develop as the alloy forms ever deeper into the
substrate. This is something you will understand better if you ever did
soldering on fine copper wire with lead-tin solder. The wire disappears
if you are too slow. The silver/copper process will be faster. You will
get a great bond, if you are good enough.

Bob

---

Date: Sat, 23 Aug 1997 11:13:05 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO, paralelling varactors

FRANK,

I guess I was not as clear as I should have been.

1 varactor VCO ( MV109)
case 1: CFIXED = 100 PF
CVARACTOR= 2-20PF
CTOTAL= 102-120 PF
Cmax/cmin= 1.176
FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%

2 paralell Varactor VCO( 2*MV 109)
case 2: CFIXED = 100 PF
CVARACTOR= 4-40PF : 2 varactors in parallel
CTOTAL= 104 to 140 PF
Cmax/Cmin= 140/104= 1.346

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End of Ham-Homebrew Digest V97 #483
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Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 10:43:36 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #483

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 483

Today's Topics:
Bounced Mail -> User Not Found (3 msgs)
Ham-Homebrew Digest V97 #480
Ham-Homebrew Digest V97 #481

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 14:58:50 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%

Thus the max to min capacity should change.

But I could not detect the change in frequency coverage
after adding the second varactor.
(Maybe I made an error in my experiment.)

I guess that my question was, is the maximum capacity really
going to double when you paralell another varactor across the
varactor of a VCO. I am specificall talking about (1 varactor

VCO) and NOT the 2 back-to-back varactor VCO.

I dont really know, but, I think that the one varactor VCO
drives the varactors in a highly non-linear way.There will be 5-10
volts RF/AC across the varactor, and 1-10 volts DC to tune it.
Thus, I believe that varactor will be working in a highly nonlinear
way. Also, Q is rather low for these types of varactors.

Anyway, I try this varactor paralleling again, and hopefully I had
done something wrong earlier, and paralelling varactors really
does increase their max capacity in case of a VCO.

Thanks for your thoughts.

John M. Franke wrote:
>
> What is important is the maximum to minimum capacitance ratio of the
> varactor. If the maximum capacitance is 100 pF and the minimum is 10
> pF, the ratio is of course 100/10 = 10. Paralleling two varactors
> produces a new ratio of 200/20 = 10, no change. Since the resonant
> frequency is equal to 1 divided by 2 pi times the square root of L times
> C, the change in frequency is proportional to 1 over the square root of
> the change in the LC product. In this case the frequency range is the
> square root of 10. One way to help see this is to insert values into
> the equation and see what happens. Pick an inductor, calculate the
> minimum and maximum frequency for the minimum and maximum capacitance
> with one varactor. Then repeat for two.
> Does this help?
> John

--
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pay me US $500 for each SPAM or Junk-Mail message you send to me.
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Date: Sun, 24 Aug 1997 08:19:58 GMT
From: keinanen@sci.fi (Paul KeinEnen)
Subject: VCO, paralelling varactors

"P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

<clip>

>I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
>
>I dont really know, but, I think that the one varactor VCO

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End of Ham-Homebrew Digest V97 #487
******************************

# 2137. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-24 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC59706.05E400000920.uuout@mandic.com.br>
Source record: 91507

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
From owner-ham-homebrew@ucsd.edu Sun Aug 24 21:25:01 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id VAA05936; Sun, 24 Aug 1997 21:25:01 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id VAA11705
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 21:32:47 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id QAA09227 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 16:22:04 -0700 (PDT)
Received: by mail.ucsd.edu; id QAA19042
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 16:05:39 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id QAA19005
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 16:05:31 -0700 (PDT)
Message-Id: <199708242305.QAA19005@mail.ucsd.edu>
Date: Sun, 24 Aug 97 16:05:30 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #488
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 488

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #486

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 21:48:32 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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further than manufacturers here; even the [old] 2SK125, for instance, is
much better than the best [J310/U310] generally available here.)

When you combine Hayward's amplifier with the appropriate
double-tuned-circuit output filter (described in the same article that
describes the amplifier), you'll have good, predictable gain (10 dB) *and*
the selectivity you need. Wes's circuit isn't the only possible solution
to your problem, of course, but it has withstood the tests of time and use
that the other circuit hasn't.

Regards,

David Newkirk, W9VES

------------------------------

Date: 22 Aug 1997 23:54:00 GMT
From: rod7rg@aol.com (ROD7RG)
Subject: Help.

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature
from the Canadian or Ametuer Radio Relay Leagues. They should be able to
provide you some contacts.

Rod
KL7RG/8

---

Date: Sat, 23 Aug 1997 07:16:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: help taming HF : some thoughts

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as gr
ounding a vacuum tube's grid can do.)
>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
> the circuit may not oscillate.
>
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as
to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the
top or the hot end of the antenna.
2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine
tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.
I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

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Date: Sat, 23 Aug 1997 20:02:36 GMT
From: la8ak@online.no (J M Noeding)
Subject: measuring VVC-diodes, how?

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.
I have a Radiometer Q-meter, but I would prefer an easier way than
measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #482
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Date: 24 Aug 97 17:13:26 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 08:52:06 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #482

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 482

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #478

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 14:39:15 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
Date: Fri, 22 Aug 1997 08:39:55 -0400
From: Zack Lau <zlau@arrl.org>
Subject: PAGER NOISE HELP

John Clarke wrote:
>
> Help requested, for a amateur located in the valley below a commercial
> tower site briselling with pager antenna, so any 2 metre signals are
> flatened by the data streams.
> Would a high Q tunable notch filter help? Any circuits or pointers will be

Not much, if there are a lots of different pagers in different
frequencies.

A good choice might be a sharp bandpass filter--the bigger the
better. One the size of a loaf of bread might do the trick, though
people have made them out of 20 gallon garbage cans... Zack W1VT

> much appreciated. Cheers and thank you in advance, John

------------------------------

Date: Fri, 22 Aug 1997 14:28:45 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

------------------------------

Date: Fri, 22 Aug 1997 14:21:43 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does anyone have simple plans they could draw for me to build such a device? Thanks for any help.

---

Date: 23 Aug 1997 03:08:01 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne NB6M

---

Date: 23 Aug 1997 11:13:53 GMT
From: hill@rowland.org (Winfield Hill)
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/
Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
_/ _/ _/ _/ _/
http://www.artofelectronics.com/ _/ _/ _/_/ _/_/_/_/

---

Date: 23 Aug 1997 15:30:51 GMT
From: pbunn624@teleplex.net (Pat Bunn)
Subject: power transmission (electric)

In article <19970819234401.TAA19821@ladder01.news.aol.com>, johnsonhe@aol.com says...
>
>>
>>Why do power companies use DC to transmitt power. 400KV, 500MW. What kind

>>of equipment is used to transform from AC to DC and DC to AC?
>>Could it be power factor?
>>73 and TIA
>
>The main reason is that DC is subject to only the resistance losses in the conductors. The line inductance and capacitance does not cause reactive voltage drop is a DC transmission line. In an AC line these losses are serious and must be corrected wth very expensive capacitor banks.

The reason that DC is not often used is that the cost of the high voltage solid state conversion systems have been very expensive in the past. Recently these cost have dropped and more DC transmission lines are being considered and will be built.

The merits of DC vs AC power generation,transmission, and distribution were highly debated at the turn of the century by Edison (DC) and Tesla (AC). Tesla eventually won the debate, but with the changes in technology of the next century, Edison and DC may be exonerated.

Pat Bunn

---

Date: 22 Aug 1997 23:24:49 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: RAMSEY SR-1 SW kit

: I dont see much change in the tuning
: slugs of the RF, IF and OSC cans unless
: I'm at the extremes.

Sorry, the OSC can changes the tuning
range just fine.

---

Date: 22 Aug 1997 23:07:17 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Regen and DC Receivers - ARRL doesn't like them!

Peter Parker <parkerp@pcug.org.auNOSPAM> wrote in article
<33fe0c12.0@newshost.pcug.org.au>...
> Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception.

Either the phasing or "Weaver" techniques can be used to build a simple "single signal" receiver and a SSB transmitter, too ... it is possible to obtain substantial undesired sideband suppression without too much difficulty ... especially with DSP techniques ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sat, 23 Aug 1997 06:08:53 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Room Temp "Oven" for Quartz?

In message <Pine.GSO.3.94.970822142932.16140A-100000@Stratus.CAM.ORG>
Michael Black <blackm00@CAM.ORG> writes:

> Another possibility, though not for portable operation, is to bury the
> oscillator in the ground. I remember some articles in the ham magazines
> about this about 35 years ago, back when moonbounce was first getting
> attention and transmitters consisted of a low frequency oscillator
> followed by divider chains. Burying the oscillator in the ground puts it
> at a constant temperature. Its the same concept used when houses are
> buried for insulation purposes. The temperature isn't warm, but it is
> constant and isolated. Coax would be run to the shack, and DC voltage
> would be sent down to the transistorized oscillator along the coax.
>
> Michael VE2BVW

G3LTF used to do this.

73 de G3PAI

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Date: Sat, 23 Aug 1997 01:34:02 +0100
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Subject: Room Temp "Oven" for Quartz?

In article <33FB23CA.7095@hnvr.com>, Kenneth M Gianino <ken@hnvr.com>
writes
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).
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>I'm looking for a simple but effective scheme to improve stability
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Im a bit late on the scene with this thread however:
If you have power available and dont mind the warm up time its easier to

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Date: Sat, 23 Aug 1997 17:35:20 GMT
From: rwclark@rwclark.seanet.com (Richard Clark)
Subject: Shortwave RX Antenna

On Mon, 18 Aug 1997 09:25:23 -0700, "hf.broekhuizen (SBKM-ME/C3)"
<hf.broekhuizen@navy.disp.mindef.nl> wrote:

>I do not have specs of your receiver, but I agree with Gary KE4ZV: the
>pre-amp for your HF-RX should not make a difference, since there is no
>improvement in SNR (N being mainly the atmospheric noise on HF).
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>More likely by adding the pre-amp you overload the input of your
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>I.e.: by non-linearity in the high part of the dynamic range (1 dB
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>result frequencies are generated as (f1+f2) and (f1-f2), but also
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Modestly priced receivers often used by SWL'ers do NOT need wideband
amplification, and their receivers are not atmospheric noise limited.
As already identified, filtering pays off and post-amplification would
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The term for such a device is Pre-selector. Hams having been for

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End of Ham-Homebrew Digest V97 #486
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Date: 24 Aug 97 21:48:31 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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------------------------------

Date: Sun, 24 Aug 97 13:59:56 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>

Subject: Ham-Homebrew Digest V97 #486

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 486

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #484

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
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Text from original message follows:
---
years passive in construction practices have allowed commercial
vendors to dominate design issues by virtue of offering "features."

A good receiver has front end tuning, often several tuned RF stages
prior to the first mixer. These stages are rare in current designs
having been consigned to the dust-bin by marketing department design
choices. Simply put they view that the Ham would rather have his hand
wither than reach for a "tuning" knob. That it isn't built into the
VFO knob is again a marketing issue in that cost issues arrise.
Tracking and alignment problems abound requiring the parts count to
push against the profit margin.

I have three friends with front-end overload problems from a nearyby
AM commercial station. Their rigs are top of line Kenwoods and they
suffer the same as my lowly DX-440 which cost an eighth of their
price. Both the DX-440 and these Kenwoods suffer the same design
shortfall: wide open front ends (OK so they are Band filtered, they
suffer all the same!). Pre-selectors would solve the problems all
around, but I already know my friends would shudder to have to reach

for a second knob (much less tuner). They conform to the expectations of Marketeers and their purchases have validated the entropy of design.

SWL'ers look for construction projects for Pre-selectors or tuned pre-amps. This is the single greatest improvement you can make outside of building IF ancillaries such as Q-multipliers, crystal lattice filters, or another stage of mixing to a lower, narrower IF. Also, do not neglect the Tuner as the cheapest means to reject noise and interfering stations. Sophisticated tuning networks with reject notches also keep cost low. Much of this material was present in the ARRL Handbooks of the '60's. I hope these common engineering issues haven't become folk-lore through neglect.

73's
Richard Clark, KB7QHC, WPE0EPH

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End of Ham-Homebrew Digest V97 #478
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Date: 24 Aug 97 14:39:14 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 97 20:26:34 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #478

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 478

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
F.S. - Tubes, books, much misc...
Ham-Homebrew Digest V97 #477
Shortwave RX Antenna

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Date: 24 Aug 97 02:22:42 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br

# 2138. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC5A4F2.444300000979.uuout@mandic.com.br>
Source record: 91412

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as
to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the
top or the hot end of the antenna.

2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine
tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.
I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

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Date: Sat, 23 Aug 1997 20:02:36 GMT
From: la8ak@online.no (J M Noeding)
Subject: measuring VVC-diodes, how?

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.
I have a Radiometer Q-meter, but I would prefer an easier way than

measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #482
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Date: 24 Aug 97 17:13:26 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
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Text from original message follows:
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Date: Sun, 24 Aug 97 08:52:06 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #482

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 482

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #478

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From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Text from original message follows:
---
Date: Fri, 22 Aug 1997 08:39:55 -0400
From: Zack Lau <zlau@arrl.org>
Subject: PAGER NOISE HELP

John Clarke wrote:
>
> Help requested, for a amateur located in the valley below a commercial
> tower site briselling with pager antenna, so any 2 metre signals are
> flatened by the data streams.
> Would a high Q tunable notch filter help? Any circuits or pointers will be

Not much, if there are a lots of different pagers in different
frequencies.

A good choice might be a sharp bandpass filter--the bigger the
better. One the size of a loaf of bread might do the trick, though
people have made them out of 20 gallon garbage cans... Zack W1VT

> much appreciated. Cheers and thank you in advance, John

---

Date: Fri, 22 Aug 1997 14:28:45 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

---

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device? Thanks for any help.

---

Date: 23 Aug 1997 03:08:01 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try
calling them at 1-800-442-5833.

Wayne NB6M

---

Date: 23 Aug 1997 11:13:53 GMT
From: hill@rowland.org (Winfield Hill)
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can
suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/
Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
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Ham-Homebrew Digest V97 #484

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 19:48:29 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
years passive in construction practices have allowed commercial
vendors to dominate design issues by virtue of offering "features."

A good receiver has front end tuning, often several tuned RF stages
prior to the first mixer. These stages are rare in current designs
having been consigned to the dust-bin by marketing department design
choices. Simply put they view that the Ham would rather have his hand
wither than reach for a "tuning" knob. That it isn't built into the
VFO knob is again a marketing issue in that cost issues arrise.
Tracking and alignment problems abound requiring the parts count to
push against the profit margin.

I have three friends with front-end overload problems from a nearyby
AM commercial station. Their rigs are top of line Kenwoods and they
suffer the same as my lowly DX-440 which cost an eighth of their
price. Both the DX-440 and these Kenwoods suffer the same design
shortfall: wide open front ends (OK so they are Band filtered, they
suffer all the same!). Pre-selectors would solve the problems all
around, but I already know my friends would shudder to have to reach
for a second knob (much less tuner). They conform to the expectations
of Marketeers and their purchases have validated the entropy of
design.

SWL'ers look for construction projects for Pre-selectors or tuned
pre-amps. This is the single greatest improvement you can make
outside of building IF ancillaries such as Q-multipliers, crystal
lattice filters, or another stage of mixing to a lower, narrower IF.
Also, do not neglect the Tuner as the cheapest means to reject noise
and interfering stations. Sophisticated tuning networks with reject
notches also keep cost low. Much of this material was present in the
ARRL Handbooks of the '60's. I hope these common engineering issues
haven't become folk-lore through neglect.

73's
Richard Clark, KB7QHC, WPE0EPH

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End of Ham-Homebrew Digest V97 #478
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Date: 24 Aug 97 14:39:14 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 97 20:26:34 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #478

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 478

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
F.S. - Tubes, books, much misc...
Ham-Homebrew Digest V97 #477
Shortwave RX Antenna

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policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 02:22:42 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br

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End of Ham-Homebrew Digest V97 #490
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# 2139. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC60A51.4EBE000009E3.uuout@mandic.com.br>
Source record: 91413

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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From owner-ham-homebrew@ucsd.edu Mon Aug 25 01:23:54 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id BAA19566; Mon, 25 Aug 1997 01:23:53 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id BAA06579
for <wagner.kuriki@mandic.com.br>; Mon, 25 Aug 1997 01:31:48 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id TAA15548 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 19:52:04 -0700 (PDT)
Received: by mail.ucsd.edu; id TAA07393
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 19:47:27 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id TAA07357
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 19:47:18 -0700 (PDT)
Message-Id: <199708250247.TAA07357@mail.ucsd.edu>
Date: Sun, 24 Aug 97 19:47:17 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #491
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 491

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Double Sided PC Boards
Ham-Homebrew Digest V97 #490
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Sale: Philips BGY35Z (22W output) power modules for 132-156MHz

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------------------------------------------------------------------------

Date: 25 Aug 97 01:27:33 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: 25 Aug 97 01:27:37 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
Priced accordingly, Substantial quantities available:

0A2 $0.75
6AH6 $0.50
6AL5 $0.50
6AN8A $0.75
6AU6A $0.50

6CL6 $0.75
6X4 $0.75
12AT7 $2.00
12AU7A $2.50
12AX7A $2.50
5651A $0.75
5963/12AU7A $2.50
6080 $2.50
6201/12AT7 $2.00
8068 $12.00
8136 $0.75
8532W $0.75

Shipping in the USA: 1 - 6 tubes $4.00, 6 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or
ELECTRONIC TEST EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

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Date: Sun, 24 Aug 97 15:30:14 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #487

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 487

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #485

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policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 21:16:54 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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>drives the varactors in a highly non-linear way.There will be 5-10
>volts RF/AC across the varactor, and 1-10 volts DC to tune it.
>Thus, I believe that varactor will be working in a highly nonlinear
>way. Also, Q is rather low for these types of varactors.

Sounds like the conditions are similar to the parametric amplifier or
varactor tripler :-).

If the high RF voltage across the varactor is your problem, then why
not use a varactor with large maximum capacitance (a tuning range from
,say, 25 pF to 250 pF) in series with a small (say 100 pF) fixed
capacitor. The two capacitances will form a capacitive voltage
divider, at the minimum capacitance the AC voltage across the varactor
is only slightly reduced but at maximum capacitance only a very small
fraction of the RF voltage is across the varactor (2/7 in this case).
This greatly reduces the risk for forward biasing at low tuning
voltages.

Your problem seem to be the large parallel capacitance, so it is quite
unrealistic to expect to get any large tuning range with varactors
with low maximum capacitance. With values in my example, you would get
sqrt ( (100+71)pF/(100+20)pF ) = 1.19 or 19 %. Using a larger series
capacitance would make the tuning range even larger, but it would also
increase the RF voltage across the varactor.

Paul OH3LWR

------------------------------

Date: Sat, 23 Aug 1997 06:34:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO , paralleling Varactors

Does anybody know why paralelling another varactor across
the varactor of a LC Voltage controlled oscilator not increase
the tuning range of the VCO?

Both the varactors are reverse biased by the tuning voltage,
as varactors should be. So, connecting another varactor
across the LC tank circuit of a VCO should increase the freq
range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts
or so. The DC bias voltage for the varactor is about 1-10 volts or so.
So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

---------------------------------------------------------------------
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
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End of Ham-Homebrew Digest V97 #479
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Date: 24 Aug 1997 01:27:37 GMT
From: k1bqt@aol.com (K1BQT)
Subject: MRF 479 Needed

Hi--

If you can't get a 479, try a 2SC3133. Good for 15W PEP.

Rick K1BQT

------------------------------

Date: Sun, 24 Aug 1997 00:39:12 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures wrote:
>
> I am trying to locate a PNP transistor with highest available VCEO value, ide
ally
> up to 1kV.
>

> ICmax or Pw is not too important, neither is hFE.
>
> So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does no
t
> seem to be available anywhere in North America.
>
> Any advice would be greatly appreciated.
>
> Thanks
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
> fbures@alchemy.chem.utoronto.ca (use this address for replies)

You might try NTE for a direct substitute? They have a searchable table
for all kinds of semiconductors at http://www.nte.com/

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Date: Sat, 23 Aug 1997 18:38:57 -0700
From: laura halliday <ve7ldh@direct.ca>
Subject: Regen and DC Receivers - ARRL doesn't like them!

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker
<parkerp@pcug.org.auNOSPAM> writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).
>
>I'm amazed how negative they are about regenerative & DC receivers. On
>regen receivers, I quote:
> (snip)

Maybe you should have a look at a more recent issue? My latest
copy (1996) discusses regens as primarily a historical thing, but
considers direct conversion receivers to be an effective way of
receiving signals.

I can think of a number of important designs between 1988 and 1996
that would have changed the perception of DC receivers as cute toys,
but not serious receivers...

As always, you get what you pay for. An extremely simple receiver
will get the job done under some circumstances, but may not
hold up under extreme conditions.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

---

Date: 24 Aug 1997 01:36:16 GMT
From: norman <norsan@bright.net>

Subject: Value of Dow-Key relay?

Dow key relays can be used for much more than switching from transmit to
receive in boatanchors. Some uses are:

switching between 2 antennas
switching in/out a preamplifier at the antenna
switching transverters to a common IF
switching rigs to a SWR meter

and many more.

Norman N8RGR

---

Date: Sun, 24 Aug 1997 09:45:13 GMT
From: ttwist@online.no (Tom Twist)
Subject: VCO, paralelling varactors

On Sat, 23 Aug 1997 11:13:05 -0400, "P. Singh"
<singhpk@NOSPAM.exit109.com> wrote:

>FRANK,
>
>I guess I was not as clear as I should have been.
>
>1 varactor VCO ( MV109)
>case 1: CFIXED = 100 PF
> CVARACTOR= 2-20PF
> CTOTAL= 102-120 PF
> Cmax/cmin= 1.176
> FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%
>
>2 paralell Varactor VCO( 2*MV 109)
>case 2: CFIXED = 100 PF
> CVARACTOR= 4-40PF : 2 varactors in parallel
> CTOTAL= 104 to 140 PF
> Cmax/Cmin= 140/104= 1.346
> FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%
>
>Thus the max to min capacity should change.
>
>But I could not detect the change in frequency coverage
>after adding the second varactor.
>(Maybe I made an error in my experiment.)
>
>I guess that my question was, is the maximum capacity really
>going to double when you paralell another varactor across the
>varactor of a VCO. I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
<snip>

Perhaps the problem with paralleling two varactors is that the two diodes is not matched, resulting in more current flowing in one of the diodes.
Try using two resistors (and RFCs), to separate the bias voltages, and use two (relatively) large capacitors in series with the HF path. I'm too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

------------------------------

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

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End of Ham-Homebrew Digest V97 #481
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Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 04:30:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #480

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 480

Today's Topics:
Accurate measurement of low level RF in the VHF region
QEX - info please
Room Temp "Oven" for Quartz?
YEASU FL/FR DX 400

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---

Date: 22 Aug 1997 16:46:03 GMT
From: blombard@bogusity.iu.net (Bob Lombardi)
Subject: Accurate measurement of low level RF in the VHF region

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>
>>Thanks
>>

>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at
the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty
good chip. There are easier ways (i.e., more ham like). Pretty sure that
Solid State Design for the Radio Amateur covers these if you'd rather.
They involve using differential hot carrier diodes driving an op amp,
with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

---

Date: Sat, 23 Aug 1997 18:24:18 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: QEX - info please

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

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Date: 23 Aug 1997 10:04:46 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Room Temp "Oven" for Quartz?

> transmitters consisted of a low frequency oscillator
>> followed by divider chains. Burying the oscillator in the ground puts
it
>> at a constant temperature. Its the same concept used when houses are
>> buried for insulation purposes. The temperature isn't warm, but it is
>> constant and isolated. Coax would be run to the shack, and DC voltage
>> would be sent down to the transistorized oscillator along the coax.
>>
>> Michael VE2BVW
>
>G3LTF used to do this.
>
>73 de G3PAI

I did too, but I always used multipliers in lieu of dividers.

W4ZCB

------------------------------

Date: Tue, 19 Aug 1997 11:11:24 -0230
From: George Andrews <vcmmcts@nlnet.nf.ca>
Subject: YEASU FL/FR DX 400

desperately need Schematic for the FL and FR DX 400 Transmitter and
Receiver. Cany anyone help????????

VO2AA/VO1VCM
vcmmcts@nlnet.nf.ca

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End of Ham-Homebrew Digest V97 #480
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Date: Sun, 24 Aug 97 08:37:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #481

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 481

Today's Topics:
11volts from 12 volts...
Bounced Mail -> User Not Found
Cheap/decent 12V supply?
Ham-Homebrew Digest V97 #479
MRF 479 Needed
PNP transistor, VCEO highest possible - looking for

Regen and DC Receivers - ARRL doesn't like them!
Value of Dow-Key relay?
VCO, paralelling varactors
Yaesu AZ -EL rotator

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: Fri, 22 Aug 1997 03:23:28 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: 11volts from 12 volts...

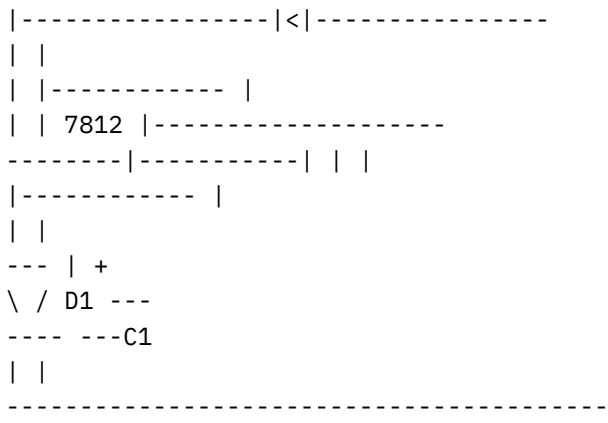
Hi bill,

Almost every 12 volt supply I have built using a 3 terminal
fixed regulator puts out about 11.5 volts or so. It seems
that the 12 volt regulators are manufactured with WIDE
tolerances.

Just use a diode or two in the ground lead of your 3 terminal reg
to increase output 11 volts to 12 volts or so.

D1, D2= In4001
C1= 10uf/16volts electrolytic

D2




In article <33efbc98.11731760@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>
>I'm thinking that I simply bought an 11 volt regulator in 12 volt
>clothing! Tomorrow I'll try a new part (and will report back on

>results).
>
>Thanks again. 73 Bill N2CQR

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: 24 Aug 97 14:28:20 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 08:56:27 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: Cheap/decent 12V supply?

These cheap switching power supplies are terrible choices for radio use,
far too noisy. Best is battery ONLY...a decent 12V Lead Acid car battery
used AS-IS (sans charger) then when you switch OFF your set up...you
turn ON the charger.
Simple, Cheap, loads of current and, best of all, quiet.
friend,
Lute

jason zawodny wrote:

> Well the question this week goes as such. Computer power
> supplies
> supply both 5V and 12V, and there are plenty laying around at work
> that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car
> battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars
>
> I've seen radio power supplies going for...

>
> Thanks
>
> jtz
>
>
> --
> --
> ------------------------------------------------------------------------
>
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ----------------------------------------------------------------
> --------

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

------------------------------

Date: Sun, 24 Aug 97 02:23:52 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #479

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 479

Today's Topics:
Accurate measurement of low level RF in the VHF/UHF region
Antenna rotator control box schematic needed.
ceramic resonators? 80m VFO - repostrd
Cheap/decent 12V supply?
Double Sided PC Boards
FS: Mil Spec Teflon Covered Wire #20,22,24,26
Pixie 2 Transceiver - Where can I get one?
power transmission (electric) (2 msgs)
QEX - info please
Relay needed
Silver plating question
VCO, paralelling varactors (2 msgs)
VCO , paralleling Varactors

# 2140. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC60A51.62C6000009E4.uuout@mandic.com.br>
Source record: 91414

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

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End of Ham-Homebrew Digest V97 #485
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Date: 24 Aug 97 21:16:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 12:53:50 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #485

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 485

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #483

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
------------------------------------------------------------------------

Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up
>>>to 150Mhz.

---

Date: 23 Aug 1997 15:01:33 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Double Sided PC Boards

David Allen <allent@mnsinc.com> wrote in article
<33fe8a16.45638370@netnews.worldnet.att.net>...
>
> On a tangential issue, has anyone done much hobby work with the new
> SOT gull-wing or even surface mount packages? The "pin" spacing on
> some of these is getting awfully small. I've gotten a few samples of
> some nice IC's I's like to evaluate, but etching and soldering at
> those line widths makes me wonder if at some point the amateur
> homebrewer is going to get scraped off.
>
> Dave Allen
> WA2BSL
> Falls Church, VA

The trick in soldering is to abandon the traditional soldering iron ...
get solder paste with "no-clean" flux (from ESP, for example ...
(800) 338-4353) and do reflow soldering with a source of hot air
(a heat gun will work in a pinch, if you keep your distance and are
careful) ...

SMT is NOT impossible, or even difficult, to work with ... IF you
take the effort to learn some new techniques ... however, this seems
to be a MAJOR problem for far too many hams ... far too few seem
willing to learn anything, let alone something modern ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sun, 24 Aug 97 17:42:46 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #490

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 490

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #488

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 23:28:45 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Telnet: bbs.mandic.com.br

Text from original message follows:
---
make an oven than a TCXO. A peltier heater is unnecessary as the crystal
will hace a minimum temperature coefficient above 27C
Your crystal will be an AT (lazy Z) cut optimised for minimum deviation
over the whole band. If you temperature control just the crystal it
should be possible to raise the temperature by using a servo heater to
where the crystal reaches its minimum frequencey with luck and if the
crystal is correctly cut this will be about 35C.
The Maintaining circuit will still be sensitive to temperature and will
limit any crystal only control to +-0.5ppm or so.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

---

Date: 22 Aug 1997 21:15:34 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: WTB RF amp for 11M

country@music.com wrote:
: country@music.com wrote:

: >Hello, I am looking for a linear amplifier to buy for my midland radio
: >I use in my Semi truck. Preferable around 300-400 watts output with 4
: >watts input. Would prefer UPS cod. willing to pay up to $400 - only
: >for really output, not a label name.
: > Mike ,
: >aka KC7KEM
: >PS. I am using a fellow hams account so please call , don't email- he
: >is a wimp and is faking his address, one of those afraid of the FCC
: >types. Not ME! call me at 964-2458

: Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
: time to call- I sleep light so no problem with late/ early calls, That
: is Washington state time.

This is a troll. Let's all not start a thread.
I wouldn't call that number either.

I can hear landmines.

sheeesh. some peoples kids, eh?

Your radio pal Tony

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End of Ham-Homebrew Digest V97 #476
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Date: Fri, 22 Aug 1997 14:20:44 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: Help Looking for A HP 1820-0736

I need a HP 1820 - 0736 divide by 2 Prescaler chip for my
HP 5303B 525 MHZ Counter

HP in canada ain't much help

Thanks in advance
de
ve6nap@oanet.com

------------------------------

Date: Sat, 23 Aug 1997 08:39:28 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: MRF 479 Needed

Try RF Parts...in San Marco, CA for your transistor.
friend,
Lute

James R. Binkley wrote:

> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.
>
> Thanks Bob w4aos@his.com

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program

Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

---

Date: Sun, 24 Aug 97 00:53:57 GMT
From: tait@primeline.net (Gary Tait)
Subject: Need plans Alliance U100 Rotator control box.

I have what I have been told is an Alliance U-100 Rotator, I need a control box for, but don't wish to shell out the bucks for one.

Does anybody have plans for a solid state box, I could build out of TTL or cmos gates (other than the motor control circuitry of course.)

Gary Tait,VE3VBF

---

Date: Sat, 23 Aug 1997 18:26:53 +0100
From: Peter Barville <peter@barville.demon.co.uk>
Subject: QEX - info please

I understand that QEX has resumed publication, with a July 1997 edition. I am particularly interested in a couple of the articles from this issue, and would like to know how to get hold of a copy. I would also welcome any information with regard to how I can subscribe to the magazine.

If you're able to help, many thanks.
--
73, Peter G3XJS ( G-QRP 3001, QRP ARCI 8572 )

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End of Ham-Homebrew Digest V97 #477
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Date: 24 Aug 97 02:22:41 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: 24 Aug 1997 02:47:52 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 97 19:16:01 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #477

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 477

Today's Topics:
2 meter antenna
Bounced Mail -> User Not Found
Double Sided PC Boards
Ham-Homebrew Digest V97 #476
Help Looking for A HP 1820-0736
MRF 479 Needed
Need plans Alliance U100 Rotator control box.
QEX - info please

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available (by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I can compare it to the J-Pole I've been using. My question is, should the two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the feeding coax, with the braid shorted to the pipe at the midpoint of the antenna. The other half the dipole is base loaded to be electrically 3/4 wavelength long and physically 5/8 wavelength (I used a section of 1/8" steel rod with the coil making up the remainder of the length... I used a piece of solid phenolic plastic rod that plugs the end of the copper pipe and extends up as the coil form, and drilled out the center of the rod to set the steel element in). I am currently feeding the base of the loading coil with the coax center conductor, and do NOT have the two halves shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen <allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work. There is no real problems, any more than with other type, the R's and C's take a bit of geting used to (they fly round the shack really well if you get the mounting wrong!), but it just requires new skills to be learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM
+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

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Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:
<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp
Help.
help taming HF : some thoughts
measuring VVC-diodes, how?
PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit

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End of Ham-Homebrew Digest V97 #484
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Date: 24 Aug 97 19:48:28 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 11:22:03 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #484

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 484

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #482

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 17:13:27 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Regen and DC Receivers - ARRL doesn't like them!
Room Temp "Oven" for Quartz? (2 msgs)
WTB RF amp for 11M

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 23 Aug 97 16:31:04 GMT
From: NORMANMO@miavx1.acs.muohio.EDU
Subject: <no subject>

add

---

Date: Wed, 20 Aug 1997 12:49:37 -0500
From: K0PW <pwentzel@minn.net>
Subject: Diathermy Machine $100.00

I have a friend who has a working diathermy machine for sale. I tore one of these apart a couple of eons ago, and harvested an excellent HV power supply for a linear -- also some heavy duty RF components. This is too heavy to ship. If anyone is interested, send me an e-mail and I'll pass along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

---

Date: Sat, 23 Aug 1997 07:02:26 GMT
From: allent@mnsinc.com (David Allen)
Subject: Double Sided PC Boards

stevem@vax.area.com (Stephen E. Muther) wrote:

>I do a lot of hobby boards and my employer's prototypes on a milling
>machine. Typically I drill the holes first (before etching or milling)
>then take the board in the back door of a cooperative board house
>for plating. If I am in a hurry or if the board house is too busy to
>deal with me, I use small brass or tin eyelets that I get at the
>local hobby/model shop. They are easy to push in and solder and
>require no cutting or trimming unlike wires.
>
>Steve M.
>

On a tangential issue, has anyone done much hobby work with the new SOT gull-wing or even surface mount packages? The "pin" spacing on some of these is getting awfully small. I've gotten a few samples of some nice IC's I's like to evaluate, but etching and soldering at those line widths makes me wonder if at some point the amateur homebrewer is going to get scraped off.

Dave Allen
WA2BSL
Falls Church, VA

---

Date: 23 Aug 1997 19:57:00 GMT
From: rog42@aol.com (Rog42)

Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 1997 06:03:04 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Fast O'scope for tiny Homebrewer budget

> wrt@eskimo.com (Bill Turner) wrote:

> >I was a test technician on the Tektronix 400 series production line
> >back in the '70s and '80s. We built so many of those we felt every
> >house in America must have one. Thanks for the kind words!
> >
> >73, Bill W7TI

I was issued a 454 when I joined a research project at the University
of Essex in 1970. The only more beautiful thing was the young lady
who came with it. (The 454 is no longer with me).

---

Date: 23 Aug 1997 12:22:45 GMT
From: "David Newkirk" <dnewkirk@bellatlantic.net>
Subject: Help!: Taming HF preamp

Bill Meara <wmeara@erols.com> wrote in article
<33f95b77.1710144@news.erols.com>...

> I went ahead and built a little grounded gate FET pre amp circuit.
> The circuit comes out of W1FB's Design Notebook.

[deletions]

> I have one problem that I would like to ask the group about: As I
> tweak the two tuned circuits (input and output) in the pre amp, it
> breaks into oscillation whenever I put them both at their resonant
> points. If I back off a bit on the input tank, the oscillation goes
> away, sensitivity remains sufficiently high and the 22 meter gang
> continues to be blocked. I suspect I may have failed to use a
> sufficiently short PC board trace to ground for the FET gate.
>
> Anyway, is this worth fixing or should I just leave it as it is? Is
> it normal for grounded gate FET preamps to behave this way? Am I
> losing performance by operating the input circuit slightly off
> resonant frequency? Can someone explain WHY this circuit is doing
> this (Too much gain? Why would the lead length matter?)

The lead length doesn't matter so much as the circuit's design. The problem with that circuit is that it's inherently unstable when its input and output are tuned. (Grounding a JFET's gate doesn't shield O from I as grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy JFET, so if you tap the I/O tuned circuits down far enough and/or stagger the I/O circuits' tuning, *and* there's sufficient loading at I and/or O, the circuit may not oscillate.

That circuit also disserves you by getting much less selectivity out of two tuned circuits than can easily be achieved with them.

A better approach is to close that book and use a circuit engineered for predictable gain and stability. One recommendation is the single-40673 amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s "Progressive Communications Receiver," later carried in many subsequent ARRL *Handbook*s under the title "High-Performance Communications Receiver" (it's in the 1992 edition, for instance). (Yes, 40673s are now "new old stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK [Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be passe over in the US, but in Japan and Europe they're still very much viable. The Japanese in particular have taken receive-class JFETs and MOSFETs much

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End of Ham-Homebrew Digest V97 #488
******************************

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Date: 24 Aug 97 23:28:45 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

# 2141. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC60A51.65C2000009E5.uuout@mandic.com.br>
Source record: 91415

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Text from original message follows:
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Date: Sun, 24 Aug 97 16:05:30 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #488

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 488

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #486

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 21:48:32 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
```

http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
further than manufacturers here; even the [old] 2SK125, for instance, is
much better than the best [J310/U310] generally available here.)

When you combine Hayward's amplifier with the appropriate
double-tuned-circuit output filter (described in the same article that
describes the amplifier), you'll have good, predictable gain (10 dB) *and*
the selectivity you need. Wes's circuit isn't the only possible solution
to your problem, of course, but it has withstood the tests of time and use
that the other circuit hasn't.

Regards,

David Newkirk, W9VES

---

Date: 22 Aug 1997 23:54:00 GMT
From: rod7rg@aol.com (ROD7RG)
Subject: Help.

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature
from the Canadian or Ametuer Radio Relay Leagues. They should be able to
provide you some contacts.

Rod
KL7RG/8

---

Date: Sat, 23 Aug 1997 07:16:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: help taming HF : some thoughts

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as gr
ounding a vacuum tube's grid can do.)

>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
> the circuit may not oscillate.
>

---

Date: 24 Aug 1997 20:51:31 GMT
From: "Joakim Langlet" <joakim@seaview.se>
Subject: Sale: Philips BGY35Z (22W output) power modules for 132-156MHz

Dear Fellow Hams!
I have a few Philips power modules (BGY35Z) that should be used rather than
be sitting on
a shelf. BGY35Z is a special selection of BGY35, which has a higher
guaranteed output
power.

Input power is 300 mW and power supply is 12.5V.

I am offering these modules, which data sheet for $100 excluding freight
and handling.
These are unused parts.

73 de SM0OET

Joakim Langlet

joakim@seaview.se

---

End of Ham-Homebrew Digest V97 #491
******************************

# 2142. RE: Extend frg on ICOM IC 737

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9708242138177681@atdbbs.com>
Source record: 91416

Following is a copy from Packet, on how to do the transmit mod for the well-reviewed. Icom 737 HF transciever. If someone else tries it, please let us know if it works.

73 from Leigh/KM6JE in Santa Barbara.

---

1300 B# 1312 ALL IW3BKW WW 940312 ICOM IC-737 GEN.COVERANGE.
From: IW3BKW@OE7XCI.#TIR.AUT.EU
ICOM IC-737
---
GENERAL COVERANGE IN TRANSMISSION.

1) Remove the top and bottom covers of the transceiver.

2) Remove the final power amplifier module.

3) Locate the LOGIC-UNIT on witch there is a back-up lithium battery for the RAM memory.

4) On the LOGIC-UNIT, near the chip called IC6 (TMP82C265BF-2),between the output pin PC06 and the imput pin PA15, find the diode D3.

5) This diode is not an SMD component.

6) Cut the diode D3.

..Now the ICOM IC-737 will transmit from 1,6 to 30 Mhz !!!.

CW Filter Switching Modification for the Icom 737

The Icom 737 is a wonderful radio for CW operation, but I did not like the filtering switching options offered in normal operation of the radio when you have installed BOTH the 9 Mhz and 455 Khz optional CW filters. The default option is to use the SSB filter for CW in the CW mode, and then switch in BOTH the 9 Mhz and 455 Khz optional IF filters in the CW-N mode. This provides too broad a filter for general tuning in CW, and the CW-N mode (with the two filters in) is far too sharp for just tuning around.

I felt that it would be better to allow the 455 Khz filter to be functioning full time in the CW mode, and then switch in the 9 Mhz CW filter in the CW-N mode. The following simple modification only requires a single wire to added to the radio.

MODIFICATION

1) Remove the top/bottom cover of the radio as per the manual.

2) Position the radio facing you and locate the resistor R-323 which is simply labeled "323" on the PC board just to the left of the opional 455 Khz CW filter. Solder a wire to the end of R-323 which is closest to the front pannel.

3) Locate J-3 just above and to the right of the 9 Mhz filter F-13. Attach a wire to the connector or wire going to pin 7. Pin 7 is the third pin from the right. (The pins are numbered 1-9 from left to right) You may carefully tack solder a wire to the plug by removing it first. I used a solid 28 gauge wire and just pushed it into the connector without soldering.

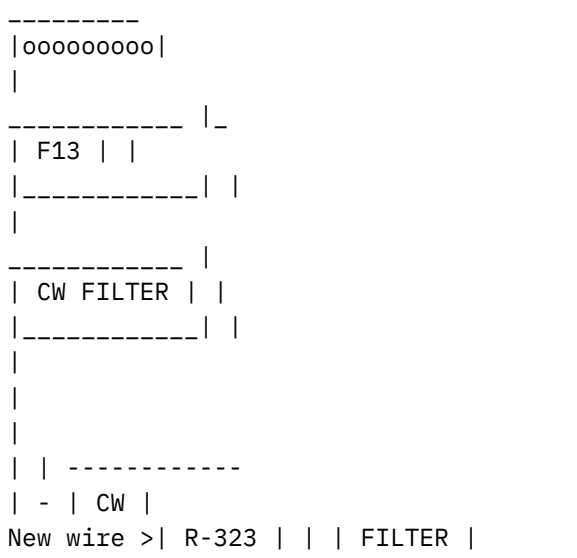
4) Replace the top and bottom covers.

I'm happy with the function of this modified switching arrangement. The CW-N function is now the mode of last resort when going after the weak ones, or when the QRM gets out of control, and tuning with just the 455 Khz filter is a better than using the SSB filter.

Good luck! 73's
Greg Chartrand
WA9EYY

---

Pin 7 of J3




(Continued to next message)

# 2143. RE: Extend frg on ICOM IC 737

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9708242138187682@atdbbs.com>
Source record: 91417

(Continued from previous message)

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| - ------------
+--------|

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FRONT
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# 2144. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC60EBB.3FF9000009FB.uuout@mandic.com.br>
Source record: 91418

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Mon Aug 25 02:01:53 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id CAA21200; Mon, 25 Aug 1997 02:01:52 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id CAA09738
for <wagner.kuriki@mandic.com.br>; Mon, 25 Aug 1997 02:09:57 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id UAA16410 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 20:22:08 -0700 (PDT)
Received: by mail.ucsd.edu; id UAA08801
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 20:07:05 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id UAA08743
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 20:06:54 -0700 (PDT)
Message-Id: <199708250306.UAA08743@mail.ucsd.edu>
Date: Sun, 24 Aug 97 20:06:53 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #492
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 492

Today's Topics:
Bounced Mail -> User Not Found (3 msgs)
Ham-Homebrew Digest V97 #489
```

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 25 Aug 97 01:27:37 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
>>>
>>>Levels will range between -20dBm and +20dBm.
>>>
>>>Has anyone got any suggestions for a suitable
>>>instrument and will a RF Millivoltmeter be more
>>>flexible than an RF Powermeter.
>>>
>>>Thanks
>>>
>>>Niels Montanana
>>>G8RWG
>>>

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End of Ham-Homebrew Digest V97 #489
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Date: 25 Aug 97 01:27:37 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: 25 Aug 97 01:27:33 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as
to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the
top or the hot end of the antenna.
2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine
tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.
I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: Sat, 23 Aug 1997 20:02:36 GMT
From: la8ak@online.no (J M Noeding)
Subject: measuring VVC-diodes, how?

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.
I have a Radiometer Q-meter, but I would prefer an easier way than
measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #482
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Date: 24 Aug 97 17:13:26 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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---

Date: Sun, 24 Aug 97 08:52:06 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #482

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 482

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #478

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 14:39:15 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
Date: Fri, 22 Aug 1997 08:39:55 -0400
From: Zack Lau <zlau@arrl.org>
Subject: PAGER NOISE HELP

John Clarke wrote:
>
> Help requested, for a amateur located in the valley below a commercial
> tower site briselling with pager antenna, so any 2 metre signals are
> flatened by the data streams.
> Would a high Q tunable notch filter help? Any circuits or pointers will be

Not much, if there are a lots of different pagers in different
frequencies.

A good choice might be a sharp bandpass filter--the bigger the
better. One the size of a loaf of bread might do the trick, though
people have made them out of 20 gallon garbage cans... Zack W1VT

> much appreciated. Cheers and thank you in advance, John

------------------------------

Date: Fri, 22 Aug 1997 14:28:45 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

------------------------------

Date: Fri, 22 Aug 1997 14:21:43 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does anyone have simple plans they could draw for me to build such a device? Thanks for any help.

---

Date: 23 Aug 1997 03:08:01 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne NB6M

---

Date: 23 Aug 1997 11:13:53 GMT
From: hill@rowland.org (Winfield Hill)
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/
Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
_/ _/ _/ _/ _/
http://www.artofelectronics.com/ _/ _/ _/_/ _/_/_/_/

---

Date: 23 Aug 1997 15:30:51 GMT
From: pbunn624@teleplex.net (Pat Bunn)
Subject: power transmission (electric)

In article <19970819234401.TAA19821@ladder01.news.aol.com>, johnsonhe@aol.com says...
>
>>
>>Why do power companies use DC to transmitt power. 400KV, 500MW. What kind

>>of equipment is used to transform from AC to DC and DC to AC?
>>Could it be power factor?
>>73 and TIA
>
>The main reason is that DC is subject to only the resistance losses in the conductors. The line inductance and capacitance does not cause reactive voltage drop is a DC transmission line. In an AC line these losses are serious and must be corrected wth very expensive capacitor banks.

The reason that DC is not often used is that the cost of the high voltage solid state conversion systems have been very expensive in the past. Recently these cost have dropped and more DC transmission lines are being considered and will be built.

The merits of DC vs AC power generation,transmission, and distribution were highly debated at the turn of the century by Edison (DC) and Tesla (AC). Tesla eventually won the debate, but with the changes in technology of the next century, Edison and DC may be exonerated.

Pat Bunn

---

Date: 22 Aug 1997 23:24:49 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: RAMSEY SR-1 SW kit

: I dont see much change in the tuning
: slugs of the RF, IF and OSC cans unless
: I'm at the extremes.

Sorry, the OSC can changes the tuning
range just fine.

---

Date: 22 Aug 1997 23:07:17 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Regen and DC Receivers - ARRL doesn't like them!

Peter Parker <parkerp@pcug.org.auNOSPAM> wrote in article
<33fe0c12.0@newshost.pcug.org.au>...
> Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception.

Either the phasing or "Weaver" techniques can be used to build a simple "single signal" receiver and a SSB transmitter, too ... it is possible to obtain substantial undesired sideband suppression without too much difficulty ... especially with DSP techniques ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sat, 23 Aug 1997 06:08:53 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Room Temp "Oven" for Quartz?

In message <Pine.GSO.3.94.970822142932.16140A-100000@Stratus.CAM.ORG>
Michael Black <blackm00@CAM.ORG> writes:

> Another possibility, though not for portable operation, is to bury the
> oscillator in the ground. I remember some articles in the ham magazines
> about this about 35 years ago, back when moonbounce was first getting
> attention and transmitters consisted of a low frequency oscillator
> followed by divider chains. Burying the oscillator in the ground puts it
> at a constant temperature. Its the same concept used when houses are
> buried for insulation purposes. The temperature isn't warm, but it is
> constant and isolated. Coax would be run to the shack, and DC voltage
> would be sent down to the transistorized oscillator along the coax.
>
> Michael VE2BVW

G3LTF used to do this.

73 de G3PAI

---

Date: Sat, 23 Aug 1997 01:34:02 +0100
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Subject: Room Temp "Oven" for Quartz?

In article <33FB23CA.7095@hnvr.com>, Kenneth M Gianino <ken@hnvr.com>
writes
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).
>
>I'm looking for a simple but effective scheme to improve stability
>without spending a lot of money. I'd like match Yaesu's 2ppm while
>retaining the original crystal. It is 10-point-something-MHz and I'm
>not likely to find a surplus TCXO or OCXO.
Im a bit late on the scene with this thread however:
If you have power available and dont mind the warm up time its easier to

---

Date: Sat, 23 Aug 1997 17:35:20 GMT
From: rwclark@rwclark.seanet.com (Richard Clark)
Subject: Shortwave RX Antenna

On Mon, 18 Aug 1997 09:25:23 -0700, "hf.broekhuizen (SBKM-ME/C3)"
<hf.broekhuizen@navy.disp.mindef.nl> wrote:

>I do not have specs of your receiver, but I agree with Gary KE4ZV: the
>pre-amp for your HF-RX should not make a difference, since there is no
>improvement in SNR (N being mainly the atmospheric noise on HF).
>
>More likely by adding the pre-amp you overload the input of your
>HF-receiver with too strong signals, thus creating stations as products
>on frequencies they never have been.
>I.e.: by non-linearity in the high part of the dynamic range (1 dB
>compression point etc.) of the receiver reciprocal mixing occurs. As a
>result frequencies are generated as (f1+f2) and (f1-f2), but also
>higher-order products.
>The operator will now notice stations on frequencies never radiated by
>any transmitter, so on a different location in the frequency band.
>
>--
Hi all,

The principle problem with the responses to this topic is that
amateurs employ what is called "pre-amps". Much of what follows this
presumption is correct, but inappropriate to SWL (due to the presumed
application of the "pre-amp").

Modestly priced receivers often used by SWL'ers do NOT need wideband
amplification, and their receivers are not atmospheric noise limited.
As already identified, filtering pays off and post-amplification would
return the filter's loss with perhaps some overall gain improvement.
The term for such a device is Pre-selector. Hams having been for

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End of Ham-Homebrew Digest V97 #486
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Date: 24 Aug 97 21:48:31 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 13:59:56 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>

Subject: Ham-Homebrew Digest V97 #486

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 486

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #484

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 19:48:29 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
years passive in construction practices have allowed commercial
vendors to dominate design issues by virtue of offering "features."

A good receiver has front end tuning, often several tuned RF stages
prior to the first mixer. These stages are rare in current designs
having been consigned to the dust-bin by marketing department design
choices. Simply put they view that the Ham would rather have his hand
wither than reach for a "tuning" knob. That it isn't built into the
VFO knob is again a marketing issue in that cost issues arrise.
Tracking and alignment problems abound requiring the parts count to
push against the profit margin.

I have three friends with front-end overload problems from a nearyby
AM commercial station. Their rigs are top of line Kenwoods and they
suffer the same as my lowly DX-440 which cost an eighth of their
price. Both the DX-440 and these Kenwoods suffer the same design
shortfall: wide open front ends (OK so they are Band filtered, they
suffer all the same!). Pre-selectors would solve the problems all
around, but I already know my friends would shudder to have to reach

for a second knob (much less tuner). They conform to the expectations of Marketeers and their purchases have validated the entropy of design.

SWL'ers look for construction projects for Pre-selectors or tuned pre-amps. This is the single greatest improvement you can make outside of building IF ancillaries such as Q-multipliers, crystal lattice filters, or another stage of mixing to a lower, narrower IF. Also, do not neglect the Tuner as the cheapest means to reject noise and interfering stations. Sophisticated tuning networks with reject notches also keep cost low. Much of this material was present in the ARRL Handbooks of the '60's. I hope these common engineering issues haven't become folk-lore through neglect.

73's
Richard Clark, KB7QHC, WPE0EPH

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End of Ham-Homebrew Digest V97 #478
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Date: 24 Aug 97 14:39:14 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 97 20:26:34 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #478

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 478

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
F.S. - Tubes, books, much misc...
Ham-Homebrew Digest V97 #477
Shortwave RX Antenna

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 02:22:42 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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http://www.mandic.com.br

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End of Ham-Homebrew Digest V97 #490
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Date: Sun, 24 Aug 97 17:23:58 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #489

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 489

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)

## 2145. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC616C0.5AEF00000A2B.uuout@mandic.com.br>
Source record: 91419

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Subject: YEASU FL/FR DX 400

desperately need Schematic for the FL and FR DX 400 Transmitter and
Receiver. Cany anyone help????????

VO2AA/VO1VCM
vcmmcts@nlnet.nf.ca

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End of Ham-Homebrew Digest V97 #480
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Date: Sun, 24 Aug 97 08:37:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #481

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 481

Today's Topics:
11volts from 12 volts...
Bounced Mail -> User Not Found
Cheap/decent 12V supply?
Ham-Homebrew Digest V97 #479
MRF 479 Needed
PNP transistor, VCEO highest possible - looking for
Regen and DC Receivers - ARRL doesn't like them!
Value of Dow-Key relay?
VCO, paralelling varactors
Yaesu AZ -EL rotator

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.
```

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Fri, 22 Aug 1997 03:23:28 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: 11volts from 12 volts...

Hi bill,

Almost every 12 volt supply I have built using a 3 terminal
fixed regulator puts out about 11.5 volts or so. It seems
that the 12 volt regulators are manufactured with WIDE
tolerances.

Just use a diode or two in the ground lead of your 3 terminal reg
to increase output 11 volts to 12 volts or so.

D1, D2= In4001
C1= 10uf/16volts electrolytic

D2

```
|-----------------|<|----------------
| |
| |------------ |
| | 7812 |--------------------
--------|-----------| | |
|------------ |
| |
--- | +
\ / D1 ---
---- ---C1
| |
```

---

In article <33efbc98.11731760@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>
>I'm thinking that I simply bought an 11 volt regulator in 12 volt
>clothing! Tomorrow I'll try a new part (and will report back on
>results).
>
>Thanks again. 73 Bill N2CQR

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
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Date: 24 Aug 97 14:28:20 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 1997 08:56:27 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: Cheap/decent 12V supply?

These cheap switching power supplies are terrible choices for radio use,
far too noisy. Best is battery ONLY...a decent 12V Lead Acid car battery
used AS-IS (sans charger) then when you switch OFF your set up...you
turn ON the charger.
Simple, Cheap, loads of current and, best of all, quiet.
friend,
Lute

jason zawodny wrote:

> Well the question this week goes as such. Computer power
> supplies
> supply both 5V and 12V, and there are plenty laying around at work
> that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car
> battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars
>
> I've seen radio power supplies going for...
>
> Thanks
>
> jtz
>
>
> --
> --
> ---
>
> Jason T. Zawodny; U of Notre Dame; Computer Engineer

> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ---------------------------------------------------------------
> --------

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

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Date: Sun, 24 Aug 97 02:23:52 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #479

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 479

Today's Topics:
Accurate measurement of low level RF in the VHF/UHF region
Antenna rotator control box schematic needed.
ceramic resonators? 80m VFO - repostrd
Cheap/decent 12V supply?
Double Sided PC Boards
FS: Mil Spec Teflon Covered Wire #20,22,24,26
Pixie 2 Transceiver - Where can I get one?
power transmission (electric) (2 msgs)
QEX - info please
Relay needed
Silver plating question
VCO, paralelling varactors (2 msgs)
VCO , paralleling Varactors

------------------------------

Date: Sun, 24 Aug 1997 11:03:26 -0700
From: KD4AFW <kd4afw@wingnet.net>
Subject: Ham shops in Tennessee

ernie wrote:
>
> Hello
> I'm looking for any information on the subject and all will be highly
> appreciated.
> Thanks in advance de Isaac, 4Z4TL
> 73
Memphis Amateur Electronics,Wells Stn Rd,Memphis Tn

---

Date: Sat, 23 Aug 1997 21:25:27 -0500
From: Chuck KD9JQ <kd9jq@imaxx.net>
Subject: Help!: Taming HF preamp

David Newkirk wrote:

> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
>
> > I went ahead and built a little grounded gate FET pre amp circuit.
> > The circuit comes out of W1FB's Design Notebook.
>
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
> > breaks into oscillation whenever I put them both at their resonant
> > points. If I back off a bit on the input tank, the oscillation goes
>
> > away, sensitivity remains sufficiently high and the 22 meter gang
> > continues to be blocked. I suspect I may have failed to use a
> > sufficiently short PC board trace to ground for the FET gate.
> >
> > Anyway, is this worth fixing or should I just leave it as it is?
> Is
> > it normal for grounded gate FET preamps to behave this way? Am I
> > losing performance by operating the input circuit slightly off
> > resonant frequency? Can someone explain WHY this circuit is doing
> > this (Too much gain? Why would the lead length matter?)
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its
> input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I
> as
> grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy
>
> JFET, so if you tap the I/O tuned circuits down far enough and/or
> stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or
> O,
> the circuit may not oscillate.
>
> That circuit also disserves you by getting much less selectivity out
> of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered
> for
> predictable gain and stability. One recommendation is the

> single-40673
> amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s
> "Progressive Communications Receiver," later carried in many
> subsequent
> ARRL *Handbook*s under the title "High-Performance Communications
> Receiver"
> (it's in the 1992 edition, for instance). (Yes, 40673s are now "new
> old
> stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK
> [Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be
> passe
> over in the US, but in Japan and Europe they're still very much
> viable.
> The Japanese in particular have taken receive-class JFETs and MOSFETs
> much
> further than manufacturers here; even the [old] 2SK125, for instance,
> is
> much better than the best [J310/U310] generally available here.)
>
> When you combine Hayward's amplifier with the appropriate
> double-tuned-circuit output filter (described in the same article that
>
> describes the amplifier), you'll have good, predictable gain (10 dB)
> *and*
> the selectivity you need. Wes's circuit isn't the only possible
> solution
> to your problem, of course, but it has withstood the tests of time and
> use
> that the other circuit hasn't.
>
> Regards,
>
> David Newkirk, W9VES

For additional info on preamp design you can review my user guide for
the
ASP 4.0 Program (Freeware) on my Web Site directly at;

http://www.imaxx.net/~kd9jq /asp.html

73 Chuck KD9JQ

---

Date: Sat, 23 Aug 1997 12:52:55 -0400
From: kr4wm@sccoast!.net (Web Williams)
Subject: Looking for homebrew Boat Anchor transportation Minnesota to S.C.

Anyone travelling from Minnesota to South Carolina? I have a home brew
boat anchor I need transported...73, Web

Remove the ! from my e-mail address to reply.

---

Date: Sat, 23 Aug 1997 16:33:40 GMT
From: jfriley@airmail.net (J. Fred Riley)
Subject: power transmission (electric)

pbunn624@teleplex.net (Pat Bunn) wrote:
>The merits of DC vs AC power generation,transmission, and distribution
>were highly debated at the turn of the century by Edison (DC) and Tesla
>(AC). Tesla eventually won the debate

Well, really it was George Westinghouse who fronted the bills for
Edison's "AC is to dangerous to use" campaign. Edison fought as dirty
as he could. He arranged for NY state to receive a Westinghouse
Alternator which was used the first electrocution, a rather botched
affair. Edison had gone around NY state county fairs showing AC was
lethal by dispatching farm animals with an alternator. The critical
event that decided the issue was the award of the power plant at
Niagara Falls to the AC system. The issue turned on distribution and
AC clearly had the advantage there. I believe--but am not sure--that
a 25 Hz system is still in use at the falls.

Fred, W8OY
jfriley@airmail.net

---

Date: Sat, 23 Aug 1997 06:22:00 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: regen and DC reciever

Peter Parker wrote:
>
> Have just been looking through the Receivers section of my 1988 ARRL
> H/book (page 12-7).
>
> I'm amazed how negative they are about regenerative & DC receivers. On
> regen receivers, I quote:
>
> Then there is reference to the radiation of regen receivers. Most
> books/articles say that adding an RF amp cuts down the radiation a lot.
> But not the ARRL - it's mentioned that these receivers can cause
> interference for several miles. I wonder if this assumes a valve receiver
> and an efficient antenna? If so, it is out of touch with more modern
> techniques, such as the use of FETS. I suspect the author of that piece
> was active in the 1930s and had a bad experience with a ham down the road
> causing interference to him because he would let his regen receiver
> oscillate - otherwise he might not have been so disparaging about regen
> receivers.

you are right.

Can I ask how RFI does a ordinary superhet radiate? After all, the
superhet has 1-5 oscilators going.

HOW much RFI does a typical computer radiate? It radiates enough
RFI to generate S-9 noise on all HF bands.

HOW much RFI does a TV set radiate? Enough to blank out the LF bands
below 500 KHZ.

So, RFI generated by a regen receiver is like the least of the
problems today.

YES, the RFI radited by regen RX can be reduced by proper design.
1. Operate the regen at very low poer levels( microwatts)
2. Use a loosely coupled antenna.

The use of RF amp to isolate the regen from the antenna is not
recommended because:-
1. It worsens the overload and cross-modulation problem.
2. Does not provide a lot more isolation than a loosely couple antenna
can provide.
3. RF amp degrades the noise performance of the regen RX.
My regen is a lot more sensitive than my superhet RX SONY
ICF 2001. In fact I use the regen as a regenerative antenna
amplifier/ Q multiplier at the signal frequency for the SUPERHET.

> Then we go to DC receivers (page 12-8). I quote "direct conversion
> receivers are not especially suitable above 14 MHz because it is
> difficult to secure adequate BFO stability at such high a frequency". The
> same would be true of a superhet too (if it used a 455 or 1600 kHz IF).
> Thus the problem is not inherently due to direct conversion. Apart from
> the mixer-VFO solution suggested, a VXO or a 2-transistor front-end
> converter could overcome this problem.
>
> Another quote: "Direct conversion receivers are ideal for use in simple
> transceivers .... provided the appropriate frequency offset is included
> between transmit and receive to permit copy of SSB and CW signals without
> readjusting the BFO".
>
> This is correct for CW (where an 800 Hz offset is required), but not for
> SSB. Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception. DSB
> transmission goes with DC receivers, and transceivers are simple but this
> is not mentioned. I have several rigs of this type, and as soon as you
> have tuned in the transmitting station properly, you are automatically
> spot on frequency - no offset required.
>
> Microphonics and hum are suggested as major difficulties, which would
> tend to discourage the builder. Though it is true that they can cause
> difficulty, the advent of chips like the NE602 has made things much
> easier. In the end, it is the audio image that is the main limitation of
> the DC receiver. Though for most builders the comments re the use of
> phasing networks for single signal reception are probably valid,

COLLINS now a part of ROCKWELL(military contractor) has a DC
reciever using DSP techniques as its top product. This DSP/DC
reciever can recieve AM,FSK among all the usual SSB, CW etc.
I believe if collins thinks that the DC/DSP reciever is the way
to GO for military technology, that really may be the way to
go for the future.

I still have to get my R2 reciever running.
I guess I will. someday.

They problem, as far as I am concerned with DC recievers, is the
90 degrees phase shifted I-Q VFO signals needed.

I think that a R2 driven by a DDS VFO may be the best bet.

May be ,all the I-Q filtering/signal done in OPAMPS in the R2
should probably be done by a motorola DSP 56000.
(Does any one know where to buy a motorola DSP 56000 devlopment kit?)

>I'm not
> sure if all designers/experimenters agree, and, besides the purpose of
> the Handbook should be to stimulate experimentation, and not discourage
> the use of certain techniques.
> Though most comments in the book are accurate (and helpful), I

YES, It is not just the negative tone, it is the very casual and
less than a good engineering approach of the handbook which does
more harm than good.
Advances in radio engineering are still possible and happening
today. But they are more or less happening in the corporations etc.

( All the information about (ROCKWELL COLLINS) was taken from their
web-page as I remember it. So, look at their web page for more
information)

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: Sat, 23 Aug 1997 13:04:28 -0400
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Subject: VCO , paralleling Varactors

What is important is the maximum to minimum capacitance ratio of the
varactor. If the maximum capacitance is 100 pF and the minimum is 10
pF, the ratio is of course 100/10 = 10. Paralleling two varactors
produces a new ratio of 200/20 = 10, no change. Since the resonant
frequency is equal to 1 divided by 2 pi times the square root of L times
C, the change in frequency is proportional to 1 over the square root of
the change in the LC product. In this case the frequency range is the
square root of 10. One way to help see this is to insert values into

the equation and see what happens. Pick an inductor, calculate the
minimum and maximum frequency for the minimum and maximum capacitance
with one varactor. Then repeat for two.
Does this help?
John

---

End of Ham-Homebrew Digest V97 #493
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## 2146. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC61764.5B9800000A2E.uuout@mandic.com.br>
Source record: 91420

Este usuario nao existe em nosso cadastro (BOUNCED)...
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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
> I have one problem that I would like to ask the group about: As I
> tweak the two tuned circuits (input and output) in the pre amp, it
> breaks into oscillation whenever I put them both at their resonant
> points. If I back off a bit on the input tank, the oscillation goes
> away, sensitivity remains sufficiently high and the 22 meter gang
> continues to be blocked. I suspect I may have failed to use a
> sufficiently short PC board trace to ground for the FET gate.
>
> Anyway, is this worth fixing or should I just leave it as it is? Is
> it normal for grounded gate FET preamps to behave this way? Am I
> losing performance by operating the input circuit slightly off
> resonant frequency? Can someone explain WHY this circuit is doing
> this (Too much gain? Why would the lead length matter?)

The lead length doesn't matter so much as the circuit's design. The
problem with that circuit is that it's inherently unstable when its input
and output are tuned. (Grounding a JFET's gate doesn't shield O from I as
grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy
JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
the circuit may not oscillate.

That circuit also disserves you by getting much less selectivity out of two
tuned circuits than can easily be achieved with them.

A better approach is to close that book and use a circuit engineered for
predictable gain and stability. One recommendation is the single-40673
amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s
"Progressive Communications Receiver," later carried in many subsequent
ARRL *Handbook*s under the title "High-Performance Communications Receiver"
(it's in the 1992 edition, for instance). (Yes, 40673s are now "new old
stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK
[Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be passe
over in the US, but in Japan and Europe they're still very much viable.
The Japanese in particular have taken receive-class JFETs and MOSFETs much

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End of Ham-Homebrew Digest V97 #488
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Date: 24 Aug 97 23:28:45 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

------------------------------

Date: Mon, 25 Aug 1997 00:14:00 GMT
From: clint.bradford@atdbbs.com (Clint Bradford)
Subject: Extend frg on ICOM IC 737

Following is a copy from Packet, on how to do the transmit mod for the
well-reviewed. Icom 737 HF transciever. If someone else tries it, please
let us know if it works.

73 from Leigh/KM6JE in Santa Barbara.

---
1300 B# 1312 ALL IW3BKW WW 940312 ICOM IC-737 GEN.COVERANGE.
From: IW3BKW@OE7XCI.#TIR.AUT.EU
ICOM IC-737
-----------
GENERAL COVERANGE IN TRANSMISSION.

1) Remove the top and bottom covers of the transceiver.

2) Remove the final power amplifier module.

3) Locate the LOGIC-UNIT on witch there is a back-up lithium battery
for the RAM memory.

4) On the LOGIC-UNIT, near the chip called IC6 (TMP82C265BF-2),between
the output pin PC06 and the imput pin PA15, find the diode D3.

5) This diode is not an SMD component.

6) Cut the diode D3.

..Now the ICOM IC-737 will transmit from 1,6 to 30 Mhz !!!.

CW Filter Switching Modification for the Icom 737

The Icom 737 is a wonderful radio for CW operation, but I did not like the filtering switching options offered in normal operation of the radio when you have installed BOTH the 9 Mhz and 455 Khz optional CW filters. The default option is to use the SSB filter for CW in the CW mode, and then switch in BOTH the 9 Mhz and 455 Khz optional IF filters in the CW-N mode. This provides too broad a filter for general tuning in CW, and the CW-N mode (with the two filters in) is far too sharp for just tuning around.

I felt that it would be better to allow the 455 Khz filter to be functioning full time in the CW mode, and then switch in the 9 Mhz CW filter in the CW-N mode. The following simple modification only requires a single wire to added to the radio.

MODIFICATION

1) Remove the top/bottom cover of the radio as per the manual.

2) Position the radio facing you and locate the resistor R-323 which is simply labeled "323" on the PC board just to the left of the opional 455 Khz CW filter. Solder a wire to the end of R-323 which is closest to the front pannel.

3) Locate J-3 just above and to the right of the 9 Mhz filter F-13. Attach a wire to the connector or wire going to pin 7. Pin 7 is the third pin from the right. (The pins are numbered 1-9 from left to right) You may carefully tack solder a wire to the plug by removing it first. I used a solid 28 gauge wire and just pushed it into the connector without soldering.

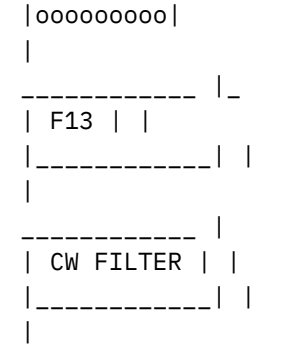
4) Replace the top and bottom covers.

I'm happy with the function of this modified switching arrangement. The CW-N function is now the mode of last resort when going after the weak ones, or when the QRM gets out of control, and tuning with just the 455 Khz filter is a better than using the SSB filter.

Good luck! 73's
Greg Chartrand
WA9EYY

---

Pin 7 of J3



```
|
|
| | ------------
| - | CW |
New wire >| R-323 | | | FILTER |
```

(Continued to next message)

---

Date: 23 Aug 1997 18:53:14 GMT
From: provero@connix.com (P.J. "Josh" Rovero)
Subject: Regen and DC Receivers - ARRL doesn't like them!

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker <parkerp@pcug.org.auNOSPAM>
writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).
>
>I'm amazed how negative they are about regenerative & DC receivers. On
>regen receivers, I quote:
>

The new Rockwell Collins 95S-1 (or something like that) covers
5 KHz to 2 GHz. It is called a "homodyne"; it is *essentially*
direct conversion. DSP processing for detection of just about
every mode and bandwidth imaginable. A very nice receiver....

Costs around $11K commercial, $6K GSA contract.

P.J. "Josh" Rovero email: provero@connix.com
Oceanographer work: rovero@sonalysts.com
Meteorologist radio: KK1D
Curmudgeon at large web: http://www.connix.com/~provero/

---

Date: 24 Aug 1997 13:33:17 GMT
From: the2x4@aol.com (The2X4)
Subject: VCO , paralleling Varactors

Hi

THis was done succesfully in the Uniden President Jackson CB
radio.Looking at the schematic there are actually two pair of varactors
in addition to the main varactor used in the VCO circuit to extend the range.

The aux pairs are switched in by the channel selector at
a specific programming word.

Hope this helps...

Carl
The2x4

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End of Ham-Homebrew Digest V97 #494
******************************
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# 2147. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC616C0.70C000000A2A.uuout@mandic.com.br>
Source record: 91421

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
From owner-ham-homebrew@ucsd.edu Mon Aug 25 03:12:21 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id DAA24227; Mon, 25 Aug 1997 03:12:21 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id DAA14065
for <wagner.kuriki@mandic.com.br>; Mon, 25 Aug 1997 03:20:26 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id VAA19470 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 21:52:06 -0700 (PDT)
Received: by mail.ucsd.edu; id VAA15430
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 21:32:55 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id VAA15395
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 21:32:48 -0700 (PDT)
Message-Id: <199708250432.VAA15395@mail.ucsd.edu>
Date: Sun, 24 Aug 97 21:32:47 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #493
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 493

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #491
Ham shops in Tennessee

Help!: Taming HF preamp
Looking for homebrew Boat Anchor transportation Minnesota to S.C.
power transmission (electric)
regen and DC reciever
VCO , paralleling Varactors

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 25 Aug 97 03:28:03 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Text from original message follows:
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Date: Sun, 24 Aug 97 16:05:30 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #488

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 488

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #486

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 21:48:32 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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further than manufacturers here; even the [old] 2SK125, for instance, is
much better than the best [J310/U310] generally available here.)

When you combine Hayward's amplifier with the appropriate
double-tuned-circuit output filter (described in the same article that
describes the amplifier), you'll have good, predictable gain (10 dB) *and*
the selectivity you need. Wes's circuit isn't the only possible solution
to your problem, of course, but it has withstood the tests of time and use
that the other circuit hasn't.

Regards,

David Newkirk, W9VES

------------------------------

Date: 22 Aug 1997 23:54:00 GMT
From: rod7rg@aol.com (ROD7RG)
Subject: Help.

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature
from the Canadian or Ametuer Radio Relay Leagues. They should be able to
provide you some contacts.

Rod
KL7RG/8

------------------------------

Date: Sat, 23 Aug 1997 07:16:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: help taming HF : some thoughts

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as gr
ounding a vacuum tube's grid can do.)
>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
> the circuit may not oscillate.
>

---

Date: 24 Aug 1997 20:51:31 GMT
From: "Joakim Langlet" <joakim@seaview.se>
Subject: Sale: Philips BGY35Z (22W output) power modules for 132-156MHz

Dear Fellow Hams!
I have a few Philips power modules (BGY35Z) that should be used rather than
be sitting on
a shelf. BGY35Z is a special selection of BGY35, which has a higher
guaranteed output
power.

Input power is 300 mW and power supply is 12.5V.

I am offering these modules, which data sheet for $100 excluding freight
and handling.
These are unused parts.

73 de SM0OET

Joakim Langlet

joakim@seaview.se

---

End of Ham-Homebrew Digest V97 #491
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---

Date: 25 Aug 97 03:28:03 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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---

Date: Sun, 24 Aug 97 19:47:17 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #491

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 491

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Double Sided PC Boards
Ham-Homebrew Digest V97 #490
Sale: Philips BGY35Z (22W output) power modules for 132-156MHz

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 25 Aug 97 01:27:33 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: 25 Aug 97 01:27:37 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Priced accordingly, Substantial quantities available:

0A2 $0.75
6AH6 $0.50
6AL5 $0.50
6AN8A $0.75
6AU6A $0.50
6CL6 $0.75
6X4 $0.75
12AT7 $2.00
12AU7A $2.50
12AX7A $2.50
5651A $0.75
5963/12AU7A $2.50
6080 $2.50
6201/12AT7 $2.00
8068 $12.00
8136 $0.75
8532W $0.75

Shipping in the USA: 1 - 6 tubes $4.00, 6 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or

ELECTRONIC TEST EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

---

Date: Sun, 24 Aug 97 15:30:14 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #487

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 487

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #485

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 21:16:54 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
>drives the varactors in a highly non-linear way.There will be 5-10
>volts RF/AC across the varactor, and 1-10 volts DC to tune it.
>Thus, I believe that varactor will be working in a highly nonlinear
>way. Also, Q is rather low for these types of varactors.

Sounds like the conditions are similar to the parametric amplifier or
varactor tripler :-).

If the high RF voltage across the varactor is your problem, then why not use a varactor with large maximum capacitance (a tuning range from ,say, 25 pF to 250 pF) in series with a small (say 100 pF) fixed capacitor. The two capacitances will form a capacitive voltage divider, at the minimum capacitance the AC voltage across the varactor is only slightly reduced but at maximum capacitance only a very small fraction of the RF voltage is across the varactor (2/7 in this case). This greatly reduces the risk for forward biasing at low tuning voltages.

Your problem seem to be the large parallel capacitance, so it is quite unrealistic to expect to get any large tuning range with varactors with low maximum capacitance. With values in my example, you would get sqrt ( (100+71)pF/(100+20)pF ) = 1.19 or 19 %. Using a larger series capacitance would make the tuning range even larger, but it would also increase the RF voltage across the varactor.

Paul OH3LWR

---

Date: Sat, 23 Aug 1997 06:34:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO , paralleling Varactors

Does anybody know why paralelling another varactor across
the varactor of a LC Voltage controlled oscilator not increase
the tuning range of the VCO?

Both the varactors are reverse biased by the tuning voltage,
as varactors should be. So, connecting another varactor
across the LC tank circuit of a VCO should increase the freq
range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts
or so. The DC bias voltage for the varactor is about 1-10 volts or so.
So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

End of Ham-Homebrew Digest V97 #479
******************************

---

Date: 24 Aug 1997 01:27:37 GMT
From: k1bqt@aol.com (K1BQT)
Subject: MRF 479 Needed

Hi--

If you can't get a 479, try a 2SC3133. Good for 15W PEP.

Rick K1BQT

---

Date: Sun, 24 Aug 1997 00:39:12 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures wrote:
>
> I am trying to locate a PNP transistor with highest available VCEO value, ide
ally
> up to 1kV.
>
> ICmax or Pw is not too important, neither is hFE.
>
> So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does no
t
> seem to be available anywhere in North America.
>
> Any advice would be greatly appreciated.
>
> Thanks
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
> fbures@alchemy.chem.utoronto.ca (use this address for replies)

You might try NTE for a direct substitute? They have a searchable table
for all kinds of semiconductors at http://www.nte.com/

---

Date: Sat, 23 Aug 1997 18:38:57 -0700
From: laura halliday <ve7ldh@direct.ca>
Subject: Regen and DC Receivers - ARRL doesn't like them!

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker
<parkerp@pcug.org.auNOSPAM> writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).
>
>I'm amazed how negative they are about regenerative & DC receivers. On

>regen receivers, I quote:
> (snip)

Maybe you should have a look at a more recent issue? My latest
copy (1996) discusses regens as primarily a historical thing, but
considers direct conversion receivers to be an effective way of
receiving signals.

I can think of a number of important designs between 1988 and 1996
that would have changed the perception of DC receivers as cute toys,
but not serious receivers...

As always, you get what you pay for. An extremely simple receiver
will get the job done under some circumstances, but may not
hold up under extreme conditions.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

---

Date: 24 Aug 1997 01:36:16 GMT
From: norman <norsan@bright.net>
Subject: Value of Dow-Key relay?

Dow key relays can be used for much more than switching from transmit to
receive in boatanchors. Some uses are:

switching between 2 antennas
switching in/out a preamplifier at the antenna
switching transverters to a common IF
switching rigs to a SWR meter

and many more.

Norman N8RGR

---

Date: Sun, 24 Aug 1997 09:45:13 GMT
From: ttwist@online.no (Tom Twist)
Subject: VCO, paralelling varactors

On Sat, 23 Aug 1997 11:13:05 -0400, "P. Singh"
<singhpk@NOSPAM.exit109.com> wrote:

>FRANK,
>
>I guess I was not as clear as I should have been.
>
>1 varactor VCO ( MV109)
>case 1: CFIXED = 100 PF

> CVARACTOR= 2-20PF
> CTOTAL= 102-120 PF
> Cmax/cmin= 1.176
> FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%
>
>2 paralell Varactor VCO( 2*MV 109)
>case 2: CFIXED = 100 PF
> CVARACTOR= 4-40PF : 2 varactors in parallel
> CTOTAL= 104 to 140 PF
> Cmax/Cmin= 140/104= 1.346
> FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%
>
>Thus the max to min capacity should change.
>
>But I could not detect the change in frequency coverage
>after adding the second varactor.
>(Maybe I made an error in my experiment.)
>
>I guess that my question was, is the maximum capacity really
>going to double when you paralell another varactor across the
>varactor of a VCO. I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
<snip>

Perhaps the problem with paralleling two varactors is that the two diodes is not matched, resulting in more current flowing in one of the diodes.
Try using two resistors (and RFCs), to separate the bias voltages, and use two (relatively) large capacitors in series with the HF path. I'm too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

---

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

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End of Ham-Homebrew Digest V97 #481
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Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------

------------------------------

Date: Sun, 24 Aug 97 04:30:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #480

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 480

Today's Topics:
Accurate measurement of low level RF in the VHF region
QEX - info please
Room Temp "Oven" for Quartz?
YEASU FL/FR DX 400

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official

policies or positions of any party. Your mileage may vary. So there.
---

Date: 22 Aug 1997 16:46:03 GMT
From: blombard@bogusity.iu.net (Bob Lombardi)
Subject: Accurate measurement of low level RF in the VHF region

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>
>>Thanks
>>
>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at
the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty
good chip. There are easier ways (i.e., more ham like). Pretty sure that
Solid State Design for the Radio Amateur covers these if you'd rather.
They involve using differential hot carrier diodes driving an op amp,
with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

---

Date: Sat, 23 Aug 1997 18:24:18 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: QEX - info please

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

---

Date: 23 Aug 1997 10:04:46 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Room Temp "Oven" for Quartz?

> transmitters consisted of a low frequency oscillator
>> followed by divider chains. Burying the oscillator in the ground puts
it
>> at a constant temperature. Its the same concept used when houses are
>> buried for insulation purposes. The temperature isn't warm, but it is
>> constant and isolated. Coax would be run to the shack, and DC voltage
>> would be sent down to the transistorized oscillator along the coax.
>>
>> Michael VE2BVW
>
>G3LTF used to do this.
>
>73 de G3PAI

I did too, but I always used multipliers in lieu of dividers.

W4ZCB

---

Date: Tue, 19 Aug 1997 11:11:24 -0230
From: George Andrews <vcmmcts@nlnet.nf.ca>

# 2148. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC61764.2E1700000A2D.uuout@mandic.com.br>
Source record: 91422

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Mon Aug 25 03:18:19 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id DAA24468; Mon, 25 Aug 1997 03:18:18 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id DAA14441
for <wagner.kuriki@mandic.com.br>; Mon, 25 Aug 1997 03:26:23 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id VAA19468 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 21:52:06 -0700 (PDT)
Received: by mail.ucsd.edu; id VAA16581
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 21:49:57 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id VAA16548
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 21:49:50 -0700 (PDT)
Message-Id: <199708250449.VAA16548@mail.ucsd.edu>
Date: Sun, 24 Aug 97 21:49:50 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #494
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 494

Today's Topics:
Bounced Mail -> User Not Found
Extend frg on ICOM IC 737
Regen and DC Receivers - ARRL doesn't like them!
```

VCO , paralleling Varactors

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 25 Aug 97 03:28:03 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

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End of Ham-Homebrew Digest V97 #485
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Date: 24 Aug 97 21:16:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 12:53:50 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #485

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 485

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #483

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up
>>>to 150Mhz.

---

Date: 23 Aug 1997 15:01:33 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Double Sided PC Boards

David Allen <allent@mnsinc.com> wrote in article
<33fe8a16.45638370@netnews.worldnet.att.net>...
>
> On a tangential issue, has anyone done much hobby work with the new
> SOT gull-wing or even surface mount packages? The "pin" spacing on
> some of these is getting awfully small. I've gotten a few samples of
> some nice IC's I's like to evaluate, but etching and soldering at
> those line widths makes me wonder if at some point the amateur
> homebrewer is going to get scraped off.
>
> Dave Allen
> WA2BSL
> Falls Church, VA

The trick in soldering is to abandon the traditional soldering iron ...
get solder paste with "no-clean" flux (from ESP, for example ...
(800) 338-4353) and do reflow soldering with a source of hot air
(a heat gun will work in a pinch, if you keep your distance and are
careful) ...

SMT is NOT impossible, or even difficult, to work with ... IF you
take the effort to learn some new techniques ... however, this seems
to be a MAJOR problem for far too many hams ... far too few seem
willing to learn anything, let alone something modern ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sun, 24 Aug 97 17:42:46 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #490

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 490

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #488

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 23:28:45 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Telnet: bbs.mandic.com.br

Text from original message follows:
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make an oven than a TCXO. A peltier heater is unnecessary as the crystal
will hace a minimum temperature coefficient above 27C
Your crystal will be an AT (lazy Z) cut optimised for minimum deviation
over the whole band. If you temperature control just the crystal it
should be possible to raise the temperature by using a servo heater to
where the crystal reaches its minimum frequencey with luck and if the
crystal is correctly cut this will be about 35C.
The Maintaining circuit will still be sensitive to temperature and will
limit any crystal only control to +-0.5ppm or so.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

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Date: 22 Aug 1997 21:15:34 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: WTB RF amp for 11M

country@music.com wrote:
: country@music.com wrote:

: >Hello, I am looking for a linear amplifier to buy for my midland radio
: >I use in my Semi truck. Preferable around 300-400 watts output with 4

: >watts input. Would prefer UPS cod. willing to pay up to $400 - only
: >for really output, not a label name.
: > Mike ,
: >aka KC7KEM
: >PS. I am using a fellow hams account so please call , don't email- he
: >is a wimp and is faking his address, one of those afraid of the FCC
: >types. Not ME! call me at 964-2458
: Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
: time to call- I sleep light so no problem with late/ early calls, That
: is Washington state time.

This is a troll. Let's all not start a thread.
I wouldn't call that number either.

I can hear landmines.

sheeesh. some peoples kids, eh?

Your radio pal Tony

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End of Ham-Homebrew Digest V97 #476
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Date: Fri, 22 Aug 1997 14:20:44 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: Help Looking for A HP 1820-0736

I need a HP 1820 - 0736 divide by 2 Prescaler chip for my
HP 5303B 525 MHZ Counter

HP in canada ain't much help

Thanks in advance
de
ve6nap@oanet.com

------------------------------

Date: Sat, 23 Aug 1997 08:39:28 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: MRF 479 Needed

Try RF Parts...in San Marco, CA for your transistor.
friend,
Lute

James R. Binkley wrote:

> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.

>
> Thanks Bob w4aos@his.com

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

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Date: Sun, 24 Aug 97 00:53:57 GMT
From: tait@primeline.net (Gary Tait)
Subject: Need plans Alliance U100 Rotator control box.

I have what I have been told is an Alliance U-100 Rotator, I need a control
box for, but don't wish to shell out the bucks for one.

Does anybody have plans for a solid state box, I could build out of
TTL or cmos gates (other than the motor control circuitry of course.)

Gary Tait,VE3VBF

------------------------------

Date: Sat, 23 Aug 1997 18:26:53 +0100
From: Peter Barville <peter@barville.demon.co.uk>
Subject: QEX - info please

I understand that QEX has resumed publication, with a July 1997 edition.
I am particularly interested in a couple of the articles from this
issue, and would like to know how to get hold of a copy. I would also
welcome any information with regard to how I can subscribe to the
magazine.

If you're able to help, many thanks.
--
73, Peter G3XJS ( G-QRP 3001, QRP ARCI 8572 )

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End of Ham-Homebrew Digest V97 #477
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Date: 24 Aug 97 02:22:41 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: 24 Aug 1997 02:47:52 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 97 19:16:01 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #477

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 477

Today's Topics:
2 meter antenna
Bounced Mail -> User Not Found
Double Sided PC Boards
Ham-Homebrew Digest V97 #476
Help Looking for A HP 1820-0736
MRF 479 Needed
Need plans Alliance U100 Rotator control box.
QEX - info please

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I can compare it to the J-Pole I've been using. My question is, should the two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the feeding coax, with the braid shorted to the pipe at the midpoint of the antenna. The other half the dipole is base loaded to be electrically 3/4 wavelength long and physically 5/8 wavelength (I used a section of 1/8" steel rod with the coil making up the remainder of the length... I used a piece of solid phenolic plastic rod that plugs the end of the copper pipe and extends up as the coil form, and drilled out the center of the rod to set the steel element in). I am currently feeding the base of the loading coil with the coax center conductor, and do NOT have the two halves shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen <allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur

>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work. There is no real problems, any more than with other type, the R's and C's take a bit of geting used to (they fly round the shack really well if you get the mounting wrong!), but it just requires new skills to be learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM

+----------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------+

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Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:
<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp
Help.
help taming HF : some thoughts
measuring VVC-diodes, how?
PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit

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End of Ham-Homebrew Digest V97 #484
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Date: 24 Aug 97 19:48:28 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sun, 24 Aug 97 11:22:03 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #484

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 484

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #482

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 17:13:27 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Regen and DC Receivers - ARRL doesn't like them!
Room Temp "Oven" for Quartz? (2 msgs)
WTB RF amp for 11M

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 23 Aug 97 16:31:04 GMT
From: NORMANMO@miavx1.acs.muohio.EDU
Subject: <no subject>

add

------------------------------

Date: Wed, 20 Aug 1997 12:49:37 -0500
From: K0PW <pwentzel@minn.net>
Subject: Diathermy Machine $100.00

I have a friend who has a working diathermy machine for sale. I tore one
of these apart a couple of eons ago, and harvested an excellent HV power
supply for a linear -- also some heavy duty RF components. This is too
heavy to ship. If anyone is interested, send me an e-mail and I'll pass
along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

------------------------------

Date: Sat, 23 Aug 1997 07:02:26 GMT
From: allent@mnsinc.com (David Allen)
Subject: Double Sided PC Boards

stevem@vax.area.com (Stephen E. Muther) wrote:

>I do a lot of hobby boards and my employer's prototypes on a milling
>machine. Typically I drill the holes first (before etching or milling)
>then take the board in the back door of a cooperative board house
>for plating. If I am in a hurry or if the board house is too busy to
>deal with me, I use small brass or tin eyelets that I get at the
>local hobby/model shop. They are easy to push in and solder and
>require no cutting or trimming unlike wires.
>
>Steve M.
>

On a tangential issue, has anyone done much hobby work with the new
SOT gull-wing or even surface mount packages? The "pin" spacing on
some of these is getting awfully small. I've gotten a few samples of

some nice IC's I's like to evaluate, but etching and soldering at
those line widths makes me wonder if at some point the amateur
homebrewer is going to get scraped off.

Dave Allen
WA2BSL
Falls Church, VA

---

Date: 23 Aug 1997 19:57:00 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 1997 06:03:04 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Fast O'scope for tiny Homebrewer budget

> wrt@eskimo.com (Bill Turner) wrote:

> >I was a test technician on the Tektronix 400 series production line
> >back in the '70s and '80s. We built so many of those we felt every
> >house in America must have one. Thanks for the kind words!
> >
> >73, Bill W7TI

I was issued a 454 when I joined a research project at the University
of Essex in 1970. The only more beautiful thing was the young lady
who came with it. (The 454 is no longer with me).

---

Date: 23 Aug 1997 12:22:45 GMT
From: "David Newkirk" <dnewkirk@bellatlantic.net>
Subject: Help!: Taming HF preamp

Bill Meara <wmeara@erols.com> wrote in article
<33f95b77.1710144@news.erols.com>...

> I went ahead and built a little grounded gate FET pre amp circuit.
> The circuit comes out of W1FB's Design Notebook.

[deletions]

# 2149. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC61904.123B00000A3A.uuout@mandic.com.br>
Source record: 91423

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
From owner-ham-homebrew@ucsd.edu Mon Aug 25 03:29:28 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id DAA24941; Mon, 25 Aug 1997 03:29:28 -0300
Received: from mailbox1.ucsd.edu (mailbox.ucsd.edu [132.239.1.53])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id DAA15095
for <wagner.kuriki@mandic.com.br>; Mon, 25 Aug 1997 03:37:33 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id WAA28932 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 22:26:47 -0700 (PDT)
Received: by mail.ucsd.edu; id WAA18289
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 22:11:58 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id WAA18244
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 22:11:48 -0700 (PDT)
Message-Id: <199708250511.WAA18244@mail.ucsd.edu>
Date: Sun, 24 Aug 97 22:11:47 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #495
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 495

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #492

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 25 Aug 97 04:05:43 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
----------------------------------
FS: Used Tubes
Ham-Homebrew Digest V97 #487

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 23:03:09 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: 24 Aug 97 23:03:09 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
>>>nielsm@lcpub.co.uk
>>
>>Same situation, I'm thinking of building something using the LT1088, or
>>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>>datasheet (FARNELL server claims to have them but then says they aren't
>>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>>PowerMeter head (working) going on the cheap I'd be interested. TIA
>>
>> 73 de Laurens M1CCO
>
>Do you have web access? Analog Devices home page has a search engine at
>the opening screen. I entered AD737 and got it. They're www.analog.com.
>
>I've used the 737 in a signal measuring setup before, and it's a pretty
>good chip. There are easier ways (i.e., more ham like). Pretty sure that
>Solid State Design for the Radio Amateur covers these if you'd rather.
>They involve using differential hot carrier diodes driving an op amp,
>with perhaps some bias to get down to the -20 dBm level.
>
>
>
>73,
>Bob
>
>
>
it is fairly easy to go much further down than this!
With 2x 1N270, or better AA119 type germanium diodes and CA3140E
OP-amp you can measure down below -46dBm up to at least 600MHz.

I made a correction amplifier using several 1N4148 for each range, but
today, I would have tried a CA3140E buffer, with a possible log.amp
and connect this to a datalogger, which may be calibrated for every

10dB range, with some possible frequency calibration (like the one you have on SHF power meters). With this circuit you might measure below -40dBm on 1,296GHz, and still have useful sensitivity above 2.320 GHz. But you have to calibrate the circuit yourself. This is accomplished by borrowing a signal generator from work or from a friend (most SHF friends have some sort of reliable signal generators)

73

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: Sat, 23 Aug 97 05:24:56 GMT
From: tait@primeline.net (Gary Tait)
Subject: Antenna rotator control box schematic needed.

I am looking for plans for a tv antenna rotator. It is one of the ones that the antenna mast goes through. It is a 4 wire, with the wires connected internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO
3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if possible.

Gary Tait,VE3VBF

---

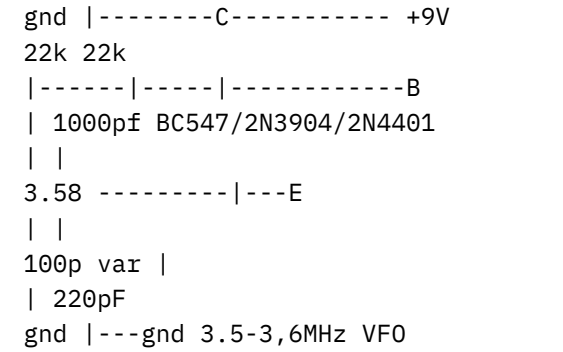
Date: Sat, 23 Aug 1997 19:04:37 GMT
From: la8ak@online.no (J M Noeding)
Subject: ceramic resonators? 80m VFO - repostrd

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.

>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?
I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin



using ceramic resonnator 3.58MHz

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 24 Aug 97 07:22:57 GMT
From: k3ky@juno.COM (David E Sinclair)
Subject: Cheap/decent 12V supply?

Using the 12V supply only from a 5V/12V computer supply probably would not
work well for charging a 12V lead/acid car battery. More voltage is needed. If
the two supplies in the computer unit are not ground referenced, then they
could be series-connected for 17V. Some simple circuitry could be used to
control or limit the battery charge current. There are several approaches
such as constant voltage, constant current, taper charging, etc. I will be glad
to supply references/schematics, etc. on request. Some other writers have
pointed out correctly that a linear supply would be a better choice than a
noisy computer switching supply, and that one or both supplies in the switch-
ing unit may have a minimum current requirement. That can be easily met with
various types of loads added in parallel with the supply needing it.

David Sinclair K3KY
e-mail: k3ky@juno.com

---

Date: Sat, 23 Aug 1997 09:51:48 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes
>stevem@vax.area.com (Stephen E. Muther) wrote:
>
>
>>I do a lot of hobby boards and my employer's prototypes on a milling
>>machine. Typically I drill the holes first (before etching or milling)
>>then take the board in the back door of a cooperative board house
>>for plating. If I am in a hurry or if the board house is too busy to
>>deal with me, I use small brass or tin eyelets that I get at the
>>local hobby/model shop. They are easy to push in and solder and
>>require no cutting or trimming unlike wires.
>>

>>Steve M.
>>
>
>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

For RF prototyping where I used to work, they used little single-sided PCBs about 1" square, with adhesive backing, with a surface mount pattern for a single chip brought out to wider pads. These were positioned on the Cu side of a piece of PCB laminate and the circuit wired up directly on the Cu ground plane with wire-wrap wire or self-fluxing magnet wire. I'll ask someone there where they got the things from. They were very cheaply made, and were free issue in the lab. I should have liberated a few before I left. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

---

Date: Sun, 24 Aug 1997 05:35:03 GMT
From: radiodale@dclink.com (Dale B. Allen)
Subject: FS: Mil Spec Teflon Covered Wire #20,22,24,26

I have the following colors and sizes available. This wire is stranded tinned copper with a Teflon jacket. Limit is 100ft./size/color for each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

---

Date: 23 Aug 1997 03:15:55 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit is available from HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne, NB6M

---

Date: Fri, 22 Aug 1997 23:55:41 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: power transmission (electric)

Mike Willis wrote:
>
> Paul KeinEnen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >
> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large currents. DC has no radiation losses, which is also significant at 50 Hz over long distances. For a given RMS, DC has a 30% smaller peak current and peak voltage. DC has no capacitively coupled current loss (not the same as leakage current) therefore power factor loss, through the insulation into the salt water. This capacitive current can cause electrolysis effects.

Bill W0IYH.

---

Date: 22 Aug 1997 16:04:03 GMT
From: n4mxf@aol.com (N4MXF)
Subject: power transmission (electric)

Hi,
I've been an engineer (manager) in the undersea cable business for 30 years and know of only a few DC cable projects for very specific applications. DC would not be an effective way to transmit power. High voltage pluse cables for digital transmission (very low current) are the only cables I know fit your discription. These are not power cables. Undersea power transmission are larger cables and are usually 5,15,35,64,130kv cables having conductors with thousands of circular mils and range from 4" to 8" diameters. There are some even larger. Cables usually contain 3 or 4 main conductors and are operated in a three phase (balanced) configuration. Today, many undersea power cables contain optical light guides (fiber optics) for signal transmission. Corona is normally controlled by proper shielding and the use of semi-con materials. External damage is the major cable failure although the we still like to get excited over the effects of "treeing" (crack propagation within a dielectric due to electro stress). If you would like any more details on cable or cable useage, drop me an email. Oxford,William & Associates:

Cable Systems Consultants. wjoxford@aol.com or N4MXF@aol.com. 73 Bill

---

Date: 24 Aug 1997 03:56:29 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: QEX - info please

>. I would also
>welcome any information with regard to how I can subscribe to the
>magazine.
>
>If you're able to help, many thanks.
>--

Well, you might consider subscribing. You can do it through the League at their regular address or FAX number, or even I suspect thru their bulletin board.

It probably gets about as sticky though as we have it getting RadComm across the pond.

W4ZCB

---

Date: 24 Aug 1997 05:54:30 GMT
From: "ron ab6zx" <dom@shocking.com>
Subject: Relay needed

Looking to buy a used antenna relay capable of 800-1000 watts, can be open frame or coaxial, speed not necessary as not for QSK. Will be used for temporary bench tests only.
--
ron ab6zx chico ca
email: dom@shocking.com

---

Date: Sat, 23 Aug 1997 21:02:45 +0200
From: Bob Mueller <r.mueller@kfa-juelich.de>
Subject: Silver plating question

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some

> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the
> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver
> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick
almost any metal into the solution the silver ions will pick up an
electron from the metal and become metallic silver while one of the
substrate ions will go into solution. This is the secret of
"electroless" plating. Sounds wonderful, but it is not; the metal
deposited this way is poorly bonded and can be often wiped off with a
rag. It is also porous. Metals going into solution include copper,
zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually,
it probably could be made to work, if you are good and work fast. The
problem is that the melting point of silver is lower than the melting
point of copper (probably higher than for brass), but not a lot lower (a
bit over 100 degrees C.) You are at risk of melting the copper if you
heat with a tourch. It would work better with a silver bath (want to
melt a liter of silver in the kitchen?) with good temperature control.
There is another problem; the silver and copper rapidly alloy to form
a lower melting point alloy. If you do not work fast this process can
cause holes to develop as the alloy forms ever deeper into the
substrate. This is something you will understand better if you ever did
soldering on fine copper wire with lead-tin solder. The wire disappears
if you are too slow. The silver/copper process will be faster. You will

get a great bond, if you are good enough.

Bob

------------------------------

Date: Sat, 23 Aug 1997 11:13:05 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO, paralelling varactors

FRANK,

I guess I was not as clear as I should have been.

1 varactor VCO ( MV109)
case 1: CFIXED = 100 PF
CVARACTOR= 2-20PF
CTOTAL= 102-120 PF
Cmax/cmin= 1.176
FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%

2 paralell Varactor VCO( 2*MV 109)
case 2: CFIXED = 100 PF
CVARACTOR= 4-40PF : 2 varactors in parallel
CTOTAL= 104 to 140 PF
Cmax/Cmin= 140/104= 1.346

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End of Ham-Homebrew Digest V97 #483
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Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 10:43:36 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #483

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 483

Today's Topics:
Bounced Mail -> User Not Found (3 msgs)
Ham-Homebrew Digest V97 #480
Ham-Homebrew Digest V97 #481

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 14:58:50 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Text from original message follows:
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---

Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%

Thus the max to min capacity should change.

But I could not detect the change in frequency coverage
after adding the second varactor.
(Maybe I made an error in my experiment.)

I guess that my question was, is the maximum capacity really
going to double when you paralell another varactor across the
varactor of a VCO. I am specificall talking about (1 varactor
VCO) and NOT the 2 back-to-back varactor VCO.

I dont really know, but, I think that the one varactor VCO
drives the varactors in a highly non-linear way.There will be 5-10
volts RF/AC across the varactor, and 1-10 volts DC to tune it.
Thus, I believe that varactor will be working in a highly nonlinear
way. Also, Q is rather low for these types of varactors.

Anyway, I try this varactor paralleling again, and hopefully I had
done something wrong earlier, and paralelling varactors really
does increase their max capacity in case of a VCO.

Thanks for your thoughts.

John M. Franke wrote:
>
> What is important is the maximum to minimum capacitance ratio of the
> varactor. If the maximum capacitance is 100 pF and the minimum is 10
> pF, the ratio is of course 100/10 = 10. Paralleling two varactors
> produces a new ratio of 200/20 = 10, no change. Since the resonant
> frequency is equal to 1 divided by 2 pi times the square root of L times
> C, the change in frequency is proportional to 1 over the square root of
> the change in the LC product. In this case the frequency range is the

# 2150. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC61904.6F7C00000A3C.uuout@mandic.com.br>
Source record: 91424

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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End of Ham-Homebrew Digest V97 #490
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Date: Sun, 24 Aug 97 17:23:58 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #489

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 489

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)

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End of Ham-Homebrew Digest V97 #495
******************************
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# 2151. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC61904.1F8A00000A3B.uuout@mandic.com.br>
Source record: 91425

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
> square root of 10. One way to help see this is to insert values into
> the equation and see what happens. Pick an inductor, calculate the
> minimum and maximum frequency for the minimum and maximum capacitance
> with one varactor. Then repeat for two.
> Does this help?
> John

--
---
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pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: Sun, 24 Aug 1997 08:19:58 GMT
From: keinanen@sci.fi (Paul KeinEnen)
Subject: VCO, paralelling varactors

"P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

<clip>

>I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
>
>I dont really know, but, I think that the one varactor VCO

---

End of Ham-Homebrew Digest V97 #487
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---

Date: Sun, 24 Aug 1997 07:07:56
From: sales@emodus.com

Subject: FS: Used Tubes

Used Tubes, Pulled from Surplus Equipment, untested,

---

End of Ham-Homebrew Digest V97 #492
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Date: 25 Aug 97 04:05:43 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Bounced Mail, user not found...

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Telnet: bbs.mandic.com.br

Text from original message follows:
---

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Date: Sun, 24 Aug 97 20:06:53 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #492

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 492

Today's Topics:
Bounced Mail -> User Not Found (3 msgs)
Ham-Homebrew Digest V97 #489

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
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Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 25 Aug 97 01:27:37 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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Text from original message follows:
---
>>>
>>>Levels will range between -20dBm and +20dBm.
>>>
>>>Has anyone got any suggestions for a suitable
>>>instrument and will a RF Millivoltmeter be more
>>>flexible than an RF Powermeter.
>>>
>>>Thanks
>>>
>>>Niels Montanana
>>>G8RWG
>>>

---

End of Ham-Homebrew Digest V97 #489
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Date: 25 Aug 97 01:27:37 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Text from original message follows:
---

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Date: 25 Aug 97 01:27:33 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Text from original message follows:
---
> That circuit also disserves you by getting much less selectivity out of two
> tuned circuits than can easily be achieved with them.
>
> A better approach is to close that book and use a circuit engineered for
> predictable gain and stability. One recommendation is the >single-40673

MAYBE. Each device (tube, FET, MOSFET, BJT) has a diffrent set of
parameters. Even each type of tube(6J6, 6AK5, 6DJ8) differs as
to G-P, G-C, C-P capacitances, and their transconductance.

I guess the key is to design around the limitations of the device
that we are using.

These limitations are not very difficult to design around for FETs.
MPF102 is not a very good FET for RF usage. Though it
is still usable.
You can use a dual gate MOSFET like 40673 3SK174 etc,
but their is not likely to be a lot of difference between that
and a properly designed circuit using J-310.
( J-310 is a good device for general RF usage, much better than
MPF-102).

I guess the key is balance.

1.Just enough RF gain to give you a good noise figure with the antenna
and frequency you intend to use it with. Too much gain and you may
compromise the cross modulation performance. If your front end(mixer)
is sensitive enough, you might not need any RF gain atall.

2. Impedance matching. This cannot be stressed enough.
In fact they say that the key to SUCCESSFUL RF design is
impedance matching!
1.Match antenna impedance to input tuned circuit. If you have a
large antenna, use a 1 turn link to couple the antenna.
If all you have is a 6 feet whip as an antenna, connect it to the
top or the hot end of the antenna.
2. Match source impedance to input tank. Generally 2 turns should
be all that is needed.
3. Match drain impedance to output tank. Around 50% or should be good.

3. Adjust input and output loading.More loading means less circuit Q
whcih might help in adjusting BAND coverage and tracking between
input and output circuits.
Less loading will make tuning much more sharp and increase
circuit Q.
4. Having adjusted loading , you might want to go to Step 2 to fine

tune the impedance matching, though it should not be really
neccessary.

5. If you still have problems with crossmodulation, run the FET
as HOT as possible, i.e. with as much drain current as possible.
I guess around 20 mA or so.
It was stated somewhere that even a BJT can have very good
crossmodulation performance better than a dual gate MOSFET
by running it at about 20-50 mA or so.
Device linearity is greatly increased and crossmodulation reduced
by running the device hot enough.

6. Use of pads can improve cross modulation performace.
This is suggested if you have a large antenna.

7. Also, it might be good idea to bear in mind that the
Cross MOD performace of the mixer should be high enough
for you to use a RF pre amp.
DONT even think about using an preamp with a NE602 mizer front end
or general coverage portable SW radios receievers. Just use
a passive 1-2 tuned circuit filters . A lot of performance gain
can be acheived just by proper impedance matching and NO FET
rf amp.
Please think about the NO FET(or tube or transistor) RF amp also!
It produces RF gain by proper impedance matching.

---
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Date: Sat, 23 Aug 1997 20:02:36 GMT
From: la8ak@online.no (J M Noeding)
Subject: measuring VVC-diodes, how?

Hi
I need to calibrate capacitance diodes to voltage to use them in a
2-50MHz impedance meter. I believe it may not be a good idea to
measure the capacity using a C-meter, since signal voltage level may
be much higher than the actual dc voltage used.
I have a Radiometer Q-meter, but I would prefer an easier way than
measuring the influence on a tuned circuit.
Any better suggestions? What does manufacturers use?
73 es hpe bcnu

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #482
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Date: 24 Aug 97 17:13:26 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Text from original message follows:
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Date: Sun, 24 Aug 97 08:52:06 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #482

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 482

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #478

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
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Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 14:39:15 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Date: Fri, 22 Aug 1997 08:39:55 -0400
From: Zack Lau <zlau@arrl.org>
Subject: PAGER NOISE HELP

John Clarke wrote:
>
> Help requested, for a amateur located in the valley below a commercial
> tower site briselling with pager antenna, so any 2 metre signals are
> flatened by the data streams.
> Would a high Q tunable notch filter help? Any circuits or pointers will be

Not much, if there are a lots of different pagers in different
frequencies.

A good choice might be a sharp bandpass filter--the bigger the
better. One the size of a loaf of bread might do the trick, though
people have made them out of 20 gallon garbage cans... Zack W1VT

> much appreciated. Cheers and thank you in advance, John

---

Date: Fri, 22 Aug 1997 14:28:45 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

---

Date: Fri, 22 Aug 1997 14:21:43 GMT
From: burbridg@pe.net (Merle and Duncan Burbridge)
Subject: parabolic microphone

I am interested in making a parabolic microphone for birding. Does
anyone have simple plans they could draw for me to build such a
device? Thanks for any help.

---

Date: 23 Aug 1997 03:08:01 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit (Pixie II) IS AVAILABLE at HSC Electronics for $9.95. Try
calling them at 1-800-442-5833.

Wayne NB6M

---

Date: 23 Aug 1997 11:13:53 GMT
From: hill@rowland.org (Winfield Hill)
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures, <fbures@address.in.the.sig> said...
>
> I am trying to locate a PNP transistor with highest available VCEO value,
> ideally up to 1kV. ICmax or Pw is not too important, neither is hFE.
> So far I've found transistor 2SB832...
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6

Frank, tell us a bit about what you're trying to accomplish, maybe we can
suggest alternate approaches using more common parts.

--
Winfield Hill hill@rowland.org _/_/_/ _/_/_/_/
The Rowland Institute for Science _/ _/ _/_/ _/
Cambridge, MA USA 02142-1297 _/_/_/_/ _/ _/ _/_/_/
_/ _/ _/ _/ _/
http://www.artofelectronics.com/ _/ _/ _/_/ _/_/_/_/

---

Date: 23 Aug 1997 15:30:51 GMT
From: pbunn624@teleplex.net (Pat Bunn)
Subject: power transmission (electric)

In article <19970819234401.TAA19821@ladder01.news.aol.com>,
johnsonhe@aol.com says...
>
>>
>>Why do power companies use DC to transmitt power. 400KV, 500MW. What
kind
>>of equipment is used to transform from AC to DC and DC to AC?
>>Could it be power factor?
>>73 and TIA
>
>The main reason is that DC is subject to only the resistance losses in
the conductors. The line inductance and capacitance does not cause
reactive voltage drop is a DC transmission line. In an AC line these
losses are serious and must be corrected wth very expensive capacitor
banks.

The reason that DC is not often used is that the cost of the high
voltage solid state conversion systems have been very expensive in the
past. Recently these cost have dropped and more DC transmission lines
are being considered and will be built.

The merits of DC vs AC power generation,transmission, and distribution
were highly debated at the turn of the century by Edison (DC) and Tesla
(AC). Tesla eventually won the debate, but with the changes in
technology of the next century, Edison and DC may be exonerated.

Pat Bunn

---

Date: 22 Aug 1997 23:24:49 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: RAMSEY SR-1 SW kit

: I dont see much change in the tuning
: slugs of the RF, IF and OSC cans unless
: I'm at the extremes.

Sorry, the OSC can changes the tuning
range just fine.

---

Date: 22 Aug 1997 23:07:17 GMT
From: "Carl R. Stevenson" <wa6vse@fast.net>
Subject: Regen and DC Receivers - ARRL doesn't like them!

Peter Parker <parkerp@pcug.org.auNOSPAM> wrote in article
<33fe0c12.0@newshost.pcug.org.au>...
> Come to think about it, would anyone build an SSB transceiver with
> an SSB transmitter and a direct conversion receiver? I doubt it - most
> builders would use a superhet for single signal reception.

Either the phasing or "Weaver" techniques can be used to build a
simple "single signal" receiver and a SSB transmitter, too ... it is
possible to obtain substantial undesired sideband suppression without
too much difficulty ... especially with DSP techniques ...

Carl - wa6vse
wa6vse@fast.net

---

Date: Sat, 23 Aug 1997 06:08:53 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Room Temp "Oven" for Quartz?

In message <Pine.GSO.3.94.970822142932.16140A-100000@Stratus.CAM.ORG>
Michael Black <blackm00@CAM.ORG> writes:

> Another possibility, though not for portable operation, is to bury the
> oscillator in the ground. I remember some articles in the ham magazines
> about this about 35 years ago, back when moonbounce was first getting
> attention and transmitters consisted of a low frequency oscillator
> followed by divider chains. Burying the oscillator in the ground puts it
> at a constant temperature. Its the same concept used when houses are
> buried for insulation purposes. The temperature isn't warm, but it is

> constant and isolated. Coax would be run to the shack, and DC voltage
> would be sent down to the transistorized oscillator along the coax.
>
> Michael VE2BVW

G3LTF used to do this.

73 de G3PAI

---

Date: Sat, 23 Aug 1997 01:34:02 +0100
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Subject: Room Temp "Oven" for Quartz?

In article <33FB23CA.7095@hnvr.com>, Kenneth M Gianino <ken@hnvr.com>
writes
>Has anyone done any experimenting with keeping a quartz crystal at room
>temperature using a Peltier device? I'd like to improve the stability
>of my HF rig, but don't want to pay Yaesu $100+ for their high-stability
>TCXO option (a meager +/-2ppm).
>
>I'm looking for a simple but effective scheme to improve stability
>without spending a lot of money. I'd like match Yaesu's 2ppm while
>retaining the original crystal. It is 10-point-something-MHz and I'm
>not likely to find a surplus TCXO or OCXO.
Im a bit late on the scene with this thread however:
If you have power available and dont mind the warm up time its easier to

---

Date: Sat, 23 Aug 1997 17:35:20 GMT
From: rwclark@rwclark.seanet.com (Richard Clark)
Subject: Shortwave RX Antenna

On Mon, 18 Aug 1997 09:25:23 -0700, "hf.broekhuizen (SBKM-ME/C3)"
<hf.broekhuizen@navy.disp.mindef.nl> wrote:

>I do not have specs of your receiver, but I agree with Gary KE4ZV: the
>pre-amp for your HF-RX should not make a difference, since there is no
>improvement in SNR (N being mainly the atmospheric noise on HF).
>
>More likely by adding the pre-amp you overload the input of your
>HF-receiver with too strong signals, thus creating stations as products
>on frequencies they never have been.
>I.e.: by non-linearity in the high part of the dynamic range (1 dB
>compression point etc.) of the receiver reciprocal mixing occurs. As a
>result frequencies are generated as (f1+f2) and (f1-f2), but also
>higher-order products.
>The operator will now notice stations on frequencies never radiated by
>any transmitter, so on a different location in the frequency band.
>
>--

Hi all,

The principle problem with the responses to this topic is that
amateurs employ what is called "pre-amps". Much of what follows this
presumption is correct, but inappropriate to SWL (due to the presumed
application of the "pre-amp").

Modestly priced receivers often used by SWL'ers do NOT need wideband
amplification, and their receivers are not atmospheric noise limited.
As already identified, filtering pays off and post-amplification would
return the filter's loss with perhaps some overall gain improvement.
The term for such a device is Pre-selector. Hams having been for

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End of Ham-Homebrew Digest V97 #486
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Date: 24 Aug 97 21:48:31 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 13:59:56 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #486

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 486

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #484

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 19:48:29 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
years passive in construction practices have allowed commercial
vendors to dominate design issues by virtue of offering "features."

A good receiver has front end tuning, often several tuned RF stages
prior to the first mixer. These stages are rare in current designs
having been consigned to the dust-bin by marketing department design
choices. Simply put they view that the Ham would rather have his hand
wither than reach for a "tuning" knob. That it isn't built into the
VFO knob is again a marketing issue in that cost issues arrise.
Tracking and alignment problems abound requiring the parts count to
push against the profit margin.

I have three friends with front-end overload problems from a nearyby
AM commercial station. Their rigs are top of line Kenwoods and they
suffer the same as my lowly DX-440 which cost an eighth of their
price. Both the DX-440 and these Kenwoods suffer the same design
shortfall: wide open front ends (OK so they are Band filtered, they
suffer all the same!). Pre-selectors would solve the problems all
around, but I already know my friends would shudder to have to reach
for a second knob (much less tuner). They conform to the expectations
of Marketeers and their purchases have validated the entropy of
design.

SWL'ers look for construction projects for Pre-selectors or tuned
pre-amps. This is the single greatest improvement you can make
outside of building IF ancillaries such as Q-multipliers, crystal
lattice filters, or another stage of mixing to a lower, narrower IF.
Also, do not neglect the Tuner as the cheapest means to reject noise
and interfering stations. Sophisticated tuning networks with reject
notches also keep cost low. Much of this material was present in the
ARRL Handbooks of the '60's. I hope these common engineering issues
haven't become folk-lore through neglect.

73's
Richard Clark, KB7QHC, WPE0EPH

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End of Ham-Homebrew Digest V97 #478
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Date: 24 Aug 97 14:39:14 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 97 20:26:34 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #478

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 478

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
F.S. - Tubes, books, much misc...
Ham-Homebrew Digest V97 #477
Shortwave RX Antenna

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 02:22:42 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

## 2152. 10 watt AM tramsmitter circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: ianls@patrol.i-way.co.uk
Message-ID: <3401df8f.36047030@news.i-way.co.uk>
Source record: 91426

Does anyone know of a transistor/FET circuit for 12-14 Volts for an AM
160 or 80 mtr transmitter? Power output preferably 10 watts or so.
It's relatively easy to get 5 W, but a 24 volt rail seems necessary
for more than this. Thanks,

## 2153. Ct17 and Icom transceiver controlled by a pc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: massimom@ThePentagon.com
Message-ID: <34015b35.2196774@news.tin.it>
Source record: 91427

i have to make a program to control my icom transceiver with my pc

i have also a ct 17 interface unit, but i have not any specification
of this unit ( address port, what is the way to connect radio with pc
by software ecc.)

might someome help me sending some information or to find
specification and right to make a good software to connect my pc to
icom transceiver with ct-17 ?

thanks in advance , max

# 2154. Re: Silver plating

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <5trctm$e87$3@alice.walrus.com>
Source record: 91428

JohnsonHE (johnsonhe@aol.com) wrote:
: >
: >:>
: >:>Hi.
: >:>I have a couple of projects that involves silverplating but I dont know
: >:how
: >:>to do it.
: >:>The electrolythic way seems to be adequate for RF-filters and similar
: >:>devices.
: >:>
: >:>Any tip?
: >:
: >:Kool -Amp. From Portland Oregon. They manufacture a scouring powder that
: >:you wet with water and rub onto copper, silver, brass, anything lower on
: >:the work function, and it deposits pure silver on the base metal. Power
: >:companies have used it for years to replate relay contacts and switches
: to
: >:lower the resistance of the contact...Therefore the name.
: >:
: >:I buy a pound jar every 30 years, so am a bit out of touch on price but
: >:probably in the neighborhood of $40 per pound. 1 pound usually lasts
: >:nearly a lifetime.
: >:
: >:W4ZCB
: >
: >Harold,
: >
: >I've looked in the phone book here before for that company, since I
: >remember it from Handbook years ago, but never could find it. Just
: checked
: >yellow pages again and its not there. Checked combined listings, silver,
: >plating, electronic sections- nothing there.
: >
: >If anyone has the address or phone number, would appreciate the info.
: >
: >

: Hi Rob. Almost missed your post, I don't usually review old notes. I may
: be the one who led you astray, I just went to the workshop and got my
: second jar in a lifetime and it's COOL-AMP not Kool-amp. Every jar is
: registered, and I've given away a lot more than I've ever used.

: The address on the jar is

: 8603 S.W. 17th Avenue
: Portland, OR 97219

: I'm sure they are still in business, they do a pretty large business with
: the Utility industry. However, I have about 20 percent of a pound left and
: can share if you can't obtain any from that address.

: W4ZCB

A hint:if you only need a little, the last time I checked, they were quite
willing to send out a fairly generous free sample upon request.

# 2155. Re: PNP transistor, VCEO highest possible - looking for

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: Alan Devlin <adevlin@golden.net.au>
Message-ID: <3401ABCF.2166@golden.net.au>
Source record: 91508
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Try the BUX range of Phillips semiconductors. There are also devices in the 2SD xxxx range. Many are used in the unfriendly - high voltage environment of Horizontal Output stages of TV's but I think most will be NPN's.

Alan - VK3XPD

# 2156. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC5A4F4.3DFF0000097E.uuout@mandic.com.br>
Source record: 91509

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Priced accordingly, Substantial quantities available:

0A2 $0.75
6AH6 $0.50
6AL5 $0.50
6AN8A $0.75
6AU6A $0.50
6CL6 $0.75
6X4 $0.75
12AT7 $2.00
12AU7A $2.50
12AX7A $2.50
5651A $0.75
5963/12AU7A $2.50
6080 $2.50
6201/12AT7 $2.00
8068 $12.00
8136 $0.75
8532W $0.75

Shipping in the USA: 1 - 6 tubes $4.00, 6 or more tubes
shipping free! For shipping outside the USA Email your list
and your shipping address for shipping cost information.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,

or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or
ELECTRONIC TEST EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

---

Date: Sun, 24 Aug 97 15:30:14 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #487

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 487

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #485

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
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policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 21:16:54 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
>drives the varactors in a highly non-linear way.There will be 5-10
>volts RF/AC across the varactor, and 1-10 volts DC to tune it.
>Thus, I believe that varactor will be working in a highly nonlinear
>way. Also, Q is rather low for these types of varactors.

Sounds like the conditions are similar to the parametric amplifier or varactor tripler :-).

If the high RF voltage across the varactor is your problem, then why not use a varactor with large maximum capacitance (a tuning range from ,say, 25 pF to 250 pF) in series with a small (say 100 pF) fixed capacitor. The two capacitances will form a capacitive voltage divider, at the minimum capacitance the AC voltage across the varactor is only slightly reduced but at maximum capacitance only a very small fraction of the RF voltage is across the varactor (2/7 in this case). This greatly reduces the risk for forward biasing at low tuning voltages.

Your problem seem to be the large parallel capacitance, so it is quite unrealistic to expect to get any large tuning range with varactors with low maximum capacitance. With values in my example, you would get sqrt ( (100+71)pF/(100+20)pF ) = 1.19 or 19 %. Using a larger series capacitance would make the tuning range even larger, but it would also increase the RF voltage across the varactor.

Paul OH3LWR

---

Date: Sat, 23 Aug 1997 06:34:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO , paralleling Varactors

Does anybody know why paralelling another varactor across
the varactor of a LC Voltage controlled oscilator not increase
the tuning range of the VCO?

Both the varactors are reverse biased by the tuning voltage,
as varactors should be. So, connecting another varactor
across the LC tank circuit of a VCO should increase the freq
range of the VCO by 50% or so. It only does so by 1-5%. WHY?

They AC voltage across the tank circuit is going to be about 10 volts or so. The DC bias voltage for the varactor is about 1-10 volts or so. So, is it that the varactor is working in a totally nonlinear way?

Will connecting two varactors back-to-back and then paralelling
work. Or they still might be operating in a non linear way?

Does any body have any experience with paralelling single varactors
across the LC tank circuit of VCO.

ANy insight / help is greatly appreciated.

Thanks

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
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End of Ham-Homebrew Digest V97 #479
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Date: 24 Aug 1997 01:27:37 GMT
From: k1bqt@aol.com (K1BQT)
Subject: MRF 479 Needed

Hi--

If you can't get a 479, try a 2SC3133. Good for 15W PEP.

Rick K1BQT

------------------------------

Date: Sun, 24 Aug 1997 00:39:12 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Frank Bures wrote:
>
> I am trying to locate a PNP transistor with highest available VCEO value, ide
ally
> up to 1kV.
>
> ICmax or Pw is not too important, neither is hFE.
>
> So far I've found transistor 2SB832 (at the TDS-NET Web site), but it does no
t
> seem to be available anywhere in North America.
>
> Any advice would be greatly appreciated.
>
> Thanks
>
> Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
> fbures@alchemy.chem.utoronto.ca (use this address for replies)

You might try NTE for a direct substitute? They have a searchable table
for all kinds of semiconductors at http://www.nte.com/

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Date: Sat, 23 Aug 1997 18:38:57 -0700
From: laura halliday <ve7ldh@direct.ca>
Subject: Regen and DC Receivers - ARRL doesn't like them!

In <33fe0c12.0@newshost.pcug.org.au>, Peter Parker
<parkerp@pcug.org.auNOSPAM> writes:
>Have just been looking through the Receivers section of my 1988 ARRL
>H/book (page 12-7).

>
>I'm amazed how negative they are about regenerative & DC receivers. On
>regen receivers, I quote:
> (snip)

Maybe you should have a look at a more recent issue? My latest
copy (1996) discusses regens as primarily a historical thing, but
considers direct conversion receivers to be an effective way of
receiving signals.

I can think of a number of important designs between 1988 and 1996
that would have changed the perception of DC receivers as cute toys,
but not serious receivers...

As always, you get what you pay for. An extremely simple receiver
will get the job done under some circumstances, but may not
hold up under extreme conditions.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

---

Date: 24 Aug 1997 01:36:16 GMT
From: norman <norsan@bright.net>
Subject: Value of Dow-Key relay?

Dow key relays can be used for much more than switching from transmit to
receive in boatanchors. Some uses are:

switching between 2 antennas
switching in/out a preamplifier at the antenna
switching transverters to a common IF
switching rigs to a SWR meter

and many more.

Norman N8RGR

---

Date: Sun, 24 Aug 1997 09:45:13 GMT
From: ttwist@online.no (Tom Twist)
Subject: VCO, paralelling varactors

On Sat, 23 Aug 1997 11:13:05 -0400, "P. Singh"
<singhpk@NOSPAM.exit109.com> wrote:

>FRANK,
>
>I guess I was not as clear as I should have been.
>

>1 varactor VCO ( MV109)
>case 1: CFIXED = 100 PF
> CVARACTOR= 2-20PF
> CTOTAL= 102-120 PF
> Cmax/cmin= 1.176
> FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%
>
>2 paralell Varactor VCO( 2*MV 109)
>case 2: CFIXED = 100 PF
> CVARACTOR= 4-40PF : 2 varactors in parallel
> CTOTAL= 104 to 140 PF
> Cmax/Cmin= 140/104= 1.346
> FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%
>
>Thus the max to min capacity should change.
>
>But I could not detect the change in frequency coverage
>after adding the second varactor.
>(Maybe I made an error in my experiment.)
>
>I guess that my question was, is the maximum capacity really
>going to double when you paralell another varactor across the
>varactor of a VCO. I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
<snip>

Perhaps the problem with paralleling two varactors is that the two diodes is not matched, resulting in more current flowing in one of the diodes.
Try using two resistors (and RFCs), to separate the bias voltages, and use two (relatively) large capacitors in series with the HF path. I'm too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

---

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

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End of Ham-Homebrew Digest V97 #481
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Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

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http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 04:30:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #480

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 480

Today's Topics:
Accurate measurement of low level RF in the VHF region
QEX - info please
Room Temp "Oven" for Quartz?
YEASU FL/FR DX 400

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policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 22 Aug 1997 16:46:03 GMT
From: blombard@bogusity.iu.net (Bob Lombardi)
Subject: Accurate measurement of low level RF in the VHF region

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>
>>Thanks
>>
>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at
the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty
good chip. There are easier ways (i.e., more ham like). Pretty sure that
Solid State Design for the Radio Amateur covers these if you'd rather.
They involve using differential hot carrier diodes driving an op amp,
with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

---

Date: Sat, 23 Aug 1997 18:24:18 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: QEX - info please

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

---

Date: 23 Aug 1997 10:04:46 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Room Temp "Oven" for Quartz?

> transmitters consisted of a low frequency oscillator
>> followed by divider chains. Burying the oscillator in the ground puts
it
>> at a constant temperature. Its the same concept used when houses are
>> buried for insulation purposes. The temperature isn't warm, but it is
>> constant and isolated. Coax would be run to the shack, and DC voltage
>> would be sent down to the transistorized oscillator along the coax.
>>
>> Michael VE2BVW
>
>G3LTF used to do this.
>
>73 de G3PAI

I did too, but I always used multipliers in lieu of dividers.

W4ZCB

---

Date: Tue, 19 Aug 1997 11:11:24 -0230
From: George Andrews <vcmmcts@nlnet.nf.ca>

Subject: YEASU FL/FR DX 400

desperately need Schematic for the FL and FR DX 400 Transmitter and
Receiver. Cany anyone help????????

VO2AA/VO1VCM
vcmmcts@nlnet.nf.ca

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End of Ham-Homebrew Digest V97 #480
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Date: Sun, 24 Aug 97 08:37:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #481

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 481

Today's Topics:
11volts from 12 volts...
Bounced Mail -> User Not Found
Cheap/decent 12V supply?
Ham-Homebrew Digest V97 #479
MRF 479 Needed
PNP transistor, VCEO highest possible - looking for
Regen and DC Receivers - ARRL doesn't like them!
Value of Dow-Key relay?
VCO, paralelling varactors
Yaesu AZ -EL rotator

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: Fri, 22 Aug 1997 03:23:28 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: 11volts from 12 volts...

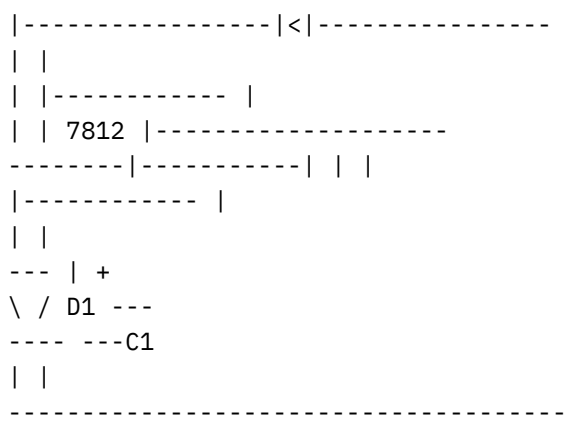
Hi bill,

Almost every 12 volt supply I have built using a 3 terminal
fixed regulator puts out about 11.5 volts or so. It seems
that the 12 volt regulators are manufactured with WIDE
tolerances.

Just use a diode or two in the ground lead of your 3 terminal reg
to increase output 11 volts to 12 volts or so.

D1, D2= In4001
C1= 10uf/16volts electrolytic

D2




In article <33efbc98.11731760@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>
>I'm thinking that I simply bought an 11 volt regulator in 12 volt
>clothing! Tomorrow I'll try a new part (and will report back on
>results).
>
>Thanks again. 73 Bill N2CQR

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: 24 Aug 97 14:28:20 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sat, 23 Aug 1997 08:56:27 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: Cheap/decent 12V supply?

These cheap switching power supplies are terrible choices for radio use,
far too noisy. Best is battery ONLY...a decent 12V Lead Acid car battery
used AS-IS (sans charger) then when you switch OFF your set up...you
turn ON the charger.
Simple, Cheap, loads of current and, best of all, quiet.
friend,
Lute

jason zawodny wrote:

> Well the question this week goes as such. Computer power
> supplies
> supply both 5V and 12V, and there are plenty laying around at work
> that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car
> battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars
>
> I've seen radio power supplies going for...
>
> Thanks
>
> jtz
>
>
> --
> --
> ------------------------------------------------------------------------
>
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ------------------------------------------------------------------
> --------

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

------------------------------

Date: Sun, 24 Aug 97 02:23:52 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #479

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 479

Today's Topics:
Accurate measurement of low level RF in the VHF/UHF region
Antenna rotator control box schematic needed.
ceramic resonators? 80m VFO - repostrd
Cheap/decent 12V supply?
Double Sided PC Boards
FS: Mil Spec Teflon Covered Wire #20,22,24,26
Pixie 2 Transceiver - Where can I get one?
power transmission (electric) (2 msgs)
QEX - info please
Relay needed
Silver plating question
VCO, paralelling varactors (2 msgs)
VCO , paralleling Varactors

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

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End of Ham-Homebrew Digest V97 #485
******************************

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Date: 24 Aug 97 21:16:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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---

Date: Sun, 24 Aug 97 12:53:50 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #485

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 485

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #483

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
---

Date: Sat, 23 Aug 1997 20:29:32 GMT
From: la8ak@online.no (J M Noeding)
Subject: Accurate measurement of low level RF in the VHF/UHF region

On 22 Aug 1997 16:46:03 GMT, blombard@bogusity.iu.net (Bob Lombardi)
wrote:

>In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>>
>>In article <33FAF41D.6076@lcpub.co.uk>,
>> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>>I am considering purchasing either a surplus RF
>>>Millivoltmeter or RF PowerMeter to accurately measure
>>>output of local oscillator and r.f. amplifier stages up

>>>to 150Mhz.

# 2157. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC5A4F2.4CAB00000978.uuout@mandic.com.br>
Source record: 91510

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
From owner-ham-homebrew@ucsd.edu Sun Aug 24 23:22:04 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id XAA12647; Sun, 24 Aug 1997 23:22:04 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id XAA26616
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 23:29:48 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id RAA11751 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 17:52:05 -0700 (PDT)
Received: by mail.ucsd.edu; id RAA28605
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 17:42:54 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id RAA28569
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 17:42:46 -0700 (PDT)
Message-Id: <199708250042.RAA28569@mail.ucsd.edu>
Date: Sun, 24 Aug 97 17:42:46 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #490
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 490

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #488

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 23:28:45 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Telnet: bbs.mandic.com.br

Text from original message follows:
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make an oven than a TCXO. A peltier heater is unnecessary as the crystal
will hace a minimum temperature coefficient above 27C
Your crystal will be an AT (lazy Z) cut optimised for minimum deviation
over the whole band. If you temperature control just the crystal it
should be possible to raise the temperature by using a servo heater to
where the crystal reaches its minimum frequencey with luck and if the
crystal is correctly cut this will be about 35C.
The Maintaining circuit will still be sensitive to temperature and will
limit any crystal only control to +-0.5ppm or so.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

------------------------------

Date: 22 Aug 1997 21:15:34 GMT
From: tonyz@rose.hp.com (Tony Zugec)
Subject: WTB RF amp for 11M

country@music.com wrote:
: country@music.com wrote:

: >Hello, I am looking for a linear amplifier to buy for my midland radio
: >I use in my Semi truck. Preferable around 300-400 watts output with 4

: >watts input. Would prefer UPS cod. willing to pay up to $400 - only
: >for really output, not a label name.
: > Mike ,
: >aka KC7KEM
: >PS. I am using a fellow hams account so please call , don't email- he
: >is a wimp and is faking his address, one of those afraid of the FCC
: >types. Not ME! call me at 964-2458
: Oops! that is 509 964 2458 and I work days so 6pm to 5am is the best
: time to call- I sleep light so no problem with late/ early calls, That
: is Washington state time.

This is a troll. Let's all not start a thread.
I wouldn't call that number either.

I can hear landmines.

sheeesh. some peoples kids, eh?

Your radio pal Tony

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End of Ham-Homebrew Digest V97 #476
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Date: Fri, 22 Aug 1997 14:20:44 -0700
From: Gerald Caouette <ve6nap@oanet.com>
Subject: Help Looking for A HP 1820-0736

I need a HP 1820 - 0736 divide by 2 Prescaler chip for my
HP 5303B 525 MHZ Counter

HP in canada ain't much help

Thanks in advance
de
ve6nap@oanet.com

------------------------------

Date: Sat, 23 Aug 1997 08:39:28 -0700
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Subject: MRF 479 Needed

Try RF Parts...in San Marco, CA for your transistor.
friend,
Lute

James R. Binkley wrote:

> Does anyone know where I can get an MRF 479 transistor, or its
> equivalent. I need one for a portable transciever I have, and don't
> find this transistor listed in any of my catalogs.

>
> Thanks Bob w4aos@his.com

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

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Date: Sun, 24 Aug 97 00:53:57 GMT
From: tait@primeline.net (Gary Tait)
Subject: Need plans Alliance U100 Rotator control box.

I have what I have been told is an Alliance U-100 Rotator, I need a control
box for, but don't wish to shell out the bucks for one.

Does anybody have plans for a solid state box, I could build out of
TTL or cmos gates (other than the motor control circuitry of course.)

Gary Tait,VE3VBF

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Date: Sat, 23 Aug 1997 18:26:53 +0100
From: Peter Barville <peter@barville.demon.co.uk>
Subject: QEX - info please

I understand that QEX has resumed publication, with a July 1997 edition.
I am particularly interested in a couple of the articles from this
issue, and would like to know how to get hold of a copy. I would also
welcome any information with regard to how I can subscribe to the
magazine.

If you're able to help, many thanks.
--
73, Peter G3XJS ( G-QRP 3001, QRP ARCI 8572 )

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End of Ham-Homebrew Digest V97 #477
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Date: 24 Aug 97 02:22:41 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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---

Date: 24 Aug 1997 02:47:52 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 97 19:16:01 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #477

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 477

Today's Topics:
2 meter antenna
Bounced Mail -> User Not Found
Double Sided PC Boards
Ham-Homebrew Digest V97 #476
Help Looking for A HP 1820-0736
MRF 479 Needed
Need plans Alliance U100 Rotator control box.
QEX - info please

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I can compare it to the J-Pole I've been using. My question is, should the two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the feeding coax, with the braid shorted to the pipe at the midpoint of the antenna. The other half the dipole is base loaded to be electrically 3/4 wavelength long and physically 5/8 wavelength (I used a section of 1/8" steel rod with the coil making up the remainder of the length... I used a piece of solid phenolic plastic rod that plugs the end of the copper pipe and extends up as the coil form, and drilled out the center of the rod to set the steel element in). I am currently feeding the base of the loading coil with the coax center conductor, and do NOT have the two halves shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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---

Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen <allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur

>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work. There is no real problems, any more than with other type, the R's and C's take a bit of geting used to (they fly round the shack really well if you get the mounting wrong!), but it just requires new skills to be learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM

+----------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------+

------------------------------

Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:
<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp
Help.
help taming HF : some thoughts
measuring VVC-diodes, how?
PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit

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End of Ham-Homebrew Digest V97 #484
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Date: 24 Aug 97 19:48:28 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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---

Date: Sun, 24 Aug 97 11:22:03 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #484

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 484

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #482

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 17:13:27 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Regen and DC Receivers - ARRL doesn't like them!
Room Temp "Oven" for Quartz? (2 msgs)
WTB RF amp for 11M

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 23 Aug 97 16:31:04 GMT
From: NORMANMO@miavx1.acs.muohio.EDU
Subject: <no subject>

add

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Date: Wed, 20 Aug 1997 12:49:37 -0500
From: K0PW <pwentzel@minn.net>
Subject: Diathermy Machine $100.00

I have a friend who has a working diathermy machine for sale. I tore one
of these apart a couple of eons ago, and harvested an excellent HV power
supply for a linear -- also some heavy duty RF components. This is too
heavy to ship. If anyone is interested, send me an e-mail and I'll pass
along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

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Date: Sat, 23 Aug 1997 07:02:26 GMT
From: allent@mnsinc.com (David Allen)
Subject: Double Sided PC Boards

stevem@vax.area.com (Stephen E. Muther) wrote:

>I do a lot of hobby boards and my employer's prototypes on a milling
>machine. Typically I drill the holes first (before etching or milling)
>then take the board in the back door of a cooperative board house
>for plating. If I am in a hurry or if the board house is too busy to
>deal with me, I use small brass or tin eyelets that I get at the
>local hobby/model shop. They are easy to push in and solder and
>require no cutting or trimming unlike wires.
>
>Steve M.
>

On a tangential issue, has anyone done much hobby work with the new
SOT gull-wing or even surface mount packages? The "pin" spacing on
some of these is getting awfully small. I've gotten a few samples of

some nice IC's I's like to evaluate, but etching and soldering at
those line widths makes me wonder if at some point the amateur
homebrewer is going to get scraped off.

Dave Allen
WA2BSL
Falls Church, VA

---

Date: 23 Aug 1997 19:57:00 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund,
and Philco. Schematics for many older radios and TV's - just $3
delivered. Tube manuals, Tube substitution books, Service manuals, Radio
magazines, much more from the 30's to the 70's. Now over 1600 different
tube types in stock - Contact Rog42@aol.com for an E-mail copy of my
latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 1997 06:03:04 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Fast O'scope for tiny Homebrewer budget

> wrt@eskimo.com (Bill Turner) wrote:

> >I was a test technician on the Tektronix 400 series production line
> >back in the '70s and '80s. We built so many of those we felt every
> >house in America must have one. Thanks for the kind words!
> >
> >73, Bill W7TI

I was issued a 454 when I joined a research project at the University
of Essex in 1970. The only more beautiful thing was the young lady
who came with it. (The 454 is no longer with me).

---

Date: 23 Aug 1997 12:22:45 GMT
From: "David Newkirk" <dnewkirk@bellatlantic.net>
Subject: Help!: Taming HF preamp

Bill Meara <wmeara@erols.com> wrote in article
<33f95b77.1710144@news.erols.com>...

> I went ahead and built a little grounded gate FET pre amp circuit.
> The circuit comes out of W1FB's Design Notebook.

[deletions]

> I have one problem that I would like to ask the group about: As I
> tweak the two tuned circuits (input and output) in the pre amp, it

> breaks into oscillation whenever I put them both at their resonant
> points. If I back off a bit on the input tank, the oscillation goes
> away, sensitivity remains sufficiently high and the 22 meter gang
> continues to be blocked. I suspect I may have failed to use a
> sufficiently short PC board trace to ground for the FET gate.
>
> Anyway, is this worth fixing or should I just leave it as it is? Is
> it normal for grounded gate FET preamps to behave this way? Am I
> losing performance by operating the input circuit slightly off
> resonant frequency? Can someone explain WHY this circuit is doing
> this (Too much gain? Why would the lead length matter?)

The lead length doesn't matter so much as the circuit's design. The problem with that circuit is that it's inherently unstable when its input and output are tuned. (Grounding a JFET's gate doesn't shield O from I as grounding a vacuum tube's grid can do.) The MPF102 isn't a very gainy JFET, so if you tap the I/O tuned circuits down far enough and/or stagger the I/O circuits' tuning, *and* there's sufficient loading at I and/or O, the circuit may not oscillate.

That circuit also disserves you by getting much less selectivity out of two tuned circuits than can easily be achieved with them.

A better approach is to close that book and use a circuit engineered for predictable gain and stability. One recommendation is the single-40673 amplifier described by Wes Hayward, W7ZOI, in November 1981 *QST*'s "Progressive Communications Receiver," later carried in many subsequent ARRL *Handbook*s under the title "High-Performance Communications Receiver" (it's in the 1992 edition, for instance). (Yes, 40673s are now "new old stock," but you can also use an ECG222, NTE222, MPF131, 3N187 and 3SK [Japanese] or BF [European] equivalents. Dual-gate MOSFETs may be passe over in the US, but in Japan and Europe they're still very much viable. The Japanese in particular have taken receive-class JFETs and MOSFETs much

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End of Ham-Homebrew Digest V97 #488
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Date: 24 Aug 97 23:28:45 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sun, 24 Aug 97 16:05:30 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #488

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 488

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #486

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 21:48:32 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
further than manufacturers here; even the [old] 2SK125, for instance, is
much better than the best [J310/U310] generally available here.)

When you combine Hayward's amplifier with the appropriate
double-tuned-circuit output filter (described in the same article that
describes the amplifier), you'll have good, predictable gain (10 dB) *and*
the selectivity you need. Wes's circuit isn't the only possible solution
to your problem, of course, but it has withstood the tests of time and use
that the other circuit hasn't.

Regards,

David Newkirk, W9VES

---

Date: 22 Aug 1997 23:54:00 GMT
From: rod7rg@aol.com (ROD7RG)
Subject: Help.

Hi Myles
You might want to check out "Elmers" at pw2.netcom.com/~ac6v/pageas.html

Also, one of the local radio stores should have some type of literature
from the Canadian or Ametuer Radio Relay Leagues. They should be able to
provide you some contacts.

Rod
KL7RG/8

---

Date: Sat, 23 Aug 1997 07:16:25 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: help taming HF : some thoughts

David Newkirk wrote:
>
> Bill Meara <wmeara@erols.com> wrote in article
> <33f95b77.1710144@news.erols.com>...
> [deletions]
>
> > I have one problem that I would like to ask the group about: As I
> > tweak the two tuned circuits (input and output) in the pre amp, it
>
> The lead length doesn't matter so much as the circuit's design. The
> problem with that circuit is that it's inherently unstable when its input
> and output are tuned. (Grounding a JFET's gate doesn't shield O from I >as gr
ounding a vacuum tube's grid can do.)
>The MPF102 isn't a very gainy
> JFET, so if you tap the I/O tuned circuits down far enough and/or stagger
> the I/O circuits' tuning, *and* there's sufficient loading at I and/or O,
> the circuit may not oscillate.
>

# 2158. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-25 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC5A4F4.28300000097D.uuout@mandic.com.br>
Source record: 91511

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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From owner-ham-homebrew@ucsd.edu Sun Aug 24 23:25:46 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id XAA12848; Sun, 24 Aug 1997 23:25:46 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id XAA27233
for <wagner.kuriki@mandic.com.br>; Sun, 24 Aug 1997 23:33:16 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id RAA11753 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 24 Aug
1997 17:52:07 -0700 (PDT)
Received: by mail.ucsd.edu; id RAA26888
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 17:24:16 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id RAA26793
sendmail 8.8.5/UCSD8.3
Sun, 24 Aug 1997 17:23:59 -0700 (PDT)
Message-Id: <199708250023.RAA26793@mail.ucsd.edu>
Date: Sun, 24 Aug 97 17:23:58 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #489
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 489

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
FS: Used Tubes
Ham-Homebrew Digest V97 #487
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Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 97 23:03:09 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: 24 Aug 97 23:03:09 GMT
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Subject: Bounced Mail -> User Not Found

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Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
-----------------------------------
>>>nielsm@lcpub.co.uk
>>
>>Same situation, I'm thinking of building something using the LT1088, or
>>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>>datasheet (FARNELL server claims to have them but then says they aren't
>>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>>PowerMeter head (working) going on the cheap I'd be interested. TIA
>>
>> 73 de Laurens M1CCO
>

>Do you have web access? Analog Devices home page has a search engine at
>the opening screen. I entered AD737 and got it. They're www.analog.com.
>
>I've used the 737 in a signal measuring setup before, and it's a pretty
>good chip. There are easier ways (i.e., more ham like). Pretty sure that
>Solid State Design for the Radio Amateur covers these if you'd rather.
>They involve using differential hot carrier diodes driving an op amp,
>with perhaps some bias to get down to the -20 dBm level.
>
>
>
>73,
>Bob
>
>
>
it is fairly easy to go much further down than this!
With 2x 1N270, or better AA119 type germanium diodes and CA3140E
OP-amp you can measure down below -46dBm up to at least 600MHz.

I made a correction amplifier using several 1N4148 for each range, but
today, I would have tried a CA3140E buffer, with a possible log.amp
and connect this to a datalogger, which may be calibrated for every
10dB range, with some possible frequency calibration (like the one you
have on SHF power meters). With this circuit you might measure below
-40dBm on 1,296GHz, and still have useful sensitivity above 2.320 GHz.
But you have to calibrate the circuit yourself. This is accomplished
by borrowing a signal generator from work or from a friend (most SHF
friends have some sort of reliable signal generators)

73

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: Sat, 23 Aug 97 05:24:56 GMT
From: tait@primeline.net (Gary Tait)
Subject: Antenna rotator control box schematic needed.

I am looking for plans for a tv antenna rotator. It is one of the ones that
the antenna mast goes through. It is a 4 wire, with the wires connected
internally as follows:

1: Black, Motor common
2:Yellow , motor, switch NO
3:red , motor,switch NC
4:blue , switch common through 27 Ohm 5W Resistor.

The switch opens/closes about 30+ times per revolution of the mast.

I would like to build an electronic control box using discrete TTL chips if
possible.

Gary Tait,VE3VBF

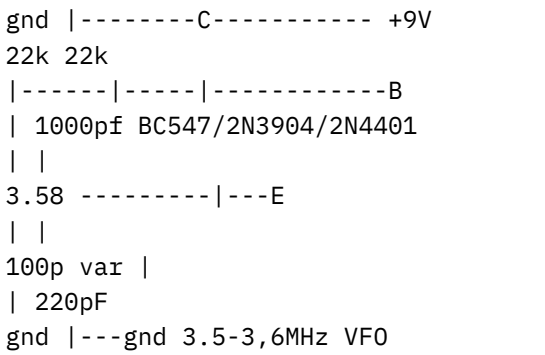
---

Date: Sat, 23 Aug 1997 19:04:37 GMT
From: la8ak@online.no (J M Noeding)
Subject: ceramic resonators? 80m VFO - repostrd

On Sun, 27 Jul 1997 13:15:06 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <mzenierEDxw7v.7CH@netcom.com>, Mark Zenier
><mzenier@netcom.com> writes
>>In article <5r5qe7$m0v$1@rosenews.rose.hp.com>,
>>Tony Zugec <tonyz@rose.hp.com> wrote:
>>>I'm still looking for any information on
>>>ceramic resonators. Anyone have any
>>>experience with them?
>>>
>>>How are they used? Mine are 455kc
>>>with 2 leads coming out.
>>>
>>>Normal ceramic filters usually have 3 leads
>>>so I am at a loss. I understand they are
>>>basically piezoelectric ceramic elements,
>>>but how does one use them in a small broadcast
>>>radio project's IF section?
>>
>>The two terminal ones are cheap replacments for quartz crystals,
>>used for the timing oscillators in a lot of consumer gear like
>>TV remote controls, CD Players and the like. Maybe you could
>>use it for a BFO, but not as a bandpass filter.
>>
>>Check out the Digikey catalog, they sell both types.
>
>The two-lead ones used to be used in place of the decoupling capacitor
>across an IF amplifier transistor emitter resistor. Alternatively, they
>could be used with appropriate capacitors to make cheap ladder filters.
>I did this many years ago.
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
the ceramic resonnators are fine for oscillators, and they may be
pulled more than comparative xtals. I am sure you may use them for
filters, I have seen a BP-filter for 7MHz band using such devices

I posted some info on a newsgroup some times, but obviously this
attracted little interest or nobody makes any experiments any more?
I have made experiments with oscillators using ceramic resonators for
250, 480, 960kHz, and 3,58, 4.0 MHz
it is easy to pull a 3.58MHz element to cover 3.5-3,6MHz in a VFO
An oscillators using ceramic resonnators should have some 3 times
higher capacitor values than xtal oscillators to operate
satisfactorily
73
jan-martin



using ceramic resonnator 3.58MHz

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 24 Aug 97 07:22:57 GMT
From: k3ky@juno.COM (David E Sinclair)
Subject: Cheap/decent 12V supply?

Using the 12V supply only from a 5V/12V computer supply probably would
not
work well for charging a 12V lead/acid car battery. More voltage is
needed. If
the two supplies in the computer unit are not ground referenced, then
they
could be series-connected for 17V. Some simple circuitry could be used to
control or limit the battery charge current. There are several approaches
such as constant voltage, constant current, taper charging, etc. I will
be glad
to supply references/schematics, etc. on request. Some other writers have
pointed out correctly that a linear supply would be a better choice than
a
noisy computer switching supply, and that one or both supplies in the
switch-
ing unit may have a minimum current requirement. That can be easily met
with
various types of loads added in parallel with the supply needing it.

David Sinclair K3KY
e-mail: k3ky@juno.com

---

Date: Sat, 23 Aug 1997 09:51:48 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes
>stevem@vax.area.com (Stephen E. Muther) wrote:
>
>
>>I do a lot of hobby boards and my employer's prototypes on a milling
>>machine. Typically I drill the holes first (before etching or milling)
>>then take the board in the back door of a cooperative board house
>>for plating. If I am in a hurry or if the board house is too busy to
>>deal with me, I use small brass or tin eyelets that I get at the
>>local hobby/model shop. They are easy to push in and solder and
>>require no cutting or trimming unlike wires.
>>
>>Steve M.
>>
>
>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

For RF prototyping where I used to work, they used little single-sided
PCBs about 1" square, with adhesive backing, with a surface mount
pattern for a single chip brought out to wider pads. These were
positioned on the Cu side of a piece of PCB laminate and the circuit
wired up directly on the Cu ground plane with wire-wrap wire or self-
fluxing magnet wire. I'll ask someone there where they got the things
from. They were very cheaply made, and were free issue in the lab. I
should have liberated a few before I left. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

---

Date: Sun, 24 Aug 1997 05:35:03 GMT
From: radiodale@dclink.com (Dale B. Allen)
Subject: FS: Mil Spec Teflon Covered Wire #20,22,24,26

I have the following colors and sizes available. This wire is stranded tinned copper with a Teflon jacket. Limit is 100ft./size/color for each order. Shipping is $3.00 for any amount.

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

---

Date: 23 Aug 1997 03:15:55 GMT
From: pegsollek@aol.com (PEGSOLLEK)
Subject: Pixie 2 Transceiver - Where can I get one?

That kit is available from HSC Electronics for $9.95. Try calling them at 1-800-442-5833.

Wayne, NB6M

---

Date: Fri, 22 Aug 1997 23:55:41 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: power transmission (electric)

Mike Willis wrote:
>
> Paul KeinEnen wrote:
>
> > sw1gak@polaris.mindport.NET (Spencer Trombly) wrote:
> >
> > >I have a question about submarine power transmission cables.
> > >
> > >Why do power companies use DC to transmitt power. 400KV, 500MW.

DC has no skin effect, which is important even at 50 Hz for very large currents. DC has no radiation losses, which is also significant at 50 Hz over long distances. For a given RMS, DC has a 30% smaller peak current and peak voltage. DC has no capacitively coupled current loss (not the same as leakage current) therefore power factor loss, through the insulation into the salt water. This capacitive current can cause electrolysis effects.

Bill W0IYH.

---

Date: 22 Aug 1997 16:04:03 GMT
From: n4mxf@aol.com (N4MXF)
Subject: power transmission (electric)

Hi,
I've been an engineer (manager) in the undersea cable business for 30 years and know of only a few DC cable projects for very specific applications. DC would not be an effective way to transmit power. High voltage pluse cables for digital transmission (very low current) are the only cables I know fit your discription. These are not power cables. Undersea power transmission are larger cables and are usually 5,15,35,64,130kv cables having conductors with thousands of circular mils and range from 4" to 8" diameters. There are some even larger. Cables usually contain 3 or 4 main conductors and are operated in a three phase (balanced) configuration. Today, many undersea power cables contain optical light guides (fiber optics) for signal transmission. Corona is normally controlled by proper shielding and the use of semi-con materials. External damage is the major cable failure although the we still like to get excited over the effects of "treeing" (crack propagation within a dielectric due to electro stress). If you would like any more details on cable or cable useage, drop me an email. Oxford,William & Associates: Cable Systems Consultants. wjoxford@aol.com or N4MXF@aol.com. 73 Bill

---

Date: 24 Aug 1997 03:56:29 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: QEX - info please

>. I would also
>welcome any information with regard to how I can subscribe to the
>magazine.
>
>If you're able to help, many thanks.
>--

Well, you might consider subscribing. You can do it through the League at their regular address or FAX number, or even I suspect thru their bulletin board.

It probably gets about as sticky though as we have it getting RadComm across the pond.

W4ZCB

---

Date: 24 Aug 1997 05:54:30 GMT
From: "ron ab6zx" <dom@shocking.com>
Subject: Relay needed

Looking to buy a used antenna relay capable of 800-1000 watts, can be open frame or coaxial, speed not necessary as not for QSK. Will be used for temporary bench tests only.

--
ron ab6zx chico ca
email: dom@shocking.com

------------------------------

Date: Sat, 23 Aug 1997 21:02:45 +0200
From: Bob Mueller <r.mueller@kfa-juelich.de>
Subject: Silver plating question

Web Williams wrote:
>
> I'm wondering (outloud)-
>
> I built a tank to remove sediment deposits from metals found during scuba
> diving. It consists of a 12VDC unregulated power supply, an ordinary
> drinking glass, some table salt, and a stainless steel spoon. The object
> is to connect the object to be cleaned to the negative terminal, and the
> spoon, which is bent and hooked over the side of the glass so that the
> "bowl" hangs down into the solution, gets connected to the positive
> terminal. When you dip the object to be cleaned into the solution, some
> bubbling takes place. This eats the stainless steel, but cleans the
> object connected to the negative terminal. I'm no scientist, and don't
> really understand the process, but it works. Could one not use table salt
> for the solution for silver plating instead of cyanide? Doesn't the
> cyanide simply act as a cleaning solution, so that if one was to start
> with the item to be plated _really_ clean, wouldn't a table salt solution
> do roughly the same job? Of course, you'd have to rinse the item
> thouroughly afterwards so the salt didn't corrode whatever it is. I don't
> think ugliness counts when the plated item is enclosed in a cabinet, so
> "bumpy" plating isn't really a consideration. I know nothing about this
> subject- just throwing out an idea....anybody tried this?
>
> Another thought: How about getting a piece of copper tubing hot and
> "soldering" a coat of silver on it. I think I have some flux of the type
> used by air-conditioning repair people when they braze tubing with silver
> solder. Could one not use .999 silver bars bought at a coin shop and
> solder a coat of silver onto tubing? It'd have to be really hot so that
> it would flow "pretty" and not leave lumps. The bars are only about $10
> apiece for a one ounce bar. Just some ideas....
>
> Comments here or remove the ! to reply via e-mail...73 all, Web Williams

Well, not quite! I have to argue against two of your points or
suggestions.
The cyanide is NOT just a cleaner. The silver ions bind to the
cyanide ions in a way leaving hardly any free silver ions in the plating
solution. (One book reports about 1 free silver ion per cubic
centimeter. That is a VERY small amount of silver. An ion is
esstentially just an atom.)
Why is that important? If there are many free ions and you stick

almost any metal into the solution the silver ions will pick up an electron from the metal and become metallic silver while one of the substrate ions will go into solution. This is the secret of "electroless" plating. Sounds wonderful, but it is not; the metal deposited this way is poorly bonded and can be often wiped off with a rag. It is also porous. Metals going into solution include copper, zinc, iron, practically anything except gold and platinum!
The other objection is rubbing silver onto a hot surface. Actually, it probably could be made to work, if you are good and work fast. The problem is that the melting point of silver is lower than the melting point of copper (probably higher than for brass), but not a lot lower (a bit over 100 degrees C.) You are at risk of melting the copper if you heat with a tourch. It would work better with a silver bath (want to melt a liter of silver in the kitchen?) with good temperature control.
There is another problem; the silver and copper rapidly alloy to form a lower melting point alloy. If you do not work fast this process can cause holes to develop as the alloy forms ever deeper into the substrate. This is something you will understand better if you ever did soldering on fine copper wire with lead-tin solder. The wire disappears if you are too slow. The silver/copper process will be faster. You will get a great bond, if you are good enough.

Bob

---

Date: Sat, 23 Aug 1997 11:13:05 -0400
From: "P. Singh" <singhpk@NOSPAM.exit109.com>
Subject: VCO, paralelling varactors

FRANK,

I guess I was not as clear as I should have been.

1 varactor VCO ( MV109)
case 1: CFIXED = 100 PF
CVARACTOR= 2-20PF
CTOTAL= 102-120 PF
Cmax/cmin= 1.176
FreqMax/FreqMin= SQRT(1.176)= 1.085 or 8.5%

2 paralell Varactor VCO( 2*MV 109)
case 2: CFIXED = 100 PF
CVARACTOR= 4-40PF : 2 varactors in parallel
CTOTAL= 104 to 140 PF
Cmax/Cmin= 140/104= 1.346

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End of Ham-Homebrew Digest V97 #483
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Date: 24 Aug 97 18:39:49 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
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InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sun, 24 Aug 97 10:43:36 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #483

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 483

Today's Topics:
Bounced Mail -> User Not Found (3 msgs)
Ham-Homebrew Digest V97 #480
Ham-Homebrew Digest V97 #481

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 97 14:58:50 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
FreqMax/FreqMin= SQRT(1.346)= 1.16= 16%

Thus the max to min capacity should change.

But I could not detect the change in frequency coverage
after adding the second varactor.
(Maybe I made an error in my experiment.)

I guess that my question was, is the maximum capacity really
going to double when you paralell another varactor across the
varactor of a VCO. I am specificall talking about (1 varactor
VCO) and NOT the 2 back-to-back varactor VCO.

I dont really know, but, I think that the one varactor VCO
drives the varactors in a highly non-linear way.There will be 5-10
volts RF/AC across the varactor, and 1-10 volts DC to tune it.
Thus, I believe that varactor will be working in a highly nonlinear
way. Also, Q is rather low for these types of varactors.

Anyway, I try this varactor paralleling again, and hopefully I had
done something wrong earlier, and paralelling varactors really
does increase their max capacity in case of a VCO.

Thanks for your thoughts.

John M. Franke wrote:
>
> What is important is the maximum to minimum capacitance ratio of the
> varactor. If the maximum capacitance is 100 pF and the minimum is 10
> pF, the ratio is of course 100/10 = 10. Paralleling two varactors
> produces a new ratio of 200/20 = 10, no change. Since the resonant
> frequency is equal to 1 divided by 2 pi times the square root of L times
> C, the change in frequency is proportional to 1 over the square root of
> the change in the LC product. In this case the frequency range is the
> square root of 10. One way to help see this is to insert values into
> the equation and see what happens. Pick an inductor, calculate the
> minimum and maximum frequency for the minimum and maximum capacitance
> with one varactor. Then repeat for two.

> Does this help?
> John

--
---
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pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: Sun, 24 Aug 1997 08:19:58 GMT
From: keinanen@sci.fi (Paul KeinEnen)
Subject: VCO, paralelling varactors

"P. Singh" <singhpk@NOSPAM.exit109.com> wrote:

<clip>

>I am specificall talking about (1 varactor
>VCO) and NOT the 2 back-to-back varactor VCO.
>
>I dont really know, but, I think that the one varactor VCO

---

End of Ham-Homebrew Digest V97 #487
******************************

---

Date: Sun, 24 Aug 1997 07:07:56
From: sales@emodus.com
Subject: FS: Used Tubes

Used Tubes, Pulled from Surplus Equipment, untested,

# 2159. Gonset G-77 Power Supply and Modulator, Parts for

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5ttcm6$5ja$2@bigdog.eli.net>
Source record: 91429
Cross-posted to: rec.radio.amateur.boatanchor,rec.radio.amateur.homebrew,sci.electronics.repair,rec.radio.amateur.swap,rec.radio.amateur.equipment.sci.electronics.components

I need following parts for the Gonset G-77 Transmitter Power Supply and Modulator:

Relay
Potter and Brumfeld KA-1211,
10,000 ohm coil.

Rectifiers (4 each)
Sarkes Tarzian, 500 MA
Type 1N1084 (M-500)

Thanks much
73's

Greg KB6WKW
please reply to gwilljo@cwo.com

# 2160. National NCX-3 Tranceiver. was WTB Transmit/Recieve Relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5ttcuu$5ja$3@bigdog.eli.net>
Source record: 91430
Cross-posted to: rec.radio.amateur.equipmnet,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchor,sci.electronics.components,sci.electronics.repair

In article <5tqel8$637$1@bigdog.eli.net>, gwilljo@cwo.com says...
>
>Need the following for a NATIONAL NCX-3 20/40/80 Meter Tranciever:
>
>Transmit/Receive Relay
>Part Number A50798.
>
>Greg KB6WKW
>
>

# 2161. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC6A45C.430900000EEF.uuout@mandic.com.br>
Source record: 91431

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Mon Aug 25 23:19:21 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id XAA29130; Mon, 25 Aug 1997 23:19:21 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id XAA19797
for <wagner.kuriki@mandic.com.br>; Mon, 25 Aug 1997 23:26:55 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id RAA28546 for <ham-homebrew-list@mailbox.ucsd.edu>; Mon, 25 Aug
1997 17:52:05 -0700 (PDT)
Received: by mail.ucsd.edu; id RAA02946
sendmail 8.8.5/UCSD8.3
Mon, 25 Aug 1997 17:31:46 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id RAA02876
sendmail 8.8.5/UCSD8.3
Mon, 25 Aug 1997 17:31:31 -0700 (PDT)
Message-Id: <199708260031.RAA02876@mail.ucsd.edu>
Date: Mon, 25 Aug 97 17:31:27 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #503
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Mon, 25 Aug 97 Volume 97 : Issue 503

Today's Topics:
Bounced Mail -> User Not Found
Capacitors
Ham-Homebrew Digest V97 #501
```

PNP transistor, VCEO highest possible - looking for
VCO, paralelling varactors
VCO , paralleling Varactors
WTB AZ-EL ROTOR

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 25 Aug 97 13:54:27 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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------------------------------

Date: Sun, 24 Aug 1997 00:24:30 -0400
From: David Hinkle <hink@scioto.net>
Subject: Capacitors

Russell Chandler wrote:
>
> The project I am working on calls for a Mylar dipped
> capacitor. My copy of the Mouser catalog lists capacitors
> in Ceramic, Electrolytic, Polyester, Polyproylene, and
> Tantalum. W1FB's Design Notebook also makes mention of
> Mylar capacitors, Tubular and Rectangular Paper capacitors.
> What am I missing here? What would a possible source
> be for Mylar cpacitors? Tubular and Rectangular Paper
> capacitors?
>
> Russ

Try JDR Microdevices. They list mylar (polyester film) capacitors.

They also have a web page. I am not sure of the address. Use any of

the search engines to find them. Otherwise, order toll free phone:
1-800-538-5000

hink

---

Date: Mon, 25 Aug 97 04:35:40 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #501

Ham-Homebrew Digest Mon, 25 Aug 97 Volume 97 : Issue 501

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #499

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 25 Aug 97 10:28:48 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
use two (relatively) large capacitors in series with the HF path. I'm
too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)

Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

---

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

---

End of Ham-Homebrew Digest V97 #481
******************************

---

Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

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BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 04:30:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #480

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 480

Today's Topics:
Accurate measurement of low level RF in the VHF region
QEX - info please
Room Temp "Oven" for Quartz?
YEASU FL/FR DX 400

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 22 Aug 1997 16:46:03 GMT
From: blombard@bogusity.iu.net (Bob Lombardi)
Subject: Accurate measurement of low level RF in the VHF region

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>
>>Thanks
>>
>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft
>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at
the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty
good chip. There are easier ways (i.e., more ham like). Pretty sure that
Solid State Design for the Radio Amateur covers these if you'd rather.
They involve using differential hot carrier diodes driving an op amp,
with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

---

Date: Sat, 23 Aug 1997 18:24:18 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: QEX - info please

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

---

Date: 23 Aug 1997 10:04:46 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Room Temp "Oven" for Quartz?

> transmitters consisted of a low frequency oscillator
>> followed by divider chains. Burying the oscillator in the ground puts
it
>> at a constant temperature. Its the same concept used when houses are
>> buried for insulation purposes. The temperature isn't warm, but it is
>> constant and isolated. Coax would be run to the shack, and DC voltage
>> would be sent down to the transistorized oscillator along the coax.
>>

>> Michael VE2BVW
>
>G3LTF used to do this.
>
>73 de G3PAI

I did too, but I always used multipliers in lieu of dividers.

W4ZCB

---

Date: Tue, 19 Aug 1997 11:11:24 -0230
From: George Andrews <vcmmcts@nlnet.nf.ca>

---

Date: Sat, 23 Aug 1997 22:44:01 GMT
From: la8ak@online.no (J M Noeding)
Subject: QRP CW xmitter: Use a TTL oscillator module on a ham band

On Sun, 3 Aug 1997 07:53:06 -0400, 708042@ican.net (Doug Smith VE3
IYB) wrote:

>In article <Pine.GSO.3.94.970803013108.652A-100000@Stratus.CAM.ORG>,
>blackm00@CAM.ORG says...
>
>> I can't recall what kind of filtering the article used, but that might
>> be because there was none. I think this was meant as a QQRP rig, and the
>> author used a pot in series with the 5volt line to reduce power. That
>> might explain something; if the voltage went low enough, the oscillator
>> may be putting out less of a square wave.
>
>The FIRE-BALL QRP Rig 50 milliwatts of pure power by Bill Brown WB8ELK
>appeared in 73 November, 1990 pg. 18,21. Doing a quick scan of the
>article nothing is mentioned about filtering.
>
>--
power might be "pure" on any bands, even if it is on all bands
simultaneously......?

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 23 Aug 1997 15:39:46 GMT
From: pbunn624@teleplex.net (Pat Bunn)
Subject: Silver plating, how?

In article <01bca730$b2f068e0$LocalHost@w9dmk.crosslink.net>,
w9dmk@crosslink.net says...
>

>How could their be any silver in photographic developing solution? The
>silver is in the emulsion. If you want silver in your developing
solution
>you have to first develop a hell of a lot of prints or film. OK?

The silver is all removed when the film is "fixed". The sodium
thiosulfate fixer after it has been used, contains the silver, not the
developer.

My experience is silver plating is that using spent fixer doesn't work
well. The only method I have found , that works is to use a sodium
cyanide process. This involves disolving silver in nitric acid to adding
salt to generate a cheap silver halide salt and then disolving it in
water with the cyanide. The plating is done electrolytically.

I did it once and don't recommend it. The silver plating was beautiful
BUT... The cyanide gas can easily kill you.

Pat Bunn, N4LTA
>
>73 de w9dmk
>

------------------------------

Date: 24 Aug 1997 16:51:21 GMT
From: norman <norsan@bright.net>
Subject: WTB AZ-EL ROTOR

Hi...

I am looking to buy and AZ-EL rotor. Not for EME so I dont need anything
very big. What have you?

Norman
N8RGR

------------------------------

End of Ham-Homebrew Digest V97 #496
******************************

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Date: 24 Aug 1997 17:53:12 GMT
From: rlucch2098@aol.com (RLucch2098)
Subject: fs-UTC Interstage audio xformers

Subject: fs-UTC Interstage X-Formers

Hi All;
I have these four United Transformer Corp. transformers for SALE:
2ea. CVP-2, one new
2ea. CVP-1, both used!
I have no need for these, so if someone can use 'em, please make me a fair

offer. Please remember that they are heavy and that I have to spend to
ship
'em.

Thanks es 73..........RICH RLUCCH2098@aol.com

---

Date: 24 Aug 1997 15:10:53 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Relay needed

>
>Looking to buy a used antenna relay capable of 800-1000 watts, can be
open
>frame or coaxial, speed not necessary as not for QSK. Will be used for
>temporary bench tests only.
>--

I have 4 each, new Dow-Keys with N connectors, the Rx isolation button,
and DPDT external contacts. They have 12 volt DC coils (which are
replaceable if you don't like 12 VDC) Bought 15 years ago when I was into
moonbounce. They handle KW at 432 MHz, although I don't think they are
rated for it.

$50 each

W4ZCB

---

Date: Sun, 24 Aug 1997 09:59:31 -0400
From: "P. Singh" <screwed@nospam.net>
Subject: VCO , paralleling Varactors

<Two pairs> of varactors paired connected in paralell.
Does a pair of varactors mean two varactors wired back-to-back?
This might work if you are paralelling back to back pairs of
varactors .

I tried to paralell single varactors across a LC tank of
a VCO.

Also, the circuit where I tried this varactor paralelling is in
the VCO that comes in the Ten-TEC QRP CW kit model 1340 .

The tuning range of the VCO inside this kit at 40 M is 70 KHZ.

This VCO drifts like crazy. (yes I have glued the toroid to the
PCB with hot melt glue)

This VCO uses 1 tuning diode MV2109 for tuning it. This VCO
tunes DOWN i.e. 4.00 to 3.930 for covering 7.00 to 7.070 .

I figured that sticking another varactor diode across the
already present MV2109 should make it tune something like
7010 to 7110 or so.

Boy, was I wrong! It hardly changed anything .

Anyway, how do you bias a varactor high enough at about
20-30 volts so that it does not draw current from the LC
tank circuit of the VCO and still have enough tuning range!

Well , you might use a large varactor like 100 PF varactor
and use a 20 PF bias range around 20-30 volts or.
Didnt someone tell me that large varactors have LOW Q
inherently.Also, large varactors are noisier.

Also, generating a 20-30 volt tuning voltage is a problem
in gear like this.

So, we are back to where we started.

The Ten-Tec guys do get a terrific tuning range at about 70 KHZ
on 40 M for their 1 varactor VCO, with a tuning voltage of
1-6.8 volts I think.

Well, they used to used 2 back to back varactor at one time for
VCO etc, but that increases the cost 4:1 for varactors.

I think it is nowadays more fashionable to use 1 varactors for
LC tank of VCO, even though that will reduce the circuit Q and
stability. I guess that the resultant lower cost and the use
of the VCO with a synthesizer chip is the reason for this.

So, it seems like that the varactor is drawing current from the
tuned circuit!
Well that must be shooting down the LC circuit Q as well, and,
resulting in drifting etc.

The2X4 wrote:
>
> Hi
>
> THis was done succesfully in the Uniden President Jackson CB
> radio.Looking at the schematic there are actually two pair of varactors
> in addition to the main varactor used in the VCO circuit to extend the range.
>
> The aux pairs are switched in by the channel selector at
> a specific programming word.
>
> Hope this helps...
>
> Carl
> The2x4

--
---

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pay me US $500 for each SPAM or Junk-Mail message you send to me.
------------------------------------------------------------------------

------------------------------

Date: Sun, 24 Aug 1997 07:28:46 GMT
From: la8ak@online.no (J M Noeding)
Subject: VCO , paralleling Varactors

On 24 Aug 1997 04:00:58 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>>
>>What is important is the maximum to minimum capacitance ratio of the
>>varactor. If the maximum capacitance is 100 pF and the minimum is 10
>>pF, the ratio is of course 100/10 = 10. Paralleling two varactors
>>produces a new ratio of 200/20 = 10, no change. Since the resonant
>
>What's really tough, is that the Q of the varactor nosedives at the lower
>voltages (Higher C). Further, you have to keep the bias high enough so
>that the thing doesn't become forward biased during part of the RF cycle.
>You usually wind up in oscillator applications, with just using the high
>end of the voltage range for the above reasons, getting lower delta C and
>need to parallel several to gewt the tuning range you need.
>
>Not quite as important when you're just tuning a circuit with uVolts of RF
>on it, but the Q problem is still there.
>
>W4ZCB

this is solved in some extent by using a twin diode combination where
two diodes are connected back-to back. 20 years ago it was some notes
on oscillator applications in Radcom, Technical topics. Perhaps some
is now found in G3VA Amateur Radio Techniques?

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #499
******************************

------------------------------

Date: 25 Aug 97 10:28:48 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Mon, 25 Aug 97 01:23:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #499

Ham-Homebrew Digest Mon, 25 Aug 97 Volume 97 : Issue 499

Today's Topics:
Announcing 10 *NEW* Mailing Lists (Reflectors)
Bounced Mail -> User Not Found
fs-UTC Interstage audio xformers
Relay needed
VCO , paralleling Varactors (2 msgs)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 24 Aug 1997 14:50:00 -0700
From: "Short, B.K." <shortckt@primenet.com>
Subject: Announcing 10 *NEW* Mailing Lists (Reflectors)

Announcing 10 *NEW* Mailing Lists (Reflectors)
---
1. MFJ-AMERITRON
2. GPS
3. STANDARD
4. SPECIAL EVENTS
5. ADI-PREMIER
6. REPEATERS
7. HAM-COMPUTERS
8. TVI-RFI-EMI
9. TEST-EQUIPMENT
10. YUPI
---

MFJ-AMERITRON is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured by MFJ Enterprises
of Starkville, Ms and affiliates (Ameritron, Mirage, etc).

* Amateur Radio Equipment
* Multimode, Packet Data Controllers
* HF and VHF Amplifiers
* Accessories
* QRP, VHF, Test Instruments
* Buy, Sell
* Anything MFJ Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe MFJ-AMERITRON

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe MFJ-AMERITRON

To post to the mailing list, send email as follows:
TO: MFJ-AMERITRON@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

GPS is a mailing list (reflector) devoted to the
discussion of the Global Positioning System and
uses relating to amateur radio, experimenting, or
other activities.

* Hand Held GPS Units
* Trackers
* Amateur Radio Applications
* Interfacing
* Buy, Sell
* Anything GPS Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe GPS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe GPS

To post to the mailing list, send email as follows:
TO: GPS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

STANDARD is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured by Standard
Amateur Radio Products.

* VHF/UHF Radios, HTs, etc
* Buy, Sell
* Anything Standard Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe STANDARD

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe STANDARD

To post to the mailing list, send email as follows:
TO: STANDARD@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

SPECIAL-EVENTS is a mailing list (reflector) devoted to the
discussion of Amateur Radio Special Events and Operating Events.
Operating Events (like Field Day or State QSO Parties) while
at times competitive lack some of the characteristics of a
true Amateur Radio Contest, but any related discussion is quite
welcome here.

* QSO Parties
* Special Events Stations
* Expedition Announcements
* On The Air Activities

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe SPECIAL-EVENTS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe SPECIAL-EVENTS

To post to the mailing list, send email as follows:
TO: SPECIAL-EVENTS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

ADI-PREMIER is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured or distributed
by Premier Communications of Walnut, Ca.

* VHF/UHF Radios, HTs, etc
* Buy, Sell
* Anything ADI/Premier Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe ADI-PREMIER

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe ADI-PREMIER

To post to the mailing list, send email as follows:
TO: ADI-PREMIER@qth.net

# 2162. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC6A45C.02C000000EF0.uuout@mandic.com.br>
Source record: 91432

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

REPEATERS is a mailing list (reflector) devoted to the
discussion of Amateur Radio Repeaters.

* Repeater Owners
* Equipment, Sites
* Linking, Systems
* Coordination, Users
* Buy, Sell
* Anything Repeater Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe REPEATERS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe REPEATERS

To post to the mailing list, send email as follows:
TO: REPEATERS@qth.net

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---

HAM-COMPUTERS is a mailing list (reflector) devoted to the
discussion of personal computers (or other) used for amateur
radio, communications, or experimenting.

* PCs, Macs, Amiga, etc
* Interfacing
* Upgrades
* Enhancements
* Buy, Sell
* Anything Ham Computer Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe HAM-COMPUTERS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe HAM-COMPUTERS

To post to the mailing list, send email as follows:
TO: HAM-COMPUTERS@qth.net

This reflector is provided by Al Waller K3TKJ at no
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Please contact me with any questions: k7on@qth.net

---

TVI-RFI-EMI is a mailing list (reflector) devoted to the
discussion of interference of all types.

* Broadcast Interference (BCI)
* Television Interference (TVI)
* Radio Frequency Interference (RFI)
* Electromagnetic Interference (EMI)
* Detection, Location, Prevention
* Neighbor Solutions
* Telephone Problems
* Filters, Suppressors, Black Magic

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe TVI-RFI-EMI

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe TVI-RFI-EMI

To post to the mailing list, send email as follows:
TO: TVI-RFI-EMI@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

-----

TEST-EQUIPMENT is a mailing list (reflector) devoted to the

------------------------------

Date: Sun, 24 Aug 1997 00:44:17 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Sorry about that. The address was wrong.

The correct one is http://www.nteinc.com/

However, I went there and ran the search and they don't show a sub.

Sorry,
hink

------------------------------

Date: 24 Aug 1997 15:16:00 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: VCO, paralelling varactors

>
>Perhaps the problem with paralleling two varactors is that the two
>diodes is not matched, resulting in more current flowing in one of the
>diodes.
>Try using two resistors (and RFCs), to separate the bias voltages, and
>use two (relatively) large capacitors in series with the HF path. I'm
>too lazy to try to draw it in ascii, but I hope you get the idea.

They better not have current flowing in them! If they do, you're in a heap
of trouble. You need to keep them biased heavily enough so that they NEVER
draw current...During ANY part of the RF cycle. Within manufacturing
tolerances, 2 in parallel exhibit double the capacity of a single one at
the same voltage.

W4ZCB

------------------------------

Date: 24 Aug 1997 04:00:58 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: VCO , paralleling Varactors

>
>What is important is the maximum to minimum capacitance ratio of the
>varactor. If the maximum capacitance is 100 pF and the minimum is 10
>pF, the ratio is of course 100/10 = 10. Paralleling two varactors
>produces a new ratio of 200/20 = 10, no change. Since the resonant

What's really tough, is that the Q of the varactor nosedives at the lower voltages (Higher C). Further, you have to keep the bias high enough so that the thing doesn't become forward biased during part of the RF cycle. You usually wind up in oscillator applications, with just using the high end of the voltage range for the above reasons, getting lower delta C and need to parallel several to gewt the tuning range you need.

Not quite as important when you're just tuning a circuit with uVolts of RF on it, but the Q problem is still there.

W4ZCB

---

Date: 24 Aug 1997 12:57:21 GMT
From: norman <norsan@bright.net>
Subject: WTB AZ-EL ROTOR

Hi all...

I am looking for an AZ-EL rotor. dead or alive. Need not be a big one as the use is not EME. What have you?

Norman Hockler
N8RGR

---

End of Ham-Homebrew Digest V97 #503
******************************

# 2163. Re: Looking for prop pitch motor. Also 90RPM gearhead motor approx 1/2 HP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: James E Elliott <jelliott@mail.stlnet.com>
Message-ID: <3402AD3C.63AC@mail.stlnet.com>
Source record: 91433
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

BOB DUCKWORTH wrote:
>
> Putting up a tower and want something heavy to turn antenna.
> Anybody got an old 'prop pitch' motor in their junkbox?
> Swap for ????
> Also looking for gearhead motor, approx. 1/2 HP. single phase 60Hz
> or DC.
>
> -bob
I have a prop pitch. What you got to trade? N0TN Jim

# 2164. CQ (RADIO AMATEUR'S JOURNAL) 1 12 $8.56

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: walteddy@nbaf.com
Message-ID: <5ttfcd$t7k@camel2.mindspring.com>
Source record: 91434
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.broadcasting

(please note: if posted to moderated group please contact
walt@nbaf.com for removal)

NBAF Magazine Subscriptions
Best values on the planet!

CQ (RADIO AMATEUR'S JOURNAL) 1 12 $8.56

visit http://nbaf.com/magazines.html

# 2165. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC707BF.119E00000F31.uuout@mandic.com.br>
Source record: 91435

```
Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---------------------------------
From owner-ham-homebrew@ucsd.edu Tue Aug 26 01:04:29 1997
Received: from uucp.mandic.com.br by merlim.mandic.com.br (8.6.12/SMI-SVR4)
id BAA05413; Tue, 26 Aug 1997 01:04:29 -0300
Received: from mailbox2.ucsd.edu (mailbox2.ucsd.edu [132.239.1.54])
by uucp.mandic.com.br (8.8.5/8.8.5) with ESMTP id BAA01462
for <wagner.kuriki@mandic.com.br>; Tue, 26 Aug 1997 01:12:24 -0300
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id TAA04806 for <ham-homebrew-list@mailbox.ucsd.edu>; Mon, 25 Aug
1997 19:52:05 -0700 (PDT)
Received: by mail.ucsd.edu; id TAA14756
sendmail 8.8.5/UCSD8.3
Mon, 25 Aug 1997 19:27:19 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by mail.ucsd.edu; id TAA14722
sendmail 8.8.5/UCSD8.3
Mon, 25 Aug 1997 19:27:12 -0700 (PDT)
Message-Id: <199708260227.TAA14722@mail.ucsd.edu>
Date: Mon, 25 Aug 97 19:27:11 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #504
To: ucsd.edu!Ham-Homebrew

Ham-Homebrew Digest Mon, 25 Aug 97 Volume 97 : Issue 504

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ct17 and Icom transceiver controlled by a pc
For sale: Old books
```

Ham-Homebrew Digest V97 #503
VCO, paralelling varactors

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 26 Aug 97 01:22:33 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

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* Repeater Owners
* Equipment, Sites
* Linking, Systems
* Coordination, Users
* Buy, Sell
* Anything Repeater Related

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SUBJECT:
BODY: subscribe REPEATERS

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TO: majordomo@qth.net

SUBJECT:
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* PCs, Macs, Amiga, etc
* Interfacing
* Upgrades
* Enhancements
* Buy, Sell
* Anything Ham Computer Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe HAM-COMPUTERS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe HAM-COMPUTERS

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TO: HAM-COMPUTERS@qth.net

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Please contact me with any questions: k7on@qth.net

---

TVI-RFI-EMI is a mailing list (reflector) devoted to the
discussion of interference of all types.

* Broadcast Interference (BCI)
* Television Interference (TVI)
* Radio Frequency Interference (RFI)
* Electromagnetic Interference (EMI)
* Detection, Location, Prevention
* Neighbor Solutions
* Telephone Problems
* Filters, Suppressors, Black Magic

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SUBJECT:
BODY: subscribe TVI-RFI-EMI

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TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe TVI-RFI-EMI

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Please contact me with any questions: k7on@qth.net

-----

TEST-EQUIPMENT is a mailing list (reflector) devoted to the

---

Date: Sun, 24 Aug 1997 00:44:17 -0400
From: David Hinkle <hink@scioto.net>
Subject: PNP transistor, VCEO highest possible - looking for

Sorry about that. The address was wrong.

The correct one is http://www.nteinc.com/

However, I went there and ran the search and they don't show a sub.

Sorry,
hink

---

Date: 24 Aug 1997 15:16:00 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: VCO, paralelling varactors

>
>Perhaps the problem with paralleling two varactors is that the two
>diodes is not matched, resulting in more current flowing in one of the
>diodes.
>Try using two resistors (and RFCs), to separate the bias voltages, and
>use two (relatively) large capacitors in series with the HF path. I'm
>too lazy to try to draw it in ascii, but I hope you get the idea.

They better not have current flowing in them! If they do, you're in a heap
of trouble. You need to keep them biased heavily enough so that they NEVER
draw current...During ANY part of the RF cycle. Within manufacturing
tolerances, 2 in parallel exhibit double the capacity of a single one at
the same voltage.

W4ZCB

---

Date: 24 Aug 1997 04:00:58 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: VCO , paralleling Varactors

>
>What is important is the maximum to minimum capacitance ratio of the
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Not quite as important when you're just tuning a circuit with uVolts of RF on it, but the Q problem is still there.

W4ZCB

---

Date: 24 Aug 1997 12:57:21 GMT
From: norman <norsan@bright.net>
Subject: WTB AZ-EL ROTOR

Hi all...

I am looking for an AZ-EL rotor. dead or alive. Need not be a big one as the use is not EME. What have you?

Norman Hockler
N8RGR

---

End of Ham-Homebrew Digest V97 #503
******************************

---

Date: 26 Aug 97 01:22:32 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br

http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Mon, 25 Aug 1997 10:16:04 GMT
From: massimom@ThePentagon.com (Max)
Subject: Ct17 and Icom transceiver controlled by a pc

i have to make a program to control my icom transceiver with my pc

i have also a ct 17 interface unit, but i have not any specification
of this unit ( address port, what is the way to connect radio with pc
by software ecc.)

might someome help me sending some information or to find
specification and right to make a good software to connect my pc to
icom transceiver with ct-17 ?

thanks in advance , max

---

Date: 26 Aug 1997 00:49:55 GMT
From: "John D. Morrison" <jdm1intx@airmail.net>
Subject: For sale: Old books

Now accepting bids on the following:

Sylvania Electronic Products Technical Manual. 1955 Edition.
Covers their entire line of tubes for 1955. Faux leather comb binding.
Good condition.

The Radio Amateur's Handbook. 1965 Edition.
590 pp. Softbound. Excellent condition.

The ARRL Antenna Handbook. 1955 Edition.
306 pp. Softbound. Fair condition.

Electron Tubes in Industry by Keith Henney. 1937 Edition.
537 pp. Hardbound. Good Condition.

RCA Radiotron Designers Handbook. 1953 Edition.
1498 pp. Hardbound. Good Condition.

John Morrison
jdm1intx@airmail.net

---

Date: Mon, 25 Aug 97 17:31:27 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #503

Ham-Homebrew Digest Mon, 25 Aug 97 Volume 97 : Issue 503

Today's Topics:
Bounced Mail -> User Not Found
Capacitors
Ham-Homebrew Digest V97 #501
PNP transistor, VCEO highest possible - looking for
VCO, paralelling varactors
VCO , paralleling Varactors
WTB AZ-EL ROTOR

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 25 Aug 97 13:54:27 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---

---

Date: Sun, 24 Aug 1997 00:24:30 -0400
From: David Hinkle <hink@scioto.net>
Subject: Capacitors

Russell Chandler wrote:
>
> The project I am working on calls for a Mylar dipped
> capacitor. My copy of the Mouser catalog lists capacitors
> in Ceramic, Electrolytic, Polyester, Polyproylene, and
> Tantalum. W1FB's Design Notebook also makes mention of
> Mylar capacitors, Tubular and Rectangular Paper capacitors.
> What am I missing here? What would a possible source
> be for Mylar cpacitors? Tubular and Rectangular Paper
> capacitors?

>
> Russ

Try JDR Microdevices. They list mylar (polyester film) capacitors.

They also have a web page. I am not sure of the address. Use any of

the search engines to find them. Otherwise, order toll free phone:
1-800-538-5000

hink

---

Date: Mon, 25 Aug 97 04:35:40 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #501

Ham-Homebrew Digest Mon, 25 Aug 97 Volume 97 : Issue 501

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #499

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 25 Aug 97 10:28:48 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
use two (relatively) large capacitors in series with the HF path. I'm
too lazy to try to draw it in ascii, but I hope you get the idea.

I haven't actually tested this, it is just a guess.

Please post your results, if you try it out.

Tom
---
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

------------------------------

Date: 22 Aug 1997 19:59:36 GMT
From: "gary" <gwatts@qni.com>
Subject: Yaesu AZ -EL rotator

Jim,
I have the Yaesu 5400
I also have the KC Tracker/Tuner

How much do you offer ?

I want a dual channel O-Scope in great working condition :-)

TTYL
Gary Watts de N0OXV

James E Elliott <jelliott@mail.stlnet.com> wrote in article
<33FBFD48.22C@mail.stlnet.com>...
> Want to buy Yaesu 5400 or 5600. Jim N0TN
>

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End of Ham-Homebrew Digest V97 #481
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Date: 24 Aug 97 16:33:11 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 04:30:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>

Subject: Ham-Homebrew Digest V97 #480

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 480

Today's Topics:
Accurate measurement of low level RF in the VHF region
QEX - info please
Room Temp "Oven" for Quartz?
YEASU FL/FR DX 400

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 22 Aug 1997 16:46:03 GMT
From: blombard@bogusity.iu.net (Bob Lombardi)
Subject: Accurate measurement of low level RF in the VHF region

In article <5tfc9i$8ro_002@leeds.ac.uk>, CBS5LD@leeds.ac.uk says...
>
>In article <33FAF41D.6076@lcpub.co.uk>,
> Niels Montanana <nielsm@lcpub.co.uk> wrote:
>>I am considering purchasing either a surplus RF
>>Millivoltmeter or RF PowerMeter to accurately measure
>>output of local oscillator and r.f. amplifier stages up
>>to 150Mhz.
>>
>>Levels will range between -20dBm and +20dBm.
>>
>>Has anyone got any suggestions for a suitable
>>instrument and will a RF Millivoltmeter be more
>>flexible than an RF Powermeter.
>>
>>Thanks
>>
>>Niels Montanana
>>G8RWG
>>
>>nielsm@lcpub.co.uk
>
>Same situation, I'm thinking of building something using the LT1088, or
>AD736/737 chips (TRUE RMS power meter chips, up to 300MHz, but can't find
>datasheet (FARNELL server claims to have them but then says they aren't
>there!)). I'll let you know what I find. Else if anyone has a MARCONI tft

>PowerMeter head (working) going on the cheap I'd be interested. TIA
>
> 73 de Laurens M1CCO

Do you have web access? Analog Devices home page has a search engine at the opening screen. I entered AD737 and got it. They're www.analog.com.

I've used the 737 in a signal measuring setup before, and it's a pretty good chip. There are easier ways (i.e., more ham like). Pretty sure that Solid State Design for the Radio Amateur covers these if you'd rather. They involve using differential hot carrier diodes driving an op amp, with perhaps some bias to get down to the -20 dBm level.

73,
Bob

(remove the "bogusity" part of the reply address to prevent bouncing).

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit ATM's Resource List at http://www.freenet.tlh.fl.us/~blombard |

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Date: Sat, 23 Aug 1997 18:24:18 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: QEX - info please

Peter Barville wrote:
>
> I understand that QEX has resumed publication, with a July 1997 edition.
> I am particularly interested in a couple of the articles from this
> issue, and would like to know how to get hold of a copy. I would also
> welcome any information with regard to how I can subscribe to the
> magazine.

Suggest you visit ARRL website at

http://www.arrl.org

And get subscription information.

Bill W0IYH

---

Date: 23 Aug 1997 10:04:46 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Room Temp "Oven" for Quartz?

> transmitters consisted of a low frequency oscillator
>> followed by divider chains. Burying the oscillator in the ground puts
it

>> at a constant temperature. Its the same concept used when houses are
>> buried for insulation purposes. The temperature isn't warm, but it is
>> constant and isolated. Coax would be run to the shack, and DC voltage
>> would be sent down to the transistorized oscillator along the coax.
>>
>> Michael VE2BVW
>
>G3LTF used to do this.
>
>73 de G3PAI

I did too, but I always used multipliers in lieu of dividers.

W4ZCB

---

Date: Tue, 19 Aug 1997 11:11:24 -0230
From: George Andrews <vcmmcts@nlnet.nf.ca>

---

Date: Sat, 23 Aug 1997 22:44:01 GMT
From: la8ak@online.no (J M Noeding)
Subject: QRP CW xmitter: Use a TTL oscillator module on a ham band

On Sun, 3 Aug 1997 07:53:06 -0400, 708042@ican.net (Doug Smith VE3
IYB) wrote:

>In article <Pine.GSO.3.94.970803013108.652A-100000@Stratus.CAM.ORG>,
>blackm00@CAM.ORG says...
>
>> I can't recall what kind of filtering the article used, but that might
>> be because there was none. I think this was meant as a QQRP rig, and the
>> author used a pot in series with the 5volt line to reduce power. That
>> might explain something; if the voltage went low enough, the oscillator
>> may be putting out less of a square wave.
>
>The FIRE-BALL QRP Rig 50 milliwatts of pure power by Bill Brown WB8ELK
>appeared in 73 November, 1990 pg. 18,21. Doing a quick scan of the
>article nothing is mentioned about filtering.
>
>--
power might be "pure" on any bands, even if it is on all bands
simultaneously......?

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

---

Date: 23 Aug 1997 15:39:46 GMT
From: pbunn624@teleplex.net (Pat Bunn)

Subject: Silver plating, how?

In article <01bca730$b2f068e0$LocalHost@w9dmk.crosslink.net>,
w9dmk@crosslink.net says...
>
>How could their be any silver in photographic developing solution? The
>silver is in the emulsion. If you want silver in your developing
solution
>you have to first develop a hell of a lot of prints or film. OK?

The silver is all removed when the film is "fixed". The sodium
thiosulfate fixer after it has been used, contains the silver, not the
developer.

My experience is silver plating is that using spent fixer doesn't work
well. The only method I have found , that works is to use a sodium
cyanide process. This involves disolving silver in nitric acid to adding
salt to generate a cheap silver halide salt and then disolving it in
water with the cyanide. The plating is done electrolytically.

I did it once and don't recommend it. The silver plating was beautiful
BUT... The cyanide gas can easily kill you.

Pat Bunn, N4LTA
>
>73 de w9dmk
>

------------------------------

Date: 24 Aug 1997 16:51:21 GMT
From: norman <norsan@bright.net>
Subject: WTB AZ-EL ROTOR

Hi...

I am looking to buy and AZ-EL rotor. Not for EME so I dont need anything
very big. What have you?

Norman
N8RGR

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End of Ham-Homebrew Digest V97 #496
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Date: 24 Aug 1997 17:53:12 GMT
From: rlucch2098@aol.com (RLucch2098)
Subject: fs-UTC Interstage audio xformers

Subject: fs-UTC Interstage X-Formers

Hi All;
I have these four United Transformer Corp. transformers for SALE:
2ea. CVP-2, one new
2ea. CVP-1, both used!
I have no need for these, so if someone can use 'em, please make me a fair offer. Please remember that they are heavy and that I have to spend to ship
'em.

Thanks es 73.....RICH RLUCCH2098@aol.com

---

Date: 24 Aug 1997 15:10:53 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: Relay needed

>
>Looking to buy a used antenna relay capable of 800-1000 watts, can be open
>frame or coaxial, speed not necessary as not for QSK. Will be used for
>temporary bench tests only.
>--

I have 4 each, new Dow-Keys with N connectors, the Rx isolation button, and DPDT external contacts. They have 12 volt DC coils (which are replaceable if you don't like 12 VDC) Bought 15 years ago when I was into moonbounce. They handle KW at 432 MHz, although I don't think they are rated for it.

$50 each

W4ZCB

---

Date: Sun, 24 Aug 1997 09:59:31 -0400
From: "P. Singh" <screwed@nospam.net>
Subject: VCO , paralleling Varactors

<Two pairs> of varactors paired connected in paralell.
Does a pair of varactors mean two varactors wired back-to-back?
This might work if you are paralelling back to back pairs of varactors .

I tried to paralell single varactors across a LC tank of
a VCO.

Also, the circuit where I tried this varactor paralelling is in the VCO that comes in the Ten-TEC QRP CW kit model 1340 .

The tuning range of the VCO inside this kit at 40 M is 70 KHZ.

This VCO drifts like crazy. (yes I have glued the toroid to the PCB with hot melt glue)

This VCO uses 1 tuning diode MV2109 for tuning it. This VCO tunes DOWN i.e. 4.00 to 3.930 for covering 7.00 to 7.070 .

I figured that sticking another varactor diode across the already present MV2109 should make it tune something like 7010 to 7110 or so.

Boy, was I wrong! It hardly changed anything .

Anyway, how do you bias a varactor high enough at about 20-30 volts so that it does not draw current from the LC tank circuit of the VCO and still have enough tuning range!

Well , you might use a large varactor like 100 PF varactor and use a 20 PF bias range around 20-30 volts or.
Didnt someone tell me that large varactors have LOW Q inherently.Also, large varactors are noisier.

Also, generating a 20-30 volt tuning voltage is a problem in gear like this.

So, we are back to where we started.

The Ten-Tec guys do get a terrific tuning range at about 70 KHZ on 40 M for their 1 varactor VCO, with a tuning voltage of 1-6.8 volts I think.

Well, they used to used 2 back to back varactor at one time for VCO etc, but that increases the cost 4:1 for varactors.

# 2166. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC707BF.48D900000F32.uuout@mandic.com.br>
Source record: 91436

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
I think it is nowadays more fashionable to use 1 varactors for
LC tank of VCO, even though that will reduce the circuit Q and
stability. I guess that the resultant lower cost and the use
of the VCO with a synthesizer chip is the reason for this.

So, it seems like that the varactor is drawing current from the
tuned circuit!
Well that must be shooting down the LC circuit Q as well, and,
resulting in drifting etc.

The2X4 wrote:
>
> Hi
>
> THis was done succesfully in the Uniden President Jackson CB
> radio.Looking at the schematic there are actually two pair of varactors
> in addition to the main varactor used in the VCO circuit to extend the range.
>
> The aux pairs are switched in by the channel selector at
> a specific programming word.
>
> Hope this helps...
>
> Carl
> The2x4

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

---

Date: Sun, 24 Aug 1997 07:28:46 GMT
From: la8ak@online.no (J M Noeding)
Subject: VCO , paralleling Varactors

On 24 Aug 1997 04:00:58 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>>
>>What is important is the maximum to minimum capacitance ratio of the
>>varactor. If the maximum capacitance is 100 pF and the minimum is 10
>>pF, the ratio is of course 100/10 = 10. Paralleling two varactors
>>produces a new ratio of 200/20 = 10, no change. Since the resonant
>
>What's really tough, is that the Q of the varactor nosedives at the lower
>voltages (Higher C). Further, you have to keep the bias high enough so
>that the thing doesn't become forward biased during part of the RF cycle.
>You usually wind up in oscillator applications, with just using the high
>end of the voltage range for the above reasons, getting lower delta C and
>need to parallel several to gewt the tuning range you need.
>
>Not quite as important when you're just tuning a circuit with uVolts of RF
>on it, but the Q problem is still there.
>
>W4ZCB

this is solved in some extent by using a twin diode combination where
two diodes are connected back-to back. 20 years ago it was some notes
on oscillator applications in Radcom, Technical topics. Perhaps some
is now found in G3VA Amateur Radio Techniques?

Jan-Martin N/ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

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End of Ham-Homebrew Digest V97 #499
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Date: 25 Aug 97 10:28:48 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Mon, 25 Aug 97 01:23:59 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #499

Ham-Homebrew Digest Mon, 25 Aug 97 Volume 97 : Issue 499

Today's Topics:
Announcing 10 *NEW* Mailing Lists (Reflectors)
Bounced Mail -> User Not Found
fs-UTC Interstage audio xformers
Relay needed
VCO , paralleling Varactors (2 msgs)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------

Date: 24 Aug 1997 14:50:00 -0700
From: "Short, B.K." <shortckt@primenet.com>
Subject: Announcing 10 *NEW* Mailing Lists (Reflectors)

Announcing 10 *NEW* Mailing Lists (Reflectors)
-----
1. MFJ-AMERITRON
2. GPS
3. STANDARD
4. SPECIAL EVENTS
5. ADI-PREMIER
6. REPEATERS
7. HAM-COMPUTERS
8. TVI-RFI-EMI
9. TEST-EQUIPMENT
10. YUPI
-----

MFJ-AMERITRON is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured by MFJ Enterprises
of Starkville, Ms and affiliates (Ameritron, Mirage, etc).

* Amateur Radio Equipment
* Multimode, Packet Data Controllers
* HF and VHF Amplifiers
* Accessories
* QRP, VHF, Test Instruments

* Buy, Sell
* Anything MFJ Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe MFJ-AMERITRON

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe MFJ-AMERITRON

To post to the mailing list, send email as follows:
TO: MFJ-AMERITRON@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

GPS is a mailing list (reflector) devoted to the
discussion of the Global Positioning System and
uses relating to amateur radio, experimenting, or
other activities.

* Hand Held GPS Units
* Trackers
* Amateur Radio Applications
* Interfacing
* Buy, Sell
* Anything GPS Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe GPS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe GPS

To post to the mailing list, send email as follows:
TO: GPS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

STANDARD is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured by Standard
Amateur Radio Products.

* VHF/UHF Radios, HTs, etc
* Buy, Sell
* Anything Standard Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe STANDARD

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe STANDARD

To post to the mailing list, send email as follows:
TO: STANDARD@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

SPECIAL-EVENTS is a mailing list (reflector) devoted to the
discussion of Amateur Radio Special Events and Operating Events.
Operating Events (like Field Day or State QSO Parties) while
at times competitive lack some of the characteristics of a
true Amateur Radio Contest, but any related discussion is quite
welcome here.

* QSO Parties
* Special Events Stations
* Expedition Announcements
* On The Air Activities

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe SPECIAL-EVENTS

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe SPECIAL-EVENTS

To post to the mailing list, send email as follows:
TO: SPECIAL-EVENTS@qth.net

This reflector is provided by Al Waller K3TKJ at no
cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

---

ADI-PREMIER is a mailing list (reflector) devoted to the
discussion of radio equipment manufactured or distributed
by Premier Communications of Walnut, Ca.

* VHF/UHF Radios, HTs, etc
* Buy, Sell
* Anything ADI/Premier Related

To join the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: subscribe ADI-PREMIER

To be removed from the mailing list, send email as follows:
TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe ADI-PREMIER

To post to the mailing list, send email as follows:
TO: ADI-PREMIER@qth.net

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Date: Sun, 24 Aug 1997 10:40:55 -0500
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: VCO, paralelling varactors

JohnsonHE wrote:
>
> >
> >Perhaps the problem with paralleling two varactors is that the two
> >diodes is not matched, resulting in more current flowing in one of the
> >diodes.
>
>
> They better not have current flowing in them! If they do, you're in a heap
> of trouble.

I think he means RF current.

Bill W0IYH

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End of Ham-Homebrew Digest V97 #504
******************************

# 2167. Re: VCO , paralleling Varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <34022BA6.55BA@powerup.com.au>
Source record: 91437

Ten years ago DeMaw published in QST an article on 'Accessories
for your VFO' and also described the VFO he used for the
experiments. In it he decided to try, as the variable 'C',
an FET (junction type) with the required capaitance to swing
the tank over the range he wanted, in series.

I have tried the idea with some differences (minor) using a
remote pot to control the turn-on voltage to the FET and can
say that I will never be using varicaps again.

Get ahold of the QST Jan 1988 p31- etc. I used LEDs to create
the bias voltages necessary for control. Highly recommended.

Try feeding the FET drain thru the coil and bypass the series
'C' with a high value resistor, rather like a grid leak.

I e-mailed DeMaw and he's forgotten all about it! Such an
inventive mind.

J M Noeding wrote:
>
> On 24 Aug 1997 04:00:58 GMT, johnsonhe@aol.com (JohnsonHE) wrote:
>
> >>
> >>What is important is the maximum to minimum capacitance ratio of the
> >>varactor. If the maximum capacitance is 100 pF and the minimum is 10
> >>pF, the ratio is of course 100/10 = 10. Paralleling two varactors
> >>produces a new ratio of 200/20 = 10, no change. Since the resonant

**********
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
**********

# 2168. Re: 10 watt AM tramsmitter circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: Tom.Twist@hda.hydro.com
Message-ID: <34029d42.334168288@news.hda.hydro.com>
Source record: 91438

On Mon, 25 Aug 1997 19:44:03 GMT, ianls@patrol.i-way.co.uk (Ian Liston-Smith) wrote:

>Does anyone know of a transistor/FET circuit for 12-14 Volts for an AM
>160 or 80 mtr transmitter? Power output preferably 10 watts or so.
>It's relatively easy to get 5 W, but a 24 volt rail seems necessary
>for more than this. Thanks,

Ian

I can't help you with the exciter, but SM0VPO, Harry has a 10 W linear amplifier on his excellent Home Brew Web site. The URL is:

http://user.tninet.se/~acz732k/tx/15w-pa.htm

73 de LB8X, Tom
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

# 2169. Bounced Mail -> User Not Found

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: postmaster@mandic.COM.BR
Message-ID: <bounce.8DC72BEB.1E4300000F9C.uuout@mandic.com.br>
Source record: 91439

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: Wed, 20 Aug 1997 14:53:31 -0700
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Subject: 2 meter antenna

I've just finished building a variation on this sleeve antenna which seems
to work OK. I need to borrow a VHF SWR bridge and trim it yet, and then I
can compare it to the J-Pole I've been using. My question is, should the
two sides of the dipole be shorted together?

My antenna is constructed with 1/2 wavelength of copper 3/4" pipe over the
feeding coax, with the braid shorted to the pipe at the midpoint of the
antenna. The other half the dipole is base loaded to be electrically 3/4
wavelength long and physically 5/8 wavelength (I used a section of 1/8"
steel rod with the coil making up the remainder of the length... I used a
piece of solid phenolic plastic rod that plugs the end of the copper pipe
and extends up as the coil form, and drilled out the center of the rod to
set the steel element in). I am currently feeding the base of the loading
coil with the coax center conductor, and do NOT have the two halves
shorted... is this correct?

TIA,
Jason, N7IME

---

Date: 23 Aug 97 21:28:53 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sat, 23 Aug 1997 10:13:55 +0100
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Double Sided PC Boards

In article <33fe8a16.45638370@netnews.worldnet.att.net>, David Allen
<allent@mnsinc.com> writes

>On a tangential issue, has anyone done much hobby work with the new
>SOT gull-wing or even surface mount packages? The "pin" spacing on
>some of these is getting awfully small. I've gotten a few samples of
>some nice IC's I's like to evaluate, but etching and soldering at
>those line widths makes me wonder if at some point the amateur
>homebrewer is going to get scraped off.

Hi Dave

I've done quite a bit of work with SM packages in my microwave work.
There is no real problems, any more than with other type, the R's and
C's take a bit of geting used to (they fly round the shack really well
if you get the mounting wrong!), but it just requires new skills to be
learnt, but certainly not difficult or impossible for Mr Average Ham.

73 Simon GM4PLM
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

---

Date: Sat, 23 Aug 97 13:54:54 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #476

Ham-Homebrew Digest Sat, 23 Aug 97 Volume 97 : Issue 476

Today's Topics:
<no subject>
Diathermy Machine $100.00
Double Sided PC Boards
F.S. - Tubes, books, much misc...
Fast O'scope for tiny Homebrewer budget
Help!: Taming HF preamp

Help.
help taming HF : some thoughts
measuring VVC-diodes, how?
PAGER NOISE HELP
parabolic microphone (2 msgs)
Pixie 2 Transceiver - Where can I get one?
PNP transistor, VCEO highest possible - looking for
power transmission (electric)
RAMSEY SR-1 SW kit

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End of Ham-Homebrew Digest V97 #484
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Date: 24 Aug 97 19:48:28 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
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Date: Sun, 24 Aug 97 11:22:03 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #484

Ham-Homebrew Digest Sun, 24 Aug 97 Volume 97 : Issue 484

Today's Topics:
Bounced Mail -> User Not Found (2 msgs)
Ham-Homebrew Digest V97 #482

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

---

Date: 24 Aug 97 17:13:27 GMT
From: postmaster@mandic.COM.BR
Subject: Bounced Mail -> User Not Found

Este usuario nao existe em nosso cadastro (BOUNCED)...
Bounced Mail, user not found...

VOZ (011) 870-0888 FAX (011) 816-3245
BBS (011) 816-3911 e 0-800-163911 (acima de 300KM)
InterNet info@mandic.com.br
http://www.mandic.com.br
Telnet: bbs.mandic.com.br

Text from original message follows:
---
Regen and DC Receivers - ARRL doesn't like them!
Room Temp "Oven" for Quartz? (2 msgs)
WTB RF amp for 11M

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---

Date: 23 Aug 97 16:31:04 GMT
From: NORMANMO@miavx1.acs.muohio.EDU
Subject: <no subject>

add

---

Date: Wed, 20 Aug 1997 12:49:37 -0500
From: K0PW <pwentzel@minn.net>
Subject: Diathermy Machine $100.00

I have a friend who has a working diathermy machine for sale. I tore one
of these apart a couple of eons ago, and harvested an excellent HV power
supply for a linear -- also some heavy duty RF components. This is too
heavy to ship. If anyone is interested, send me an e-mail and I'll pass
along his phone number. He's located 15 miles south of Mpls. Mn.

73,

Paul K0PW

---

Date: Sat, 23 Aug 1997 07:02:26 GMT
From: allent@mnsinc.com (David Allen)
Subject: Double Sided PC Boards

stevem@vax.area.com (Stephen E. Muther) wrote:

>I do a lot of hobby boards and my employer's prototypes on a milling
>machine. Typically I drill the holes first (before etching or milling)
>then take the board in the back door of a cooperative board house
>for plating. If I am in a hurry or if the board house is too busy to
>deal with me, I use small brass or tin eyelets that I get at the
>local hobby/model shop. They are easy to push in and solder and
>require no cutting or trimming unlike wires.
>
>Steve M.
>

On a tangential issue, has anyone done much hobby work with the new SOT gull-wing or even surface mount packages? The "pin" spacing on some of these is getting awfully small. I've gotten a few samples of some nice IC's I's like to evaluate, but etching and soldering at those line widths makes me wonder if at some point the amateur homebrewer is going to get scraped off.

Dave Allen
WA2BSL
Falls Church, VA

---

Date: 23 Aug 1997 19:57:00 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, books, much misc...

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #810-T.

---

Date: Sat, 23 Aug 1997 06:03:04 +0100
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Fast O'scope for tiny Homebrewer budget

> wrt@eskimo.com (Bill Turner) wrote:

> >I was a test technician on the Tektronix 400 series production line
> >back in the '70s and '80s. We built so many of those we felt every
> >house in America must have one. Thanks for the kind words!
> >

> >73, Bill W7TI

I was issued a 454 when I joined a research project at the University
of Essex in 1970. The only more beautiful thing was the young lady
who came with it. (The 454 is no longer with me).

------------------------------

Date: 23 Aug 1997 12:22:45 GMT
From: "David Newkirk" <dnewkirk@bellatlantic.net>
Subject: Help!: Taming HF preamp

Bill Meara <wmeara@erols.com> wrote in article
<33f95b77.1710144@news.erols.com>...

> I went ahead and built a little grounded gate FET pre amp circuit.
> The circuit comes out of W1FB's Design Notebook.

[deletions]

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End of Ham-Homebrew Digest V97 #497
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## 2170. Satellite Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-26 00:00:00 UTC
From: Paul <prg22@ix.netcom.com>
Message-ID: <3402F595.ACA@ix.netcom.com>
Source record: 91440
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

While I have been looking for satellite frequencies I noticed that some of the uplinks are below the 144-148 2 meter band, and some of the downlinks are also below the 2 meter and 440 band. While I can do the mars/cap modification to my radio to access those freqs, i have two questions... will the mars/cap mod void the warranty if I don't have a permit, and would I have to have a permit to transmit to the uplink of some of those satellites? I believe the frequencies are around 142 or 143 Mhz. By the way I have a Kenwood TH-79A.
Any help is greatly appreciated. Thank You.

post or e-mail any replies

Paul Garcia
KF6MVO

## 2171. Dan's Small Parts email address

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <drxTMBACO+A0Ewl9@lfheller.demon.co.uk>
Source record: 91441

Does Dan, with his Small Parts (I'd have kept quiet about that) have an
email address? Failing that, a phone number would help. I've been told
that he might have some components I am after.

73, Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

## 2172. Help with VLF wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: ptperkins@aol.com
Message-ID: <19970827181701.OAA03057@ladder02.news.aol.com>
Source record: 91442

I am looking at short range comms in water and would be interested in anyone's ideas, thoughts, circuits or advice in this area. My intention is to transmit encoded binary data. Speed is not an issue . I would be grateful for any ideas. Please e-mail me direct. thanks

# 2173. Re: Make money now!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: la8ak@online.no
Message-ID: <340487ad.584237@news.online.no>
Source record: 91443
Cross-posted to: rec.puzzles.crosswords,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On 26 Aug 1997 18:40:52 GMT, "PC" <pcsim@olmiss.edu> wrote:

> A little while back I was browsing these news groups, just like you are
>
>now and came across an article similar to this that said you could make
>
>thousands of dollars within weeks with only an initial investment of
>
>only $6.00! So I thought "Yeah, right, this must be a scam", but like
>
>most of us I was curious, so I kept reading. Anyway, it said that you
>
>send $1.00 to each of the six names and addresses in the article.
>
>
is this meant to be some sort of dx news?
home-brew is buying and selling in USA, but DX'ing....???

Jan-Martin N�ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 2174. Re: Satellite Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: nospam@nowhere.net
Message-ID: <3404320b.0@news.dol.net>
Source record: 91444

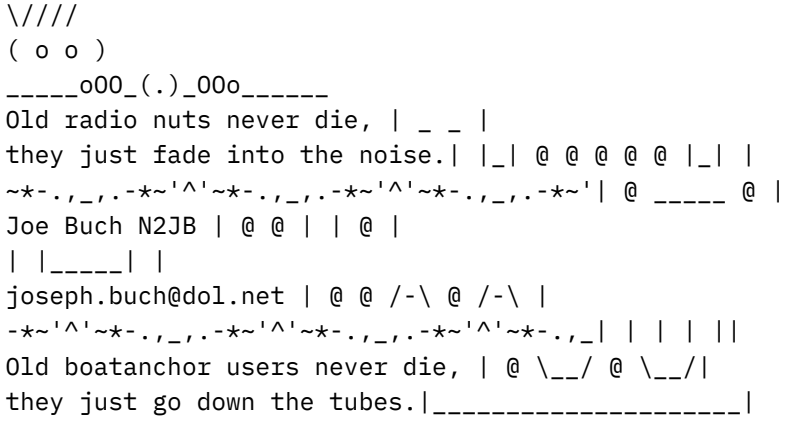
Paul <prg22@ix.netcom.com> wrote:

>While I have been looking for satellite frequencies I noticed that some
>of the uplinks are below the 144-148 2 meter band, and some of the
>downlinks are also below the 2 meter and 440 band. While I can do the
>mars/cap modification to my radio to access those freqs, i have two
>questions... will the mars/cap mod void the warranty if I don't have a
>permit,

With or without a permit, modifications will void most
manufacturer's warranties.

>and would I have to have a permit to transmit to the uplink of some of
>those satellites? I believe the frequencies are around 142 or
>143 Mhz. By the way I have a Kenwood TH-79A.

You may not transmit to any satellite outside the ham bands
unless you are specifically authorized to do so by the
satellite system operator. That authorization may include
the need for a proper government license.


\////
( o o )
_____oOO_(.)_OOo_____
Old radio nuts never die, | _ _ |
they just fade into the noise.| |_| @ @ @ @ @ |_| |
~*-.,_,.-*~'^'~*-.,_,.-*~'^'~*-.,_,.-*~'| @ _____ @ |
Joe Buch N2JB | @ @ | | @ |
| |_____| |
joseph.buch@dol.net | @ @ /-\ @ /-\ |
-*~'^'~*-.,_,.-*~'^'~*-.,_,.-*~'^'~*-.,_| | | | ||
Old boatanchor users never die, | @ __/ @ __/|
they just go down the tubes.|_____|

# 2175. Re: Dan's Small Parts email address

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5u216k$ndq$1@rosenews.rose.hp.com>
Source record: 91445

I don't have any relationship to Dan's Small Parts,
but I am a very satisfied customer.

He has lots of good deals on quantity buys and
has stuff I couldn't find anywhere else.

A real CANDY STORE!!!

Thanks, Dan's Small Parts!!!

Your pal Tony

# 2176. Re: qrp antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34049201.0@newshost.pcug.org.au>
Source record: 91446

toddvana12@aol.com (TODDVANA12) wrote:
>hello all
>i was wondering if anyone has plans for a good antenna for qrp backpacking

A small, rolled up dipole is probably as good as anything.

Peter

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____

# 2177. Re: HELP find ferrite cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <34044568.37F3@taxes.net>
Source record: 91447

Amidon et al. is our best source. In a pinch, the companies
that sell to CBers -- er, I mean, people who home-brew
HF amps -- frequently have these cores but at a higher price.
Try Communication Concepts, RF Parts, Copper Electronics.

Are you making a two-port output transformer with these?
Be advised that old TV sets and cheap TV baluns contain
a two-hole ferrite core that is perfect for this application
if you are lucky enough to find a large one.

This core is something I always scrounge out of every old TV that
is unfortunate to come my parts-cannibalizing way -- the little
ones are perfect for the input transformer.

The old Motorola RF Data book has an excellent discussion of the
technique of making these transformers.

N6OTQ

# 2178. Re: qrp antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34049301.0@newshost.pcug.org.au>
Source record: 91448

toddvana12@aol.com (TODDVANA12) wrote:
>hello all
>i was wondering if anyone has plans for a good antenna for qrp backpacking

And if you want to operate QRP while walking along, a magnetic loop is probably the best. A 1.5 m loop (which would permit 80m operation) would be a bit unweildy, but a 1m loop would be more manageable. However, you'd sacrifice efficiency on all bands, especially on 80. I wonder if anyone has tried mounting a mag loop to a backpack. You'd have to be careful you didn't burn your nose, ears or other extremities if they came into contact with the high voltage part of the loop.

Seriously though, I found a 6ft CB whip fine for 28 Mhz pedestrian mobile operation - more info on my home page.

73,

--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____________________________________________________

# 2179. HIGH VOLTAGE P.S HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: JAMES MOHNEY <jmohney@jacksonmi.com>
Message-ID: <34047561.809F4569@jacksonmi.com>
Source record: 91449

HELLO, I HAVE AN OLD HV POWER SUPPLY THAT I AM REBUILDING FOR A 4-1000 AMP. MY QUESTION IS THE OLD HIGH VOLTAGE DIODE BANK USED .005 CAPS. AS I LOOK AT DIFFERENT POWER SUPPLY PLANS I SEE ALOT OF THOSE USE .001 OR .01 WOULD IT BE OK TO USE A DIFFERENT VALUE THAN THE .005 IF SO WHAT IF ANY DIFFERERENCES WOULD I NOTICE?

THANK YOU

JIM, N8SGA

# 2180. Re: Color burst characteristics/QST on CDROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: eurppa@prrmenet.com
Message-ID: <eurppa-ya023580002708971628170001@news.primenet.com>
Source record: 91450

In article <3404440E.133D@taxes.net>, jstrohm@.texas.net wrote:

:There was an article in QST in the late '80s about making filters
:from crystals. Sorry I can't provide a better reference than
:this...it did give some tips on matching and measuring crystals.
:
:As much as I knock the League and QST, I have to admit that
:the body of information in QST covers just about everything
:in radio. Now if only the ARRL would put all the QST back issues
:on CD-ROM!!
:
:N6OTQ

I'd like to see the now defunct Ham Radio magazine on CD ROM. That magazine still is an indispensible resource of technical info. The local community college here threw out their whole collection!

Rob.

# 2181. FS: Antique Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: Kevin Harlan <sales@emodus.com>
Message-ID: <01bcb29f$aa400dc0$528a0118@cx75859-a.msnv1.occa.home.com>
Source record: 91451
Cross-posted to:
rec.antiques.radio+phono,rec.audio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

ANTIQUE TUBES, USED, pulled from old radios and equipment, UNTESTED.

qty manuf. tube type shape price each

1 EO 2A5 ST ( shoulder ) $7.50
1 Philco 2A6 ST ( shoulder ) $2.50
1 CBS 5Z3 ST ( shoulder ) $2.50
1 GE 6A7 ST ( shoulder ) $4.00
1 Philco 6A7 ST ( shoulder ) $4.00
1 Raytheon 6A7 ST ( shoulder ) $4.00
1 Tung-Sol 6A7 ST ( shoulder ) $4.00
1 Raytheon 6AB5/6N5 Tubular $5.00
1 Raytheon 6B7 ST ( shoulder ) $2.25
2 Nat. Union 6D6 ST ( shoulder ) $1.75
1 Raytheon 6D6 ST ( shoulder ) $1.75
1 Sylvania 6E5 Tubular $7.50
1 Silvertone 6F5G ST ( shoulder ) $7.50
1 Zenith 6K7G ST ( shoulder ) $2.00
1 Silvertone 6K8G ST ( shoulder ) $2.00
1 Tung-Sol 24 ST ( shoulder ) $2.00
1 GE 24-A ST ( shoulder ) $2.00
1 Ken-Rad 24-A ST ( shoulder ) $2.00
1 Nat. Union 24-A ST ( shoulder ) $2.00
1 Raytheon 24-A ST ( shoulder ) $2.00
2 RCA 24-A ST ( shoulder ) $2.00
1 Kadette 25B5 ST ( shoulder ) $4.00
1 Sylvania 25Z5 ST ( shoulder ) $1.75
1 Raytheon 25Z5 Tubular $1.50
1 Cunningham 26 ST ( shoulder ) $2.00
1 Raytheon 26 ST ( shoulder ) $2.00
1 Sylvania 26 ST ( shoulder ) $2.00
1 Cunningham 27 ST ( shoulder ) $1.50
5 Gibraltar 27 ST ( shoulder ) $1.50
1 Nat. Union 27 ST ( shoulder ) $1.50
3 Raytheon 27 ST ( shoulder ) $1.50
4 RCA 27 ST ( shoulder ) $1.50
1 Sylvania 27 ST ( shoulder ) $1.50
2 RCA 35 ST ( shoulder ) $2.00
1 Cunningham C35 Globe $5.00
1 RCA 36 ST ( shoulder ) $2.00
1 Raytheon 37 ST ( shoulder ) $2.00
1 RCA 37 ST ( shoulder ) $2.00
1 Cunningham 38 ST ( shoulder ) $1.75

1 GE 39/44 ST ( shoulder ) $1.00
2 Sylvania 39/44 ST ( shoulder ) $1.00
2 Philco 41 ST ( shoulder ) $2.50
3 RCA 41 ST ( shoulder ) $2.50
1 Cunningham 42 ST ( shoulder ) $4.00
2 Raytheon 42 ST ( shoulder ) $4.00
1 Raytheon 43 ST ( shoulder ) $2.00
1 RCA 43 ST ( shoulder ) $2.00
1 Delco 47 ST ( shoulder ) $4.00
1 Cunningham 57 ST ( shoulder ) $2.00
1 RCA 57 ST ( shoulder ) $2.00
1 Nat. Union 75 ST ( shoulder ) $2.50
1 Ken-Rad 75 ST ( shoulder ) $2.50
1 Cunningham 76 ST ( shoulder ) $3.00
1 Philco 76 ST ( shoulder ) $3.00
1 Tung-Sol 76 ST ( shoulder ) $3.00
1 RCA 77 ST ( shoulder ) $1.50
1 Ratheon 80 ST ( shoulder ) $4.00
1 Nat. Union 85 ST ( shoulder ) $1.50
1 Raytheon 85 ST ( shoulder ) $1.50
1 Triad T-224 Globe $15.00
1 EO 247 Globe $15.00
1 Silvertone 251 Globe $10.00
1 Sllvania SX-280 Globe $15.00
2 Cunningham C327 Globe $5.00
1 Cunningham 380 Globe $15.00

Shipping in USA: 1 - 6 tubes $4.00, 7 or more shipping free.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,or cash by
registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST EQUIPMENT,
please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

# 2182. FS: New Tubes, NOS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: Kevin Harlan <sales@emodus.com>
Message-ID: <01bcb29f$f7055fc0$528a0118@cx75859-a.msnv1.occa.home.com>
Source record: 91452
Cross-posted to: rec.antiques.radio+phono,rec.audio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.equipment

NEW TUBES: New Old Stock (NOS)

1AD4 $2.20
1T4/DF91 $1.60
5R4WGB $4.00
5U4G USA $17.50
5U4G Russian $6.50
5V4G RCA $9.00
6AG7 RCA $4.00
6AS8 $2.50
6AZ8 Phillips $4.50
6BX7GT RCA (black plate)$7.10
6C8G $3.00
6CB6A $2.00
6EW6 $2.50
6F6 $5.00
6H6 RCA $1.25
6J6WB $1.50
6K8 $3.25
6L6WGB Phillips $19.00
6L6GC Russian $6.50
6X9/ECF200 $3.25
12AT7 Sylvania $5.00
12AX7 Westinghouse $9.00
12BA6 GE $2.75
39/44 RCA $2.50
84/6Z4 RCA $4.00
572B/T160L Centron $94.00
572B Chinese $65.00
809 $20.00
1626 Sylvania $3.00
JAN 5687 Tung-Sol $5.00
JAN 5751 GE $5.00
5751WB GE (black plate) $8.50
5829WA $5.00
5844 $2.50
5933(807W) Sylvania $11.00
6082A RCA (black plate) $10.50
JAN 6072 (black plate) $9.50
6146 GE $19.00
6146 Chinese $13.00
JAN 6922 Sylvania $5.00
7062/180CC Amperex $5.00

EL84/6BQ5 Sovtek $4.25

3-500Z Eimac $160.00
3-500Z Penta $105.00
3-500C Chinese $120.00

Shipping in USA, 1 to 6 tubes $4.00, 7 or more tubes free.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
TEST EQUIPMENT, RECONDITIONED, CALIBRATED, 120 DAY WARRANTY,
FREE SHIPPING IN USA.

Hewlett Packard 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz, $675 ea

Tektronix 455 , 50 MHz Dual trace oscilloscope, $395
Tektronix 465, 100 MHz dual trace oscilloscope, $550
TEKTRONIX 465M 100MHz Oscilloscopes, reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
Tektronix 475A, 250 MHz dual trace oscilloscope, $750
HP8405A, Vector Voltmeter, $325
Power Design 6050,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $225
Power Design 6050A,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $200

**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,or cash by
registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST EQUIPMENT,
please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

# 2183. Re: Spice3 model for FT-243 crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: eurppa@prrmenet.com
Message-ID: <eurppa-ya023580002708971624440001@news.primenet.com>
Source record: 91453

In article <340468b0.87721977@news.usit.net>, geiger@usit.net wrote:

:I need a suitable Spice3 model for a 7.040 Mhz FT-243 crystal. I have a QRP
:transmitter that I am modeling in Spice. It uses a 2N3819 JFET and a FT-243
:in the oscillator.
:
:TIA for any help.
:
:
:
:Ed Geiger - KD4AB - Dayton, TN - geiger@usit.net

You'll need to measure the motional capacitance Cm of the crystal and the equivalent series resistance Rs of the crystal. Then the motional inductance Lm can be calculated from the resonant freq and Cm.

Rs is most easily measured in a standard 12.5ohm test fixture as described in the book "Crystal Filters: Design, Manufacture, and Application" by Robert Kinsman. Its a recent book available in many technical bookstores.

The paralled capacitance Cp can in many cases just be assumed as 5pf, but you could measure it in a capacitance meter.

Cm can be measured most easily by measuring the series resonant freq of the crystal with or without an external series cap, and then using a formula in Kinsman to calculate Cm.

The method shown in a number of QST articals using the 3db down freqs of the crystal in series resonance for calculating parameters is much more difficult than the above methods since the skirts of even a single high quality crystal make measuring those 3db points extremely sensitive to signal generator drift and accuracy. Of course, if you have a $5000 HP signal generator on your bench, then by all means, do it any way you want :)

Rob.

# 2184. Re: Color burst characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <5u2ki9$8td@nntp02.primenet.com>
Source record: 91454

Jim <jstrohm@taxes.net> wrote:
>There was an article in QST in the late '80s about making filters
>from crystals. Sorry I can't provide a better reference than
>this...it did give some tips on matching and measuring crystals.

QST ran three articles on making crystal filters:

A Unified Approach to the Design of Crystal Ladder Filters
Wes Hayward, W7ZOI
May 1982, p 21

Designing and Building Simple Crystal Filters
Wes Hayward, W7ZOI
July 1987, p 24

A Tester for Crystal F, Q and R
Doug DeMaw, W1FB
January 1990, p 21

The first article outlined the theory and design. The second was another design. The last article was an implementation by DeMaw for an instrument described by Hayward to allow you to analyze the crystals you want to use in IF ladder filters.

All three articles are in the Appendix of:

W1FB's Design Notebook
Doug DeMaw, W1FB
(available from ARRL for $10)

# 2185. Re: HELP find ferrite cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <3404D738.1F2EB053@imaxx.net>
Source record: 91455

David Hinkle wrote:

> I am trying to build a small RF amp and need 6 ferrite cores about 1/2
>
> inch o.d. and 1/2 inch long.
>
> Anybody know where I can find these items?
>
> If so, please reply to email:
>
> hink@scioto.net
>
> thanks...

Try Amidon at;

http://bytemark.com/amidon/contents.htm

--
---
Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net
---

# 2186. Re: parabolic microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-27 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <34051E04.1872@flash.net>
Source record: 91456

Merle and Duncan Burbridge wrote:
>
> I am interested in making a parabolic microphone for birding. Does
> anyone have simple plans they could draw for me to build such a
> device? Thanks for any help.

Try Edmund Scientific for the dish, I used a 741 op amp and a 386N amplifier on a bread board. Worked VERY well. I used a plastic dish with one 1/4 " dia piece of all thread slightly offset from the center. The mic was offset from the all thread the same distance. This let me 'tune' the mic into the right position. I did it using a fixed audio source and slowly raised the mic for peak audio (I used a scope) but I beieve that +/- 1/2" is negligible difference.

good luck, Tim ka8ddz

# 2187. Re: Color burst characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: Jim Tury <tury@erols.com>
Message-ID: <3405808D.94F139DA@erols.com>
Source record: 91363

In case you guys missed it, see p 22-23 in the September, 1997, QST. Back issues of QST are available from 1970 on in CD-ROM format. This would free up about 7 feet of shelf space in my shack.

KA4CKI

Jim wrote:

> There was an article in QST in the late '80s about making filters
> from crystals. Sorry I can't provide a better reference than
> this...it did give some tips on matching and measuring crystals.
>
> As much as I knock the League and QST, I have to admit that
> the body of information in QST covers just about everything
> in radio. Now if only the ARRL would put all the QST back issues
> on CD-ROM!!
>
> N6OTQ

# 2188. Re: Winding coils myself?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: a313@Lehigh.EDU
Message-ID: <5u4be7$2n4a@ns2-1.CC.Lehigh.EDU>
Source record: 91364

In article <5u4a56$1nu@miso.wwa.com>, voicebox@dnai.com (DaveC) writes:
>I've finally determined that I need a coil of 40-50mH (yes, millihenries).
>I need to be able to adjust it (unwind some turns) as the other values in
>this circuit are a little vague (pizoelectric transducers used at
>other-than-specified frequencies result in other-than-specified
>capacitances).
>
>Standard available coils are not available in such large values, or they
>are available only in fixed values (not adjustable). And the commercial
>ones are usually potted in epoxy or some other permanent substance, making
>it extremely difficult to "adjust" them.
>
>So, what's the best plan? Iron core with standard magnet wire?
>
>It needs to be able to handle at least 1 amp (maybe 1.5 amps, surge) at
>100VAC max, at 40KHz max (no DC will flow through this coil).
>
>I'm resigned to winding my own coils, I just need some help finding an
>appropriate core (a part number would help, or a material and dimensions)
>and number of turns for a given mH value, size of wire, and of course,
>number of turns.
>
>Any help would be greatly appreciated. Direct e-mail replies doubly so.
>
>Thanks.
>
>Enjoy,
>Dave
>--
>Dave Carpenter
>Sound Logic
>
>
If you're in the mood to roll your own .....You may wish to check into an old edition of the ARRL Handbook. Most of the older editions which can be found in many Public Libraries contain a chapter on inductance. The formulae for computing the coil diameter and length for various core/wire materials are there for you to complete your design. Nice to see some one still doing some homebrew.

73's Dick K8WHA

# 2189. Ap Note: Design of Precision Wideband Active Audio 90 Degree Phase Splitting Networks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <3405C6EB.7B5C@webblabs.com>
Source record: 91365
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,alt.ham-radio,alt.ham-radio.am,alt.ham-radio.amtor,alt.ham-radio.atv,alt.ham-radio.digital-voice,alt.ham-radio.eme,alt.ham-radio.exotic-modes,alt.ham-radio.fax,alt.ham-radio.fm,alt.ham-radio.hf,alt.ham-radio.marketplace

A new application note detailing the design of precision wideband audio
90 degree phase splitting networks can be found at:

http://www.webblabs.com/afdplus.htm

The note discusses in detail the operation of the professional AFDPLUS
active filter design environment in the synthesis of user-specified
quadrature generation electronics. A printed copy of the four-page ap
note is available by mail upon request.

Kathy Goerg

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI 53005

TEL 414.367.6825 FAX 414.367.6824
kgoerg@webblabs.com

# 2190. Re: Spice3 model for FT-243 crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: nielsen@primenet.com
Message-ID: <slrn60bbh4.1bn.nielsen@nielsen.tus.primenet.com>
Source record: 91366

In article <340468b0.87721977@news.usit.net>, Ed Geiger wrote:
>
>I need a suitable Spice3 model for a 7.040 Mhz FT-243 crystal. I have a QRP
>transmitter that I am modeling in Spice. It uses a 2N3819 JFET and a FT-243
>in the oscillator.

I don't about the present capabilities of Spice, but I tried to analyze a
crystal oscillator circuit about 25 years ago and needed to write a
Fortran program using extended double precision in order to have enough
precision to handle the Q of the equivalent circuit.

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
http://www.primenet.com/~nielsen

## 2191. Air Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: Harry Hurst <hhurst@delaware.infi.net>
Message-ID: <01bcb3f2$64d269a0$3a4b9ace@wil-tech1>
Source record: 91367

Is there any information available * ANYWHERE* on constructing air variable capacitors?

Is there anyone out there who has built capacitors?

Are there any kits?

TIA

de WA3PTG

# 2192. WTB: Junker HF kit for Motorola Brick

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <01bcb3e4$14bd58c0$edcdaec7@node2>
Source record: 91368
Cross-posted to: alt.2600,alt.cellular,alt.cellular.motorola,alt.cellular.oki.900,alt.cellular.tech,alt.cellular-phone-tech,rec.radio.amateur.homebrew,sci.electronics.components

I am looking for a handsfree adaptor to rob parts from in
a project using Motorola Ultra Classics. Non-working
is best, working but cheap would be second best.

reply via e-mail please,

Thanks,
--
David Little KD4NUE
dalite01@sprynet.com
Brunswick, Georgia 31523 USA

If CON is the opposite of PRO then it
stands to reason that CONGRESS is
the Opposite of PROGRESS - Go Figure

# 2193. Re: RAMSEY SR-1 SW kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5u4nu1$qj4$1@rosenews.rose.hp.com>
Source record: 91369

The Ronney's (pronney@sprynet.com) wrote:
: Hi Tony

: Tony Zugec wrote in article <5tkct1$1a0$1@rosenews.rose.hp.com>...>I have
: drift. AM comes in fine, and
: >being 10 Kc wide, one would not know
: >the difference, but when CW or RTTY
: >etc. mixes with another carrier and can
: >be heard, these signals waver around like
: >crazy indicating the local osc may be
: >moving around.
: >
: >In the presence of strong AM carriers,
: >the osc will pull and any carriers beating
: >with the AM signal give an annoying waver.
: >

: I don't have one of these kits so I can't speak about it, but...
: If two signals are beating against each other causing an audible tone, that
: tone won't change in frequency if your receiver drifts.
: The beat frequency between the two signals is strictly the difference
: between the two signals. If, on the other hand, you are talking about
: the amplitude of the beat frequency, that is possible. Here's how. If the
: pair of signals is moving far enough relative to the IF filter, then one or
: both
: would be attenuated, causing the beat signal to attenuate, too.
: Alternatively, you are merely experiencing the naturally occurring change in
: signal strength that occurs on the SW bands.

: Hope this is helpful

: Martin, WB6YMI

Thanks, Martin.

No, my oscillator or the mixer is changing frequency. The
wavering is not a change in signal strength, its change
in frequency. Also, if the mixer/osc are changing in frequency,
the beat note will change in freq too as in all superhets.

I think I am experiencing osc pull by the NE602 mixer.
Havent pulled it out and put in another or replaced the
varactor yet. I'll post if they make any change. I did
hear some cw on the 40 metre wavelength, it was all over
the place. This thing should be pretty stable, so I
am pretty sure the MV209 or NE602 is having a problem.

See ya!

## 2194. 2-Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: Joe <jos@falcon.cc.ukans.edu>
Message-ID: <3406127E.756E@falcon.cc.ukans.edu>
Source record: 91370

I am trying to find information on how to build a 2-meter transceiver
and/or a 2 meter amp. I would like to make to transceiver so that I can
join in on packet in my area so crystal controled would be fine. If you
know where I might find that information, please tell me.
Thanks a lot!
Joe Slaugh
jos@falcon.cc.ukans.edu

# 2195. Re: parabolic microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <34061B11.D5C703AA@sj.bigger.net>
Source record: 91371

Hi,
Say, here's a BETTER idea....build a low cost, low power FM
Microphone, hang it by (on) a tree limb, bird feeder,
hummingbird feeder etc....then TAPE the results on a
cassette deck connected to an FM tuner (reciever).
friend,
Lute

Joe Buch wrote:

> burbridg@pe.net (Merle and Duncan Burbridge) wrote:
>
> >I am interested in making a parabolic microphone for
> birding. Does
> >anyone have simple plans they could draw for me to build
> such a
> >device? Thanks for any help.
>
> I made one years ago using one of those snow disks the
> kids
> use for sliding down hills. Close to parabolic shape.
>
> On a bright day point it at the sun. You will find a
> region
> in front of the dish where the energy focuses. Mount your
>
> microphone here facing the dish. Use a michrophone with
> an
> inherent cardiod pattern..
>
> When finding the focus use caution. If the dish is
> painted
> white or a similar highly reflective color, temperatures
> at
> the focus can reach hazardous levels. Probe the area with
> a
> stick but be prepared if the stick bursts into flame.
>
> \////
> ( o o )
>
> _____oOO_(.)_OOo_____
> Old radio nuts never die, | _
> _ |
> they just fade into the noise.| |_| @ @ @ @ @

> |_| |
> ~*-.,_,.-*~'^'~*-.,_,.-*~'^'~*-.,_,.-*~'| @ _____
> @ |
> Joe Buch N2JB | @ @ | |
> @ |
> |
> |_____| |
> joseph.buch@dol.net | @ @ /-\ @
> /-\ |
> -*~'^'~*-.,_,.-*~'^'~*-.,_,.-*~'^'~*-.,_| | |
> | ||
> Old boatanchor users never die, | @ __/ @
> __/|
> they just go down the
> tubes.|_____|

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

# 2196. Re: Spice3 model for FT-243 crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: eurppa@prrmenet.com
Message-ID: <eurppa-ya023580002808971626260001@news.primenet.com>
Source record: 91372

In article <slrn60bbh4.1bn.nielsen@nielsen.tus.primenet.com>,
nielsen@primenet.com wrote:

:In article <340468b0.87721977@news.usit.net>, Ed Geiger wrote:
:>
:>I need a suitable Spice3 model for a 7.040 Mhz FT-243 crystal. I have a QRP
:>transmitter that I am modeling in Spice. It uses a 2N3819 JFET and a FT-243
:>in the oscillator.
:
:I don't about the present capabilities of Spice, but I tried to analyze a
:crystal oscillator circuit about 25 years ago and needed to write a
:Fortran program using extended double precision in order to have enough
:precision to handle the Q of the equivalent circuit.
:
:

That was back in the days of 4, 8, ?? bit computers. Regular "float"
precision means a quite different thing nowadays. :) :)

I have a C++ program for analyzing ladder crystal filters. The complex
class math routines take 100 ms for 100 data points for each 4 pole
section, and the graphs turn out very nice with regular floating point
variables.

But then this is PowerPC cpu at 132mhz. With a fast Pentium, times and
precision should be comparable.

With oscillators and other non-linear stuff, convergence would be the
problem, but I'm no expert on that. There are entire books devoted to the
subject.

Rob.

ps. I've used Microsim for crystal filters and it does a decent job.
However, I'm told old versions were a problem with crystal modeling

# 2197. Re: Air Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5u51j9$ssn$1@rosenews.rose.hp.com>
Source record: 91373

Harry Hurst (hhurst@delaware.infi.net) wrote:
: Is there any information available * ANYWHERE* on constructing air variable
: capacitors?

Haven't heard of anyone attempting this, other than for
broadcast type crystal radios where 2 or more large plates
forming the condenser slide past each other to change
capacity.

Surely an imaginative mind could come up with an air
variable but would have to have a small machine shop.

If you are thinking about constructing what I think
you are (construction similar to standard 356pF)
and are successful, please..by all means, let
us know how you did it, as I am looking at someday
purchasing a small miniature lathe and other tools
to work with metal.

I don't think most of us Joe Blow from Kokomo
types working out of our garages have the capability
though to construct something like the standard
various air-variables.

You MIGHT be able to work in wood with brass
bushings and aluminum plates etc...but even
that would seem like quite a project.

I think I'll stick to just scrounging. :-)

## 2198. Low-power, small size, fm broadcaster.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: Mike <apollyon@pacbell.net>
Message-ID: <34060DA9.1AF577DC@pacbell.net>
Source record: 91374

I'm trying to build a small (approx. 1" x 2" x .5"), low voltage (~1.5 -
3 v),
short range (~10') stereo fm broadcaster.

I think this is the place to ask...

Can this be done?
If it's already done, where can I get it?

I've already built a mono version which works off a 1.5 volt watch
battery, but I hear
its a lot more difficult to get a stereo encoder in there.

Any help is welcome.
If I'm in the wrong group just let me know and I'll go elsewhere.

Thanks,
Mike
apollyon@pacbell.net

## 2199. Re: qrp rigs built into altoids tins?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: Dick Pascoe G0BPS <Dick@kanga.no-spam.demon.co.uk>
Message-ID: <jilheLAsfTB0Ew3I@kanga.demon.co.uk>
Source record: 91375

In article <33F3A588.9D745F8B@mc.net>, jack <cmb@mc.net> writes
>any one have any schematics for qrp transmitters,receivers or
>transceivers built into altoids candy tins (the small ones).thanks 73
>jack n9iif
>
>
Anything that will fit has been used.
Shoehorn it in.

TTFN de ..

** Remove 'no-spam' in header to reply **

Dick Pascoe G0BPS Kanga Products
Seaview House. Crete Road East.
Folkestone Kent. CT18 7EG.
Tel/Fax 01303 891106
http://www.kanga.demon.co.uk

## 2200. GaSFets where to get them??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: ag381@FreeNet.Carleton.CA
Message-ID: <5u2gse$e9@freenet-news.carleton.ca>
Source record: 91457

where in Ottawa or if need be Toronto can I get some GasFets for a low noise antenna pre (144Mhz)
Thanks for advice.

# 2201. WTB Manual, Weinschel 432A - 434A RF Gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: daveb@buffnet.net
Message-ID: <5u2l20$q48$1@buffnet2.buffnet.net>
Source record: 91458

Hello,

Need manuals for Weinschel 432A, 433A & 434A RF plug ins. Gladly pay
copying costs. Would be happy to just get copy of schematics

Thanks

daveb@buffnet.net

# 2202. Need manual for Oak Hills Spirit 1 Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: ki3b@aol.com
Message-ID: <19970828013201.VAA26713@ladder01.news.aol.com>
Source record: 91459

Hi,

I need a copy or will make a copy of the Oak Hills Spirit transceiver kit.
I have the 30 meter version. I also am in need of the keyer assembly
instructions. Would pay reasonable copying and shipping costs.

Please e-mail me at ki3b@aol.com.

Thanks,

Joe KI3B

# 2203. FM Radio Transmitters for sale / *** RSL *** http://www.broadcast-warehouse.com/

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: info@broadcast-warehouse.com
Message-ID: <872763778.3287.19.nnrp-03.c2def3ab@news.demon.co.uk>
Source record: 91460

FM Radio Transmitters for sale / *** RSL ***
http://www.broadcast-warehouse.com/

# 2204. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <340572AD.1D85@crpl.cedar-rapids.lib.ia.us>
Source record: 91461
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Gary Coffman wrote:

> Any reasonable HF receiver is limited by atmospheric noise, not
> internal noise,

Not always true.

CCIR studies in the 1950's found situations at certain times of the year (e.g. winter) and in certain locations (e.g. at sea), and at certain frequencies (e.g. in the 5 to 6 MHz region) where the noie level was quite low.

I have also noticed it with rotary beams at 20, 15 and 10 meters in certain directions (e.g. due north) in certain daylight hours in the winter time. I think a lot of HF DXers in quiet rural locations would agree. The situation is characterized by low noise and very weak signals coming over the polar (north or sometimes even south) regions.

In these situations, some receivers with noise figures of 12 dB or more could benefit from the gain and increased sensitivity of a preselector/preamp and possibly even antenna tuning. Receiver overload in this unusual environment is not usually a big problem.

Bill W0IYH

## 2205. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: vk7cs@vision.NET.AU
Message-ID: <199708290019.KAA17340@saturn.vision.net.au>
Source record: 91376

```
subscribe
```

## 2206. heathkit sb 200 with kenwood ts850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Rodney Herwerth <kc5tax@laplaza.com>
Message-ID: <01bcb443$18cfa080$cd4897cc@default>
Source record: 91377

i just retained a amp from my brother who has un fortunatley left the ammetuer world. im wondering how to interface an old amp with a new radio? seems to me i need a relay of sorts because of power dirrerence. any thoughts would be helpful . please send any info to kc5tax@laplaza.com

# 2207. Re: heathkit sb 200 with kenwood ts850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <34067a55.2225971@news.sprynet.com>
Source record: 91378

On 29 Aug 1997 06:22:11 GMT, "Rodney Herwerth" <kc5tax@laplaza.com>
wrote:

>i just retained a amp from my brother who has un fortunatley left the
>ammetuer world. im wondering how to interface an old amp with a new radio?
>seems to me i need a relay of sorts because of power dirrerence. any
>thoughts would be helpful . please send any info to kc5tax@laplaza.com
>
Did it come with the manual. Heathkit is usually quite good with
manuals?
larry ve3fxq

# 2208. Re: Air Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Michael Tracy <mtracy@arrl.org>
Message-ID: <3406F1EC.1989@arrl.org>
Source record: 91379

Harry,
Although I've never seen any info on homebrewing air variables,
there are kits available - Ten-Tec has them.

Also, there was an article you might be interested in called "Build Your Own Variable Capacitors". It involved using copper cylindars and teflon sheet, rather than an air-dielectric. This article appeared in November 1975 QST.

Incidently, you might also be interested in an excellent, modern tube regen design by David Newkik that appeared in the September 1992 issue of QST.

73, Michael Tracy, KC1SX, ARRL Lab Engineer

Harry Hurst wrote:
>
> Is there any information available * ANYWHERE* on constructing air
> variable capacitors?
>
> Is there anyone out there who has built capacitors?
>
> Are there any kits?
>
> TIA
>
> de WA3PTG

# 2209. Re: Color burst characteristics/QST on CDROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <34067A24.1571@taxes.net>
Source record: 91380

eurppa@prrmenet.com wrote:

> I'd like to see the now defunct Ham Radio magazine on CD ROM. That
> magazine still is an indispensible resource of technical info.

As the people from AoL say,

"ME TO!!!!!"

It might be possible to obtain the reprint rights for HR, but
it would be difficult and probably not cost-effective. However,
the League has deep enough pockets and controls enough rights
to be able to sell to a microfilm compamy -- could they do
a QST CD? Even though I'm aware of the problems with publishing
rights, I think the ARRL could put QST on CD. And I think
they could make money on it, too.

For the right money, I'd do the data conversion for them.

Seriously, what would you pay for QST on CD-ROM, with searchable text
and vector-based schematics and PC board layouts? It would have to
be a multi-CD set with the earliest issues done first, and
perhaps a 2 or 3 year delay between magazine publication and
CD publication, depending on how many issues could fit on a CD.

Since the complete QST on microform costs a couple hundred dollars,
I expect the price of the CDs would be higher -- probably $25 a
CD, and this would probably work out to $4 or $5 per year for the
recent years. Would you pay that much?

Answer here -- or if you think that this idea REALLY has enough
merit to convince the Main St. boys, email me at jstrohm@texas.net

ARRL -- Your Clue For The Day: You want this project done, and done
right? I'm your man.

N6OTQ

# 2210. Re: HIGH VOLTAGE P.S HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <34067BFB.4A61@taxes.net>
Source record: 91381

First, stop shouting.

Second, the value of the capacitors is not critical, and
anything from 0.001 uF to 0.01 uF works OK, in my experience.

Third, the diode string method is outmoded, ineffective,
and prone to failure. It's something we developed to
replace mercury-vapor rectifier tubes. You'll be a LOT
happier, and save a lot of time and money, if you use
real high-voltage diodes. You can scrounge these out of
microwave ovens, or you can order them from "Silicon Alley,"
the guy who advertises in QST. No, I don't work for him.
I'm just one of MANY satisfied customers.

N6OTQ

P.S. You need to look at the cost of Silicon Alley's parts vs.
the cost of building diode strings. Real HV rectifiers are
cheaper if you're buying new parts -- maybe even cheaper if
you're only replacing a few parts in an assembled string!
And don't use the "1A 1000V" generic diodes or 1N4007. They
blow up at about 100 mA. Use the (I believe) 1N5407, the fat 2.5A
diode. Those will last longer, maybe a month or so.

# 2211. Re: Air Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34069c70.0@newshost.pcug.org.au>
Source record: 91382

"Harry Hurst" <hhurst@delaware.infi.net> wrote:
>Is there any information available * ANYWHERE* on constructing air variable
>capacitors?

Have a look at several of the home pages to do with magnetic loop
antennas. Sometimes there is information on building air variables
(admittedly a bit big) on those.

At least one of the pages I'm thinking about can be found via the links
section of Novice Notes Online - URL below.

Cheers,

Peter VK1PK

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 2212. Want USED TEK Scope -485, 475A, etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <3406DEB2.6E1D@lafn.org>
Source record: 91383

Looks like the winners (scopes that work for you folks) are
TEK 485, 475, 465B, 7904, HP180 for tight budgets.

I now want to buy a used working TEK 485 or 475A or 7904 with
specific plug-ins.

I now really need suggestions where to post my needs,
what sources to monitor, vendors to call, etc.
I need name of an honest capable CAL LAB that works on these
old scopes that you folks have had good luck.

I will be checking out ATT, GE, Electro-Rent to see what they offer
from pool of equipment they have maintained, calibrated,
and now are reselling out of their inventory.

Thanks for any pointers and tips.

73, W6MIK

--

_____
Dave Shalita,
af389@lafn.org
Van Nuys, CA

# 2213. Re: Spice3 model for FT-243 crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: eurppa@prrmenet.com
Message-ID: <eurppa-ya023580002908971020430001@news.primenet.com>
Source record: 91384

In article <3406cdda.43882679@news.usit.net>, geiger@usit.net wrote:

:On Fri, 29 Aug 1997 01:08:40 +0100, Leon Heller <leon@lfheller.demon.co.uk>
:wrote:
:>
:>Someone gave a me a Spice model for xtal ladder filters, which I could
:>dig out if anyone is interested.
:
:If it is not too much trouble to find, I would appreciate a copy via
E-Mail. It
:would certainly give me some clues. Dr. Fred Terman's discussion
:of what a crystal looks like from an electronic standpoint is informative
:but somewhat dated.
:
:
:
:Ed Geiger - KD4AB - Dayton, TN - geiger@usit.net

I wish I could send you a copy of some of my stuff via email, but I use a Power Mac for internet, and emulate Windows for running PSpice. That gives me 486 Windows performance, but I don't have any Windows internet software. Using Windows is miserable enough without adding more applications :) :)

Sorry, Rob.

ps. If you are really into this, you could send me an IBM formatted diskette and a SASE (padded) envelope, and I could copy my libraries onto it. Now this is Microsim, so there are crystal symbols, and the symbols have data fields for entering in the Cm, Q, and fc, so its all quite sophisticated and easy to use for making any circuit without alot of calculations beforehand.

If you have any questions about Microsim, you can go to their website and request a free demo CD, which contains everything including schematic capture, autorouter, mixed signal simulation, etc. And amazingly if you don't exceed 70 devices or one page in schematic you effectively get a $10,000 software package for small circuits.

# 2214. Crystal filter info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3407058a.23534923@news.erols.com>
Source record: 91385

Leon (G1HSM), Tom Bruhns and I have been discussing the construction of crystal IF filters. Today I breadboarded a little oscillator so I could do some very rough checks on a batch of 50 3.579 Mhz color burst crystals (in HC-33 holders) bought (at a very reasonable price!) from Dan's small parts. I just fired up the oscillator and tuned my Drake 2-B to zero beat at 3.579 Mhz. Then I started plugging in the crystals while listening for any tone. (I know this would be easier and more accurate with a counter, but I don't have one.) I found that of the batch of 50 rocks only 6 were noticeably off frequency.

I also have four 3.579 computer clock crystals (in HC-18 holders) from Mouser. They seemed to all be pretty close in frequency, but I'm inclined to use the color burst rocks for the filter. Are there any advantages to using the computer clock crystals in this application? Anyone have any experience with this?

73 Bill N2CQR

# 2215. Re: Color burst characteristics/QST on CDROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <ZCtuHFA3KxB0EwyR@lfheller.demon.co.uk>
Source record: 91386

In article <34067A24.1571@taxes.net>, Jim <jstrohm@taxes.net> writes
>eurppa@prrmenet.com wrote:
>
>> I'd like to see the now defunct Ham Radio magazine on CD ROM. That
>> magazine still is an indispensible resource of technical info.
>
>As the people from AoL say,
>
> "ME TO!!!!!"
>
>It might be possible to obtain the reprint rights for HR, but
>it would be difficult and probably not cost-effective. However,
>the League has deep enough pockets and controls enough rights
>to be able to sell to a microfilm compamy -- could they do
>a QST CD? Even though I'm aware of the problems with publishing
>rights, I think the ARRL could put QST on CD. And I think
>they could make money on it, too.

As I recall, University Microfilms (I think they are part of Xerox
Corp.) used to supply HR on microfilm. Perhaps it is still available
from them. I junked all my copies in one of my many moves. 8-(

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

## 2216. Wanted KPC3 or 4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Jim Dolson <jdolson@cyberbeach.net>
Message-ID: <3407418E.3982@cyberbeach.net>
Source record: 91387

want to buy used kpc3 or 4. reasonable price

jim

# 2217. Re: Low-power, small size, fm broadcaster.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: mfraser@obelix.helix.net
Message-ID: <5u7bpq$5t7@van1s03.cyberion.com>
Source record: 91388

I just took delivery of an Emerson unit from Heartland America 800 229
2901, 20.00 each, item number 2580, runs on 2 penlite cells.

Haven't opened it up yet, haven't tried it yet, don't know if
it's aa or aaa cells, but it's 20mA at 3volts, so you can figger.
Tunable, it looks like, the package says "any clear station".

Yeah, I could have built one, but I've got a thousand things to
build and fix, so little time.... / mark

Mike (apollyon@pacbell.net) wrote:
: I'm trying to build a small (approx. 1" x 2" x .5"), low voltage (~1.5 -
: 3 v),
: short range (~10') stereo fm broadcaster.

: I think this is the place to ask...

: Can this be done?
: If it's already done, where can I get it?

: I've already built a mono version which works off a 1.5 volt watch
: battery, but I hear
: its a lot more difficult to get a stereo encoder in there.

: Any help is welcome.
: If I'm in the wrong group just let me know and I'll go elsewhere.

: Thanks,
: Mike
: apollyon@pacbell.net

# 2218. Re: Air Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Harry Hurst <hhurst@delaware.infi.net>
Message-ID: <01bcb4b0$ba1df320$324b9ace@wil-tech1>
Source record: 91389

Michael Tracy <mtracy@arrl.org> wrote in article
<3406F1EC.1989@arrl.org>...
> Harry,
> Although I've never seen any info on homebrewing air variables,
> there are kits available - Ten-Tec has them.
>
> Also, there was an article you might be interested in called "Build Your
> Own Variable Capacitors". It involved using copper cylindars and teflon
> sheet, rather than an air-dielectric. This article appeared in November
> 1975 QST.
>
> Incidently, you might also be interested in an excellent, modern tube
> regen design by David Newkik that appeared in the September 1992 issue
> of QST.
>
> 73, Michael Tracy, KC1SX, ARRL Lab Engineer
>
>

I'm going to follow up on your suggestions. Thanks much.

It seems to me that homebrew air caps might make an interesting project for my reentry into ham radio, although i don't have any metalworking skills.

Capacitor parts could be offered with different ceramic end pieces and plates, different length shaft lengths, and spacers. You could offer complete kits, or component parts a-la-cart to build a particular part.

Now... I happen to know where there is an old mica mine a few miles from here. I wonder if I could build some mica capacitors?....

# 2219. Re: heathkit sb 200 with kenwood ts850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Mike - WB0IKT <crucis@sky.net>
Message-ID: <34072D41.B7EC9D49@sky.net>
Source record: 91390

I had a SB-200 once---used it with a Kenwood TS-520. As I remember, The SB-200 needed an external relay to act like a PTT switch. Two pins on the octal plug on the back of the SB-200 connected to the accessory jack of the 520, along with ALC. You must be careful not to overdrive the SB-200. The input level was limited to no more than 100 Watts DC. At 100 Watts input, I used to get 600 Watts output on 80M-15M and 450-500 on 10M. I think the connection to the 850 is very similar to the 520.

WB0IKT

larry wrote:
>
> On 29 Aug 1997 06:22:11 GMT, "Rodney Herwerth" <kc5tax@laplaza.com>
> wrote:
>
> >i just retained a amp from my brother who has un fortunatley left the
> >ammetuer world. im wondering how to interface an old amp with a new
> radio?
> >seems to me i need a relay of sorts because of power dirrerence. any
> >thoughts would be helpful . please send any info to
> kc5tax@laplaza.com
> >
> Did it come with the manual. Heathkit is usually quite good with
> manuals?
> larry ve3fxq

--
==========
Mike Watson, WB0IKT QCWA Mbr# 28651, Mid-Continent Chapter
#35
Raymore, Missouri, USA Grid: EM28st
http://www.sky.net/~crucis E-mail: crucis@sky.net or WB0IKT@juno.com
==========

## 2220. Panoramic adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: David Wall <xew19@dial.pipex.com>
Message-ID: <01bcb4c8$de34ea80$6afd82c1@default>
Source record: 91391

In the '60s, Heathkit produced a Panoramic Adapter kit, is there a modern equivalent? I read somewhere about a circuit to use an oscilloscope as a poor mans spectrum display, can anyone point me towards further details?
My thanks,
David.

# 2221. Re: Air Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34073A0B.760C@crpl.cedar-rapids.lib.ia.us>
Source record: 91392

Harry Hurst wrote:
>
> Michael Tracy <mtracy@arrl.org> wrote in article
> <3406F1EC.1989@arrl.org>...
> > Harry,
> > Incidently, you might also be interested in an excellent, modern tube
> > regen design by David Newkik that appeared in the September 1992 issue
> > of QST.

There is also an excellent transistorized regen project in the Projects Section of Chapter 17 of the 1995/6/7 ARRL Handbook. This project was done by Charles Kitchin, who is with Analog Devices Company.

Bill W0IYH

Bill W0IYH

# 2222. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2908971713230001@wd1v.mv.com>
Source record: 91393
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John Seney
http://www.mv.com/ipusers/wd1v

# 2223. Re: RAMSEY SR-1 SW kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: The Ronney's <pronney@sprynet.com>
Message-ID: <5u7ura$j2b$1@juliana.sprynet.com>
Source record: 91394

Hi again, Tony.

Unfortunately, I don't have any details on the Ramsey kit. I've seen them in a local store and thought about purchasing one, It seems kinda like fun. Does it have a BFO?

Perhaps I am not following you. If you are receiving CW using the kit's internal BFO, then I agree that you will hear the tone change if the local oscillator changes frequency.
It seems, however that you are receiving using the heterodyne between the CW signal and a second, nearby signal. If that is the case, the audio signal that you hear is the difference frequency between the two carriers. Another possibility is that the tone you hear is the beat frequency between a signal at the desired frequency and one being received on the image frequency.
Lets see how that works (I'm thinking out loud here):
Lets call the desired frequency Fc1. Then the frequency of the local oscillator (Flo) is, for the sake of argument, below Fc1 by a frequency of Fif (The intermediate frequency. Oh, this is not a direct conversion receiver, is it?) So, Fc1 - Flo = Fif. But, there is also an image frequency (Fc2) that can be received, which is Flo - Fc2 = Fif. As Flo drifts, say, to a higher frequency and since Fif is fixed, the signal at Fc1 will appear to drift lower in frequency while the signal at Fc2 will appear to drift higher. Thus there is a net appearance of the two signals changing in relative frequency. If the beat note from these two signals is what you are hearing as the "tone" of the CW or RTTY, then, yes, moving the frequency of the local oscillator will change the tone you hear. You seemed to indicate in your original posting that the tuning seemed to make no difference, so maybe there is little or now image rejection. Are you hearing signals on the frequencies you expect or are they also showing up at unexpected locations as well? This would indicate image frequency reception. I know it may be difficult to tell if signals are in the correct frequency locations as the dial calibration may not be that accurate on a kit like that. Another indication would be hearing the same signal in two locations on the dial that are separated by twice the intermediate frequency. What is the IF on the kit? If it is single conversion, probably 455KHz, so listen for a unique signal and then try at a frequency that is twice the IF above and below. Compare the signal strengths.

Please see my notes below, too....

>...>I have
>: drift. AM comes in fine, and
>: >being 10 Kc wide, one would not know
>: >the difference, but when CW or RTTY
>: >etc. mixes with another carrier and can

>: >be heard, these signals waver around like
>: >crazy indicating the local osc may be
>: >moving around.
I think you are saying in the above paragraph that the note that you hear is not from the signal beating with an internal BFO, but two received carriers heterodyning together. Yes?

>: >In the presence of strong AM carriers,
>: >the osc will pull and any carriers beating
>: >with the AM signal give an annoying waver.
This is a waver in what? Apparent frequency? You notice this by retuning? Is there a beat note (tone) in this case?

>: I don't have one of these kits so I can't speak about it, but...
>: If two signals are beating against each other causing an audible tone, that
>: tone won't change in frequency if your receiver drifts.
>: The beat frequency between the two signals is strictly the difference
>: between the two signals. If, on the other hand, you are talking about
>: the amplitude of the beat frequency, that is possible. Here's how. If the
>: pair of signals is moving far enough relative to the IF filter, then one or
>: both
>: would be attenuated, causing the beat signal to attenuate, too.
>: Alternatively, you are merely experiencing the naturally occurring change in
>: signal strength that occurs on the SW bands.
>
>: Hope this is helpful
>
>: Martin, WB6YMI
>
>Thanks, Martin.
>
>No, my oscillator or the mixer is changing frequency. The
>wavering is not a change in signal strength, its change
>in frequency. Also, if the mixer/osc are changing in frequency,
>the beat note will change in freq too as in all superhets.
(The mixer doesn't have a 'frequency' as such. It merely mixes two signals and creates sum and difference frequencies. In this case, the mixer is mixing the desired receive frequency with the local oscillator, creating a sum and difference frequency, one of which is at the intermediate frequency.)

>I think I am experiencing osc pull by the NE602 mixer.
Yes, that could happen.
>Havent pulled it out and put in another or replaced the
>varactor yet.
I doubt that it is the chip itself. That is, if one does it, they all will. Probably no value in replacing the NE602 with another NE602.

>I'll post if they make any change. I did
>hear some cw on the 40 metre wavelength, it was all over
>the place. This thing should be pretty stable, so I
>am pretty sure the MV209 or NE602 is having a problem.
Hmmm... Varactor tuning. Well, be sure that the power supply to the tuning pot is very well regulated. Imagine this: You tune in a station and get lots of audio signal. As the audio gets louder and quieter, the power supply sees more and less load. The power supply voltage droops when the load is high and returns back up when the load is reduced. If that same power supply is used to feed the tuning pot, then the varactor will see the same variations. So, loud signals will cause the varactor to see voltage change and tune the receiver to another frequency, which will cause the signal to go away, which will cause the signal to come back, which will repeat the process.... You've invented the oscillator! Hopefully the voltage going to the tuning pot is well regulated and that it does not share with the audio stage.

>See ya!
You bet!. Happy SWLing. 73's
Martin. WB6YMI

## 2224. ham radio help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: fixit@bright.next
Message-ID: <3404f0e9.139555472@news.bright.net>
Source record: 91395
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi all! I need the expertise of a ham radio guy. I have some questions about antenna length and position that I'd like some answers for.

If anybody's interested in helping a fellow 'lectron-pusher (not a ham, tho :), please reply via email.

Thank you for your time!

I added an extra "x" to foil the spamsters. YOU figure it out...

# 2225. Antenna Building and Tower Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: AARON SCHMITZ <aschmitz@earthlink.net>
Message-ID: <340788E1.2367@earthlink.net>
Source record: 91396

Attention fellow amateurs:
I have recently updated my page to include my rooftop tower design. It was of my own design and has served me well. Also I have a set of plans for yagis, J poles, Super J Pole, quads, and Collinears. Take a peek and see what you think. Also included are online designers for quads and yagis. Design your own while you are online. 73 and happy building.

http://www.earthlink.net/~aschmitz

Aaron Schmitz, KB0YKI
--
==========
Aaron Schmitz
KB0YKI
Route 1 Box 31
Ewing, MO 63440
Email:
aschmitz@earthlink.net
aschmitz@culver.edu
World Wide Web:

http://home.earthlink.net/~aschmitz/home.html

"Specializing in support for Macintosh and IBM compatible Computers"
"Real Hams use verticals, but smart ones use Yagis!"

# 2226. Scope from TV CRT - please don't skip :)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: Nuno Sucena Almeida <slug@bbs.aeminium.pt>
Message-ID: <5u67qj$811@pc2.local.aeminium.pt>
Source record: 91397

Hello guys,

could some one point me some *information* on how to build a scope from an old TV *CRT* and other spare parts? And where can i get info about the CRT pinouts, voltages , etc ? I know it has been done and its seems easy to me but with adicional *guidelines* it would be easier to start with the project. I'm aware of the BW CRT deflection coil limitations but how much BW could I espect from a tipical CRT?
And about tipical Deflection and electron source ( the lamp:) voltages/currents and *other* info that you might think is important.

The primary use would be checking signals under 1MHz ( laser beam audio and data communications , FSK analisys , spectral analisys , etc ).
Thank you *very* much!

--
Nuno Sucena
CT1FOX CQG9304 CQM9228 Eng.Electrote'cnica FCTUC
To reply by e-mail use *slug* as user and *cygnus.ci.uc.pt* as domain.
My web page & PGP sig are located at the same place.

# 2227. CW filter TS-50 S ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-29 00:00:00 UTC
From: DL1TWA@t-online.de
Message-ID: <5u7msg$sbg$2@news00.btx.dtag.de>
Source record: 91398

Hi HAMs !

I would be very pleased, if anyone can tell me his/her experiences with
CW-filters in TS-50S (especially "non-KENWOOD" filters).
The pin numbers from the original filter are useful, too !

Please write me : DL1TWA@t-online.de

# 2228. Re: Color burst characteristics/QST on CDROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970830201100.QAA05305@ladder01.news.aol.com>
Source record: 91313

In article <34067A24.1571@taxes.net>, Jim <jstrohm@taxes.net> writes:

>Seriously, what would you pay for QST on CD-ROM, with searchable text
>and vector-based schematics and PC board layouts? It would have to
>be a multi-CD set with the earliest issues done first, and
>perhaps a 2 or 3 year delay between magazine publication and
>CD publication, depending on how many issues could fit on a CD.
>
>

In case no one has bothered to mention it to you, the 1996, and 1995
years of QST are available separately for $19.95 plus shipping from
the ARRL, or some dealers, if you go to major ham dealers, there
is no shipping, if you buy it there on the spot. I also note that from
1970 - 1994 is available in 5 year chunks for $39.95, which is also
a reasonable price. The single year CD include QEX for that year,
and apparently the NCJ. The conversion of the ads to black and white
does lose some of the impact, but everything is fully readable. There
were complaints on another newsgroup about the format of
the CDs, and the search tool available, but I note that anyone
with an internet connection can also use the ARRL's search tool
on the web site, and then find the proper issue to read. The
information is on the CD, one just has to search for the correct
info effectively.
-art clemons-

# 2229. Re: Double Sided PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <34089653.5717659@news.gv.net>
Source record: 91314

wrightj@planetc.com
shared these priceless pearls of wisdom:

->How does a homebrewer plate thru holes in making oc boards?

You don't. You call a company called "Rivets Inc." in Santa Barbara CA (or some name like this) and order a thousand or so itty bitty hollow copper rivets with an 0.032 (or whatever hole size you use) outside diameter. Rivet the hole, then solder vias and hope that the components wick the solder onto the rivet when you install the component.

Or, do what most of us do. If it is a simple via, solder a short bit of clipped resistor lead through it. If it is a component throughhole, solder both sides of the board when you put the component in.

Plating copper into the holes is a real bitch. Most of us that have tried it at home have not met with great success.

Jim

->

# 2230. Re: Microcontroller as freq synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: "P. Singh" <screwed@nospam.net>
Message-ID: <34085FE0.66F8@nospam.net>
Source record: 91315

hi Bob,

what kind of synthesizer PLL chips are available and where
can I buy these?

I have only been able to buy MC145106 and MC145151 chips.

I seem unable to locate any of the better synthesize chips
like MC145170-1 etc.

Using the timer as PLL synthesizer would definitely
reduce the "where to BUY" problem. These timers can go
to 20-30 MHZ in several popular versions of 8051.

Bob Mueller wrote:
>
> P. Singh wrote:
> >
> > Hi,
> >
> > People have already used the microcontroller like "PIC "
> > as frequency counters.
> >
> > I was wondering if it would be possible to use the timer
> > of microcontroller as the divide by N counter of a PLL
> > synthesizer. Yes, I would need an external phase comparator,
> > BUT, microcontrollers and phas comparators are both easier
> > to find that synthesizer chips.
> >
> > Thanks for any ideas/pointers
> >
> > (My email address is singhpk@exit109.com)
> >
> > ----------------------------------------------------------------------
> > Sending me SPAM or Junk-Mail means that you have legally agreed to
> > pay me US $500 for each SPAM or Junk-Mail message you send to me.
> > ----------------------------------------------------------------------
> While I have little doubt you could do it, in principle, I expect you
> would get a rather slow device. Furthermore, there are enough
> synthesizer ICs available; the microprocessor is nice, however, for
> loading data and conversion between human units and binary, which most
> of the popular PLL chips like.
> Bob

--
---

Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2231. WTB: 9 MHz narrow bandwidth filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <3408BCAC.5F85@sympatico.ca>
Source record: 91316

Looking for commercial 9 MHz filter for CW receiver.
I have a 455 KHz Collins mechanical filter if interested in partial swap.

Thanks,

John

VE3PCN

# 2232. TEK 465 CRT needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: Jason G Skalski <jskalski@acsu.buffalo.edu>
Message-ID: <3408CE5B.4F60BCDB@acsu.buffalo.edu>
Source record: 91317

I need a CRT for a Tektronics 465 scope...New would be nice. Good working condition a must. If anyone has one or knows the whereabouts; please drop a note.

Jim (N2GO)

# 2233. Re: J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <3408D2B5.6E78@ruraltel.net>
Source record: 91318

Worms92 wrote:
>
> I not sure about 11dbs. but there should be some increase in gain because
> the vertical should cause a directional effect to some small degree.
> mdj KE4YJX

**********
Whatever its worth, I always under the impression generally a 5/8 wave
antenna can be expect to have 3 db gain. over what!, I ussume isotropic,
because it gives a bigger figure.

--
73, Doug Younker, N0LKK
near Plainville, KS
dougy@ruraltel.net

# 2234. Re: Crystal filter info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580003008972157460001@news.primenet.com>
Source record: 91319

In article <3407058a.23534923@news.erols.com>, wmeara@erols.com (Bill Meara
) wrote:

:Leon (G1HSM), Tom Bruhns and I have been discussing the construction
:of crystal IF filters. Today I breadboarded a little oscillator so I
:could do some very rough checks on a batch of 50 3.579 Mhz color burst
:crystals (in HC-33 holders) bought (at a very reasonable price!) from
:Dan's small parts. I just fired up the oscillator and tuned my Drake
:2-B to zero beat at 3.579 Mhz. Then I started plugging in the
:crystals while listening for any tone. (I know this would be easier
:and more accurate with a counter, but I don't have one.) I found
:that of the batch of 50 rocks only 6 were noticeably off frequency.
:
:I also have four 3.579 computer clock crystals (in HC-18 holders) from
:Mouser. They seemed to all be pretty close in frequency, but I'm
:inclined to use the color burst rocks for the filter. Are there any
:advantages to using the computer clock crystals in this application?
:Anyone have any experience with this?
:
:
:73 Bill N2CQR

I'd just pick the ones with the highest Q. An easy comparative measurement
can be made by putting the crystal between two pi attenuator networks. The
signal generator connects to the input of one network, and a scope or rf
voltmeter to the output of the other.

Make the pi attenuators, say 6db at 50ohms (12.5ohm is standard for crystal
test fixtures). Keep the signal generator at the same level for all tests.
Then just put your crystals in the test fixture, tune the sig gen for
resonance with each crystal, and pick out the crystals that give the most
output at resonance.

You can also just keep the sig gen at one freq and put all the crystals
thru to pick out the ones closest in fc, but thats usually only important
for narrow CW filters.

Rob.

# 2235. Re: 2304MHz / 2403MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <j0VbnHAU5IC0Ewf9@ifwtech.demon.co.uk>
Source record: 91320
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Andy Sayers wrote:
>Can anyone tell me if the 13cm EME / weak signal band segments have moved
>from 2304MHz to 2403MHz ??
>
>I heard that pay TV was moving into the 2.3 - 2.4GHz band. Is this just in
>Australia, or world-wide?

The weak-signal/EME segment is either 2304 or 2320MHz in most of Europe,
still 2304 in the USA (AFAIK) and 2440 in Japan. Dedicated 13cm EME
operators need very flexible receive converters!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

## 2236. Need compression capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970830001201.UAA03467@ladder01.news.aol.com>
Source record: 91399

Looking for ARCO 429 compression capacitors or equivalent.
These are high current compression type capacitors wih a range of 100 to
500pf. Have 1 need 4 more. Building a solid state amp.

Jim

# 2237. FT-290R problems

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: peterw@dyson.BRisnet.ORG.AU
Message-ID: <34077A99.B7A@dyson.brisnet.org.au>
Source record: 91400

Hello All, A friend of mine has discoverd an unusual problem with his FT-290R mark 1.
At first switch on, the S meter goes full scale, the TX has low power and poor rx. sensitivity. This would suggest a drop in PLL output, but so far has elude him (and me). The fault slowly gets better after a few minutes.
As a cross check Ipulled my ft-290R out and was about to measure various levels around the PLL area, to my horror discovered mine does exactly the same thing, well almost, my s meter goes to 3/4 scale.
Anybody found the cure for this, it really has us beat as the fault goes away after a short time, until switch on the next day.
Peter VK4AWP

## 2238. Collins 312B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: Mack McLaughlin <kf4mir@panama.c-com.net>
Message-ID: <01bcb4e5$f5ed2080$95835fcc@dialinxx.phoenix.net>
Source record: 91401

(I have posted this note to two other groups, so if you have read this, please disregard...thank you.)

I have recently inherited a Collins 312B Station Control box that I would like to hook up, but I am not sure exactly how. I run nets from my location often and would very much like to offer 2 way phone patch capability.

This is an old unit, so it is not just as easy as running it inline to the antenna and simply plugging a phone line in. I have an Alas 210 that I will be connecting to it.

What I need to know, is exactly how to hook it up and operate it. The connections on the back are as follows:
Coax in and out ( I can figure this much out! <g>)
Anit vox in (1/8" connector)
Anit vox out (1/8")
Audio in (1/8" 4 ohms)
PTT (1/8")
Phone patch out (1/8")
and Phone line screws (2).

I would appreciate the advice of anyone with experience that could help me.

Thanx.....Mack
HP1XBG Ft. Clayton, Republic of Panama.

## 2239. Help Identify Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5u88ot$gh8$1@bigdog.eli.net>
Source record: 91402
Cross-posted to: sci.electronics.components,sci.electronics.repair,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur.equipment,rec.ham-radio.swap

Salvaged the following diodes with associated markings, but can't find specs:

HI Q CK72AX 102M

FRIE CK80AW 102M 1000

M MR2901S 7426

IN3209 SI 7412

IR X5M4

Can anyone identify or give me specs i.e. Hi current, UHF.

Have old 1956 ARRL but they are not listed there either.

Thanks
Greg KB6WKW

# 2240. Re: NE602 where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: "P. Singh" <screwed@nospam.net>
Message-ID: <3407DCEA.3501@nospam.net>
Source record: 91403

Allied Electronics stocks NE602, NE612, NE604.

Dans Small Parts stocks NE612 which is about the same as NE602.

Doug Smith wrote:
>
> Anyone know of a good source of NE602 ICs? Hopefully one that also
> stocks a variety of other parts for QRP projects? None of the normal
> places (Mouser, Digi-Key, etc.) seem to carry this one.
>
> 73 DOug

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2241. Re: Color burst characteristics/QST on CDROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5u81uv$aq8@apple.telalink.net>
Source record: 91404

Jim <jstrohm@taxes.net> wrote:
>It might be possible to obtain the reprint rights for HR, but
>it would be difficult and probably not cost-effective. However,
>the League has deep enough pockets and controls enough rights
>to be able to sell to a microfilm compamy -- could they do
>a QST CD? Even though I'm aware of the problems with publishing
>rights, I think the ARRL could put QST on CD. And I think
>they could make money on it, too.

I thought there *was* a QST CD?

Didn't CQ buy out HR? I'm no lawyer, but would think that purchase
would probably convey the rights to publish a HR CD. (if they felt it
was worth doing...)

73 Doug

# 2242. Pointer to Oscilloscope.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-3008970829580001@wd1v.mv.com>
Source record: 91405
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.marketplace,alt.ham-radio.packet

Oscilloscope.FAQ is located on
my home page.

If you'd like an Email version
sent to you as an attached text
file (50k), send an Email with
SCOPE FAQ on the SUBJECT LINE.

Best regards,

John Seney
http://www.mv.com/ipusers/wd1v

# 2243. Switching Mixer using DMOS 2N7000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: "P. Singh" <screwed@nospam.net>
Message-ID: <3407E6BF.5986@nospam.net>
Source record: 91406

DMOS switching transistors like 2N7000 or 2N7002 are available
cheaply from DIGIKEY etc.

Has anyone thought about using these to make a switching Mixer like
Calogics SD8901 or Silconix SD5000 FET quads.

I guess that mismatch among a lot of 2N7000 FETS should not be a big
problem.

Does anybody have any experience using these DMOS FET QUAD mixers?

Thanks for your help!

(PS:I dont think that I have ever seen a SD 5000 in my life OR
will ever be able to buy one. So, the 2n7000 might be the only way
I could build a switching DMOS FET mixer.)

---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2244. Re: 11 volts from 12 volt regulator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: worms92@aol.com
Message-ID: <19970830161901.MAA20411@ladder01.news.aol.com>
Source record: 91407

check and see if your ground is at zero and not floating at -0.9 volts on
the regulators gnd terminal

mdj

## 2245. 2304MHz / 2403MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: Andy Sayers <asayers@cyberone.com.au>
Message-ID: <01bcb510$26ae69c0$191308d2@default>
Source record: 91408
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Can anyone tell me if the 13cm EME / weak signal band segments have moved from 2304MHz to 2403MHz ??

I heard that pay TV was moving into the 2.3 - 2.4GHz band. Is this just in Australia, or world-wide?

73,
Andy Sayers VK1AT
asayers@cyberone.com.au

# 2246. Re: Want USED TEK Scope -485, 475A, etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <340866AE.4669@pop.removethistomailme.net>
Source record: 91409

David Shalita wrote:
> 
> Looks like the winners (scopes that work for you folks) are
> TEK 485, 475, 465B, 7904, HP180 for tight budgets.
> 
> I now want to buy a used working TEK 485 or 475A or 7904 with
> specific plug-ins.
> 
> I now really need suggestions where to post my needs,
> what sources to monitor, vendors to call, etc.
> I need name of an honest capable CAL LAB that works on these
> old scopes that you folks have had good luck.
> 
> I will be checking out ATT, GE, Electro-Rent to see what they offer
> from pool of equipment they have maintained, calibrated,
> and now are reselling out of their inventory.
> 
> Thanks for any pointers and tips.
> 
> 73, W6MIK
> 
> --
> _____________________________________
> Dave Shalita,
> af389@lafn.org
> Van Nuys, CA

The 485 in particular is a great scope -- I much prefer it to the clunkier 7xxx jobs (only use my 7834 when I need its storage feature or a specialized plugin.) Its 350 MHz spec is ridiculously conservative; mine is 3 dB down at around 400 MHz, and is perfectly usable with rock-solid triggering at close to 500 MHz. Its only real drawback is a screen phosphor that's susceptible to secondary emission (blooming) at moderately high intensities. This is a reasonable tradeoff for a bright, clear 1 ns/div sweep rate, though.

You'll want to look at the various advertisers in Nuts & Volts magazine (they probably have a Web site that could be found via Yahoo, etc.) You can buy a clean 485 with a limited warranty from Tucker Electronics up in Garland, TX (www.tucker.com), but you'll pay 2x - 3x the "street" or "hamfest" price for the privilege. I think Tucker gets around $1500 for the 485, but I was lucky enough to find a "broken" one being sold by a guy on Compuserve a few years back for $350, with two brand-new probes. It was well worth the 25-cent transistor and 2 hours' troubleshooting time I spent fixing it up.

If you don't need the extremely high bandwidth of the 485, you can get essentially the same feature set in a 60 MHz 453 for less than $150-$200. 453's and 454's (150 MHz) are easier to find than the 485, have what are unquestionably the finest analog CRTs ever built, and are somewhat easier to troubleshoot due to their lack of exotic custom ICs. Personally, I have never understood the appeal of the 465/475 models -- their CRTs are lousy compared to the 453/454 models, they are much more expensive, and they offer only slighly higher bandwidths. I would recommend either a 453/454 model (the 453 is all solid-state and is preferable if you don't need the extra bandwidth of the 454's Nuvistor-based front end), or going all the way up to the newer 485. Buy a 77xx/78xx/79xx only if you genuinely need storage or plug-in capability.

-- jm (de KE5FX)

---
Note: My E-mail address has been altered to avoid spam
---

## 2247. Amateur Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <34087EFA.6D1DD712@cyberramp.net>
Source record: 91410

http://www.cyberramp.net/~rnewland

## 2248. Microcontroller as freq synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-30 00:00:00 UTC
From: "P. Singh" <screwed@nospam.net>
Message-ID: <34084399.3476@nospam.net>
Source record: 91411

Hi,

People have already used the microcontroller like "PIC "
as frequency counters.

I was wondering if it would be possible to use the timer
of microcontroller as the divide by N counter of a PLL
synthesizer. Yes, I would need an external phase comparator,
BUT, microcontrollers and phas comparators are both easier
to find that synthesizer chips.

Thanks for any ideas/pointers

(My email address is singhpk@exit109.com)

---
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pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2249. AM Radio Reception Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: Kin <kng@pacbell.net>
Message-ID: <01bcb5ae$3bdbf8a0$e001aace@kinsnt>
Source record: 91321

The reception for AM radio in the high-rise building I am working in is terrible. I would like to hear any suggestions as to how to solve this problem.

Problem: Radio reception is bad in cubicles because of interference from Computers and normal office equipment. But receipt near the building Windows is OK. In my cubicle, the reception is extremly noisy.

Goal: Listen to only one AM radio station.

Possible solutions:

1. Put an AM radio near a window and run a long long long wire to my cubicle. This is not very practical.

2. Put a custom AM radio near a window and rebroadcast the good reception into FM and receive the FM broadcast in my cubicle. Do I violate any FCC laws by doing that?

3. Build an extremely and highly selective AM radio. Anybody have a schematic?

Any more suggestions?

Kin

## 2250. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: howarz@asd.net
Message-ID: <3408e53b.23009947@news.accent.net>
Source record: 91322

```
test
```

# 2251. Re: NE602 where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: howarz@asd.net
Message-ID: <3408e4aa.22864510@news.accent.net>
Source record: 91323

Test
howard@aed.net (Howard Rosen) wrote:

>Try ne612 (philips) it's the same part..
>desmith@telalink.net (Doug Smith) wrote:
>
>>Anyone know of a good source of NE602 ICs? Hopefully one that also
>>stocks a variety of other parts for QRP projects? None of the normal
>>places (Mouser, Digi-Key, etc.) seem to carry this one.
>>
>>73 DOug
>>
>>
>

## 2252. Re: NE602 where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: howard@aed.net
Message-ID: <3408e2ca.22385299@news.accent.net>
Source record: 91324

Try ne612 (philips) it's the same part..
desmith@telalink.net (Doug Smith) wrote:

>Anyone know of a good source of NE602 ICs? Hopefully one that also
>stocks a variety of other parts for QRP projects? None of the normal
>places (Mouser, Digi-Key, etc.) seem to carry this one.
>
>73 DOug
>
>

# 2253. DAN'S SMALL PARTS DOES IT AGAIN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5ub04n$ggu$4@zinger.callamer.com>
Source record: 91325

YES, you just have to check it out. Dan has extended his

"CRAZY DAYS SALE" and even lowered some of his prices!

Check it out!

http://www.fix.net/dans.html

Enjoy,,,72,,,Jerry...WA6OWR...K

## 2254. MAXAR Help:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: Gary <noone@nowhere.net>
Message-ID: <34093880.517@nowhere.net>
Source record: 91326

I've acquired a MAXAR 80 that I would like to put on the 70 cm band.
Anyone have a schematic, alignment instructions, or any useful
information for this radio? I'll be glad to reimburse any costs.

Contact me at wb8spv@hotmail.com

Thanks & 73.

Gary

# 2255. Re: Anzac Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: "John M. Franke" <j.m.franke@larc.nasa.gov>
Message-ID: <340967AD.1262@larc.nasa.gov>
Source record: 91327

Anzac T-1000:
Two-Way Power Divider
Freq. Range : 10-1000 MHz
Insertion Loss (less coupling): 10-500 MHz = 0.5 dB Max, 500-1000 MHz =
0.8 dB Max.
Isolation: 25 dB Min.
Amplitude Balance: 0.2 dB Max.
Phase Balance: 2 degree Max.
VSWR(all ports): 10-500 MHz = 1.5:1 Max, 500-1000 MHz = 1.3:1 Max.
Impedance: 50 Ohms Nominal
Maximum Power Rating:2.5 Watts Max.
Price (5-9 units) ~ $87.00

Hope this helps,
John
j.m.franke@larc.nasa.gov

## 2256. DRAKE for sale and wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970831162100.MAA15501@ladder02.news.aol.com>
Source record: 91328

Want mint PS-7 power supply, junker L4PS with good transformer, junker L7PS with good transformer, and perhaps spare parts for 7 line depending on cost.

For sale:
Upgrade/replacement parts for L4PS and L7PS. Higher capacity caps, higher rating diodes, new equalizing resistors, new ALC resistor (30 watt, not 7 watt that blows the unavailable ALC pot on the L4B), plus ball bearing muffin fan. All new components, shipped priority mail conus $115. The caps alone, 200 mfd not 250 mfd like I have, run over $160 at 1994 prices, if you can find them.

Also can provide copies of service manual for TR-7, general coverage transmit/recieve mod, VLF mod, and copies of owner's manuals for TR-7, L-7, MN-2700, keyer, patch, speech processor, etc. $21 priority mail conus.

Evan

# 2257. HELP: Amperex 7237 tube...What is it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <3409B69E.3F00@sympatico.ca>
Source record: 91329
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors

I picked up this large external anode tube at a local fleamarket.
It makes a great paper weight but may work for someone who knows what it
is.

Thanks,

John VE3PCN

# 2258. Re: AM Radio Reception Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-08-31 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <340A56E9.18D9@flash.net>
Source record: 91330

Kin wrote:
>
> The reception for AM radio in the high-rise building I am working in is
> terrible.

Hmmm, didn't you post this 6 months ago? A highly selective radio is not going to do the trick for electrical interferance.

Can you get an antenna near the window? Not knowing how much your company will permit makes it difficult. I'd talk maintinance into running a pair of wires to the window, put the radio in the window an then plug into the phone jack or get inside and disconnect the speaker then run the audio only to your cubicle.

Tim

# 2259. Eimac Amateur Service Newsletters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: James Parsons <k5rov@worldnet.att.net>
Message-ID: <340B1718.EE@worldnet.att.net>
Source record: 91263
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have a set of the Eimac Amateur Service Newsletters, written by
William I. Orr., W6SAI. These are in very good condition and cover the
letters from AS-1 to AS-50. The newsletters have some great stuff,
including pictures for building and discussing amplifiers, using such
tubes as the 3-400Z, 4-1000A, 3-500Z, and many others. Some great
amplifier circuits for HF and VHF. They include the index, and
moonbounce information..

First one asking for these at 22.00 dollars, and I ship, will get them.

73,

Jim, K5ROV

--

James (Jim), Parsons, K5ROV USAF, Ret.
k5rov@worldnet.att.net QCWA, NWQRP, Fists, ARRL
EX: W1RLA, K5FBB, K4FEO, SV0WN (CRETE), SV0WN (RHODES),
DL4NC, DL4JP, KA2FC (JAPAN), KA2JP (JAPAN).
JOHN 3:16

# 2260. Cleartone CM6500 UHF Transceiver - Information?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Eric Warner <eric@northop.demon.co.uk>
Message-ID: <CEG6uCAaJyC0Ew4J@northop.demon.co.uk>
Source record: 91264
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello All,
I've just bought one of the above radios at a rally and was
told enough about the keypad programming to determine that the set
works OK on it's original 450 - 470Mhz channels.

I now want to mod it to the UK 430 - 440Mhz amateur allocation and
wonder if anyone has done this before? Simple re-tuning doesn't look
like the answer as the local oscillator gives up before it gets down to
the 70cm band :-(

A web search has drawn a blank - even on the "Cleartone" company! - so I
wonder if anyone out there has wrestled with one of these sets before?

TIA,

Eric

# 2261. for sale AD9830 DDS EVALUATION KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Pieter Ibelings <n4ip@amsat.org>
Message-ID: <5ufiil$a7r@camel2.mindspring.com>
Source record: 91265
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have an AD9830 evaluation kit. It includes an AD9830 analog devices DDS with software. It also includes an on board 50 MHz clock. More info at http://www.analog.com.

Asking $50 firm

N4IP

Pieter Ibelings

# 2262. Re: heathkit sb 200 with kenwood ts850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Bill Harris <billhar@flash.net>
Message-ID: <340A9BA6.6C62@flash.net>
Source record: 91331

Terry Simonds wrote:
>
> "Rodney Herwerth" <kc5tax@laplaza.com> wrote:
>
> ->i just retained a amp from my brother who has un fortunatley left
> the
> ->ammetuer world. im wondering how to interface an old amp with a new
> radio?
> ->seems to me i need a relay of sorts because of power dirrerence. any
> ->thoughts would be helpful . please send any info to
> kc5tax@laplaza.com
>
> As I remember, the SB200 required closure of a circuit at some 150V dc
> or so to pull in a TR relay in the amplfier. I would suggest you use
> the TR circuit in your "new radio" to actuate an external TR relay
> whose normally open contacts would then complete the HV circuit in the
> amplfier.
>
> Terry/WB4FXD in Ft. Lauderdale

You do not need an external voltage to operate the antenna relay
in the SB-200, that is provided in SB-200. There is an RCA phono
jack on the back of the amp marked 'ant relay'. On the back of the
TS520 is an octal socket marked 'remote'. Pin 5 of this socket is the
normally open contact
of the transmit/receive relay in the 520. All you need to do is connect
the a cable from the 'ant relay' of the SB-200 to the remote socket
on the 520.
When the 520 is placed in transmit mode, this will close the circuit
and operate the antenna relay in the SB-200.

K5MIL

# 2263. re:Accurate measurement of low level RF in the VHF region

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcb67d$9a24c700$6795f5ce@wa6vse>
Source record: 91332

Someone was looking for suggestions on an RF millivoltmeter
or RF power meter ...

Laurens, M1CCO said:
> I'm thinking of building something using the LT1088 or
> AD736/737 chips (TRUE RMS power meter chips, up to
> 300 MHz, but can't find the data sheet)

The datasheet for the AD736/737 are available at:

http://www.analog.com

HOWEVER ... the 3 dB bandwidth for sine wave input varies from
5kHz at 1mV rms input to 460kHz at 200mV rms input ... NOT
very useful at 300 MHz ...

The LT1088, however, IS spec'd to 300 MHz 3dB, but only to
100 MHz with 2% accuracy ... this would appear to be a
potentially more useful part ...

�300MHz 3dB Bandwidth �1% Accuracy DC-50MHz �2% to 100MHz
�Bandwidth Flat Over Input Voltage Range �50:1 Crest Factor
�20:1 Dynamic Range �35V Peak Input �Thermally Based Operation
�Fully Specified Thermal and Electrical Parameters �Standard IC Packages
�Resistive Inputs
(data from http://www.liinear-tech.com)

Carl - wa6vse
wa6vse@fast.net

# 2264. TH75E freq. ampliation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: "Juan A. Albaladejo" <jaalbldj@arrakis.es>
Message-ID: <340AA0CE.6861@arrakis.es>
Source record: 91333

Thanks to all for reading this one.
I own a Kenwood TH75E biband walky, with the original European coverage (144-146 and 430-440).
Someone knows about the procedure for opening this limits, at least in reception?
Best regards from Juan, EA4ALZ

# 2265. Re: NE602 where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Tom.Twist@hda.hydro.com
Message-ID: <340a774a.848709479@news.hda.hydro.com>
Source record: 91334

On Sun, 31 Aug 1997 03:20:12 GMT, howard@aed.net (Howard Rosen) wrote:

>Try ne612 (philips) it's the same part..

Not quite so.

The NE612 is functionally equivalent to the NE602, and is pin
compatible, but it has a slightly lower performance.

I think this applies to the noise figure , 5 dB for the NE602 vs 6 dB
for the NE 612. The conversion gain at 45 MHz is also lower, the NE602
has minimum gain of 14 dB, and typical gain of 17 dB. I don't recall
the figures for NE612, but I think it is a few dB worse.

73 de LB8X, Tom
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

# 2266. re:Accurate measurement of low level RF in the VHF region

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970901092901.FAA21170@ladder02.news.aol.com>
Source record: 91335

>
>Someone was looking for suggestions on an RF millivoltmeter
>or RF power meter ...
>
>Laurens, M1CCO said:
>> I'm thinking of building something using the LT1088 or
>> AD736/737 chips (TRUE RMS power meter chips, up to
>> 300 MHz, but can't find the data sheet)

I think you might be interested in the Analog Devices AD-640. I use a pair of them in a log detector and have a succesful duplication of their design in the data sheets. I can see -70 with ease, -75,-80 with a little imagination. If you're willing to narrow up the bandwidth a bit, to limit the noise, you can do better than that. Mine are linear in dB at 0.5 volts per 10 dB within a millivolt all the way.

W4ZCB

# 2267. Re: Low-power, small size, fm broadcaster.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: "P. Singh" <nospam@screwed.net>
Message-ID: <340A7A68.D2E@screwed.net>
Source record: 91336

What you want should be available in your department store.

I bough mine from century 21 in NYC.
It is called the SOUNDFEEDER wireless FM stereo transmitter.
It works off one 1.5 volts DC AA cell and has a built in
stereo encoder.

The manufacturer seems to be Arkon Research Inc, Arcadia CA

Mike wrote:
>
> I'm trying to build a small (approx. 1" x 2" x .5"), low voltage (~1.5 -
> 3 v),
> short range (~10') stereo fm broadcaster.
>
> I think this is the place to ask...
>
> Can this be done?
> If it's already done, where can I get it?
>
> I've already built a mono version which works off a 1.5 volt watch
> battery, but I hear
> its a lot more difficult to get a stereo encoder in there.
>
> Any help is welcome.
> If I'm in the wrong group just let me know and I'll go elsewhere.
>
> Thanks,
> Mike
> apollyon@pacbell.net

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2268. Re: NE602 where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970901150301.LAA26098@ladder01.news.aol.com>
Source record: 91337

Hi Tom--

My understanding is Philips is discontinuing DIP NE602 (I'm not sure about the status of the NE612). However, the AN602--the Mil Spec version of the NE602, will continue to be produced in DIP packaging. If you find the NE602 to be unavailable because distributors can't get them, use the NE612 for non-critical HF work and the AN602 for more demanding applications. The AN602 is also available in SMD.

Rick K1BQT

# 2269. RSL FM BROADCAST TRANSMITTERS kits FOR SALE AND HIRE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: info@broadcast-warehouse.com
Message-ID: <873127393.14177.19.nnrp-1.c2def3ab@news.demon.co.uk>
Source record: 91338

RSL FM BROADCAST TRANSMITTERS FOR SALE AND HIRE!
http://www.broadcast-warehouse.com/

# 2270. Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Peter Egelston <smutty@nh.ultranet.com>
Message-ID: <340AC3D8.247C05A9@nh.ultranet.com>
Source record: 91339
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

Man Bites Old Brown Dog!

9/1/97

Hi, there. My name is Peter Egelston. I am President and principal owner of Smuttynose Brewing Company, a small craft brewery located in Portsmouth, New Hampshire (for those of you who may not be familiar with us). We are a small company (fewer than ten full-time employees) whose products - Shoals Pale Ale, Old Brown Dog Ale, and Chuck Wheat Ale - are distributed throughout New England, with smaller spot markets along the eastern seaboard and the midwest. Our sales for 1997 will be approximately 6,800 barrels.

Earlier this week, I made the decision to let my sales manager go. Because as an employer I am legally obligated to protect the privacy of this individual, I am not able to discuss the precise circumstances that led up to his departure. Suffice it to say that this was a difficult decision that I felt was necessary for the long-term benefit of the company.

But let me get to the reason for this posting. It came to my attention this morning that the story on the street here is Portsmouth is that my former sales manager was let go because he refused my directive to sell a batch of contaminated Old Brown Dog. Although several variations of this story are floating around, they all share that basic point. I must say, the story is effective in that is simultaneously attacks my company's and my personal reputation, both of which I value highly. Furthermore, it exploits the fact that as an employer, my response must be extremely cautious and measured.

I thought long and hard before deciding to address this publicly - it's like responding to the question "When did you stop beating your wife?" - the fact is, we at Smuttynose can't win. Deny it or ignore it - the damage is done.

But I have to go on record and say that this story is patently false. We are a small company struggling to survive in a difficult market full of larger and better financed competitors. The good will we have received from our customers has been well fought for and, in my opinion, well deserved. We do not deserve to be slandered like this. Like many small breweries, Smuttynose Brewing is comprised of a small number of individuals who are deeply dedicated to making great beer. We must make up for our lack of financial resources with hard work, creativity and persistence.

This particular accusation hurts especially, due to the fact that last spring we did have a batch of Old Brown Dog that went bad (a lactic infection, for the record). We recovered most of it before it hit the market, but several hundred cases found their way into the hands of our customers, and it cost us dearly. While we have taken that setback as an opportunity to do some soul-searching and to make some serious improvements in our quality control, the incident will haunt us for a long time.

Now we are faced with a disgruntled ex-employee trying to exploit this for the sole purpose of exacting some sort of revenge for what he perceives as a wrong done to him. This is beneath contempt.

It hurts to have to go public with this, yet, reluctantly, I feel that some sort of response is necessary. As I began this posting by saying, we are damned if we do, and damned if we don't. I am confident that we will come out of this better off than before. Certainly, I get some grim satisfaction in feeling justified after the fact for making the decision I did.

Feel free to respond to this posting, or email me directly with any feedback you may wish to share.

If you wish to learn more about us, warts and all, visit our website, which is still under construction but is now accessible at:

http://www.smuttynose.com

Thank you.

# 2271. Re: Microcontroller as freq synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <340B0275.37F54C00@direct.ca>
Source record: 91340

P. Singh wrote:

> what kind of synthesizer PLL chips are available and where
> can I buy these?
>
> I have only been able to buy MC145106 and MC145151 chips.
>
> I seem unable to locate any of the better synthesize chips
> like MC145170-1 etc.

You can get stuff like this all over the place. I'd try Digi-Key, Mainline and Future/Active in a first round of phone calls. Have you contacted your local Motorola distributor? What did they say?

Microcontrollers are still handy in these situations, to feed serial programming data to the PLL chips.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

## 2272. Looking for small, circular, shielded, threaded/locked 2 pin connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: nickel@widget.ecn.purdue.edu
Message-ID: <5uevim$502@mozo.cc.purdue.edu>
Source record: 91341
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

I would appreciate any clues about places I might find a
small (< 0.25"/6 mm diameter),
shielded,
threaded or locking (to resist some vibration),
2 pin
cable plug with matching bulkhead receptacle. Knowing manufacturers would
be nice, representatives appreciated, distributors/retailers great.

Thanks for any help,
Dave Nickel
nickel@ecn.purdue.edu

# 2273. Re: Value of Dow-Key relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <340aa0ac.2343814@news1.mnsinc.com>
Source record: 91342

On Wed, 20 Aug 1997 19:20:56 -0800, measures@mail.vcnet.com (R. L.
Measures ) wrote:

>In article <19970810043201.AAA15096@ladder02.news.aol.com>, k9sqg@aol.com
>(K9SQG) wrote:
>
>> Have a brand new Dow-Key "bypass" antenna relay with SO-239 connectors,
>> 110v AC but no accessory contacts. Anybody know what they go for on the
>> used market?
>>
>The intrinsic problem with Dow-Key relays is that they switch slower than
>modern radios.
>
>--
>--Rich-- . . . 805-386-3734, ag6k

Right... so? I am sure it's a big problem for packet, but most of us
using Dow-key relays want them for tube xmtr projects and there it is
not a sesrious problem really!

(remove the word REMOVE from my e-mail address to respond!)

# 2274. Re: qrp plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <340a9f47.1986472@news1.mnsinc.com>
Source record: 91343

On Tue, 12 Aug 1997 11:58:51 -0500, jack <cmb@mc.net> wrote:

>any one have any qrp plans for transmitter and receiver that fit in
>altoids candy tins?i have two of these and would like to make a receiver
>and transmitter for qrp thanks 73 jack n9iif

Contact Bruce, W6TOY in MD or Mike Czuwaczewski (SP?)
They both know a lot of QRPers who have done this kind of thing.

You can e-mail W6TOY at: Muscolino_Bruce@tmac.com
He can refer you to the right people. I met with several of these
"Maryland Milliwatters" guys who build stuff in the altoids boxes
and Mike was even working on building a QRP TX in a fuse box!
(One of those little ones that holds 5 Buss AGC cartridge fuses!)

These guys are really into building miniature QRP stuff.

Enjoy!

AND, take a look at:

http://www.mnsinc.com/bry/hamlynx/hamqrp.htm

for some more useful information.

73 - Bry, AF4K

(remove the word REMOVE from my e-mail address to respond!)

# 2275. Re: AM Radio Reception Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Kin <kng@pacbell.net>
Message-ID: <01bcb701$f4532030$6e20aace@kinsnt>
Source record: 91344

Tim,

> Hmmm, didn't you post this 6 months ago? A highly selective radio is not
> going to do the trick for electrical interferance.
>
This is my first time. I guess somebody else had the same problem.

Kin

# 2276. Re: Ham shops in Tennessee

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <340aa1e5.2657051@news1.mnsinc.com>
Source record: 91345

On Sun, 24 Aug 1997 11:03:26 -0700, KD4AFW <kd4afw@wingnet.net> wrote:

>ernie wrote:
>>
>> Hello
>> I'm looking for any information on the subject and all will be highly
>> appreciated.
>> Thanks in advance de Isaac, 4Z4TL
>> 73
>Memphis Amateur Electronics,Wells Stn Rd,Memphis Tn

There is a ham store in Nashville too - MADISON, TN to be exact.
Just off the main drag, a block south of Madison Church of Christ,
in a row of shops on the WEST side of the main street. Look for
antennas. Ask for MIKE.
I forget the name of his store.

Years ago it was called ARSON (Amateur Radio Supply of Nashville)
before he owned it. They had the corny ads in QST - "We're burning to
make hot deals!"

Groan!

(remove the word REMOVE from my e-mail address to respond!)

# 2277. Re: 10 watt AM tramsmitter circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <340aa294.2831383@news1.mnsinc.com>
Source record: 91346

On Mon, 25 Aug 1997 19:44:03 GMT, ianls@patrol.i-way.co.uk (Ian Liston-Smith) wrote:

>Does anyone know of a transistor/FET circuit for 12-14 Volts for an AM
>160 or 80 mtr transmitter? Power output preferably 10 watts or so.
>It's relatively easy to get 5 W, but a 24 volt rail seems necessary
>for more than this. Thanks,

I have several neat tube designs for 10 watt AM transmitters just recently posted on the web at:

http://www.mnsinc.com/bry/hamfiles.htm

Enjoy! 73 de AF4K

(remove the word REMOVE from my e-mail address to respond!)

# 2278. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: "Cecil A. Galbraith" <cgalbrai@concentric.net>
Message-ID: <340B0F15.7AC3@concentric.net>
Source record: 91347
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

Peter Egelston wrote:
>
> Man Bites Old Brown Dog!
>
> 9/1/97
>
> Hi, there. My name is Peter Egelston. I am President and principal owner
> of Smuttynose Brewing Company, a small craft brewery located in
> Portsmouth, New Hampshire (for those of you who may not be familiar with
> us). We are a small company (fewer than ten full-time employees) whose
> products - Shoals Pale Ale, Old Brown Dog Ale, and Chuck Wheat Ale - are
> distributed throughout New England, with smaller spot markets along the
> eastern seaboard and the midwest. Our sales for 1997 will be
> approximately 6,800 barrels.
>
> Earlier this week, I made the decision to let my sales manager go.
> Because as an employer I am legally obligated to protect the privacy of
> this individual, I am not able to discuss the precise circumstances that
> led up to his departure. Suffice it to say that this was a difficult
> decision that I felt was necessary for the long-term benefit of the
> company.
>
> But let me get to the reason for this posting. It came to my attention
> this morning that the story on the street here is Portsmouth is that my
> former sales manager was let go because he refused my directive to sell
> a batch of contaminated Old Brown Dog. Although several variations of
> this story are floating around, they all share that basic point. I must
> say, the story is effective in that is simultaneously attacks my
> company's and my personal reputation, both of which I value highly.
> Furthermore, it exploits the fact that as an employer, my response must
> be extremely cautious and measured.
>
> I thought long and hard before deciding to address this publicly - it's
> like responding to the question "When did you stop beating your wife?" -
> the fact is, we at Smuttynose can't win. Deny it or ignore it - the
> damage is done.
>
> But I have to go on record and say that this story is patently false. We
> are a small company struggling to survive in a difficult market full of
> larger and better financed competitors. The good will we have received
> from our customers has been well fought for and, in my opinion, well
> deserved. We do not deserve to be slandered like this. Like many small
> breweries, Smuttynose Brewing is comprised of a small number of

> individuals who are deeply dedicated to making great beer. We must make
> up for our lack of financial resources with hard work, creativity and
> persistence.
>
> This particular accusation hurts especially, due to the fact that last
> spring we did have a batch of Old Brown Dog that went bad (a lactic
> infection, for the record). We recovered most of it before it hit the
> market, but several hundred cases found their way into the hands of our
> customers, and it cost us dearly. While we have taken that setback as an
> opportunity to do some soul-searching and to make some serious
> improvements in our quality control, the incident will haunt us for a
> long time.
>
> Now we are faced with a disgruntled ex-employee trying to exploit this
> for the sole purpose of exacting some sort of revenge for what he
> perceives as a wrong done to him. This is beneath contempt.
>
> It hurts to have to go public with this, yet, reluctantly, I feel that
> some sort of response is necessary. As I began this posting by saying,
> we are damned if we do, and damned if we don't. I am confident that we
> will come out of this better off than before. Certainly, I get some
> grim satisfaction in feeling justified after the fact for making the
> decision I did.
>
> Feel free to respond to this posting, or email me directly with any
> feedback you may wish to share.
>
> If you wish to learn more about us, warts and all, visit our website,
> which is still under construction but is now accessible at:
>
> http://www.smuttynose.com
>
> Thank you.

If you can be certain that this man is the source of the tale, I suggest
that you need to speak to an attorney....

Cecil

--
Cecil Galbraith
CustomSoft mail to cgalbrai@concentric.net

Free programmer's utilities and MFC tips at
http://www.concentric.net/~cgalbrai

# 2279. Hamfest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Mario <n2pvp-nospam-@infi-pos.com>
Message-ID: <01bcb70a$df2f3460$1c26c0cc@n2pvp>
Source record: 91348
Cross-posted to: alt.radio.pirate,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.inf

The Shore Area Hamfest is coming! Sunday October 12, 1997 Rain or Shine.
It will be held at the Brookdale Community College in Lincroft, New Jersey.
Take the Garden State Parkway to exit 109 than go west on route 520 to the
college. There will be a large indoor area and an even larger outdoor area.
There will be plenty of FREE parking.
ARRL VE testing starts at 10:00 AM. Buyer can start coming in at 8 AM.
Tickets on sale at the door for $6 or you can get tickets in advance for
$5.

For more info contact Al Jackson NK2O (908) 922-8121
Or write Shore Area Hamfest
PO Box 635
Eatontown, NJ 07724

Talk in will be on 145.485 /-6

# 2280. Re: Scope from TV CRT - please don't skip :)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: John Baxter <jbaxter@voicenet.com>
Message-ID: <340AA19A.16F18583@voicenet.com>
Source record: 91349

Nuno Sucena Almeida wrote:

> Hello guys,
>
> could some one point me some *information* on how to build a scope
> from an
> old TV *CRT* and other spare parts? And where can i get info about the
> CRT
> pinouts, voltages , etc ? I know it has been done and its seems easy
> to me

Hello Nuno,

Many years ago, I built something like this. I'm sorry that I no longer have the plans, but the general idea was to use the entire old TV, not just the CRT. An extra deflection yoke was required. Basically all you do is disconnect the horizontal deflection circuit from the TV's yoke and instead wire it to the corresponding terminals on the extra deflection yoke.

Then use an audio amplifier (perhaps the one from the TV itself) to apply audio to the horizontal terminals on the TV yoke.

So now you have a TV which:

* Still has high voltage to the CRT, because the horizontal output is connected to the extra yoke (most TVs derive their high voltage from the horizontal circuit).

* Sweeps vertically at the normal rate

* Deflects horizontally in response to audio input.

If you want, wearing safety goggles etc. you can loosen adn gently rotate the yoke 90 degrees so the sweep will be horizontal on the face of the tube.

The result is a large screen "horror movie" oscilloscope. It is not terribly linear, and accurate measurements are not really possible. But it will provide some indication of a signal.

Maybe one could design and build an accurate sweep generator to use instead of the TV vertical sweep... but by the time you did this, you'd proabbly have the cost of a used 'scope plus a whole lot of time invested.

Besides being VERY CAREFUL when working inside a TV... the CRT can hold a high-voltage charge long after the set is turned off... please be

aware that I was working with 1970's vintage TV sets. This should work with modern TVs, but I have not tried it. It would be best to have a schematic of the TV handy for reference if possible.

Good luck, have fun...

-john
John Baxter, N3FPZ
jbaxter@voicenet.com

# 2281. 160 Meters for SB221

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Karyn Alan <k0uyh@uslink.net>
Message-ID: <340B3E08.F67C752A@uslink.net>
Source record: 91350

Does anyone know where I can get info and/or parts to add 160 meters to
my SB221?

I also need a 6C10 Compactron for an SB610 station monitor.

Thanks in advance,
Karyn KA0K

# 2282. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: mattz@pond.com
Message-ID: <5ufbrt$164_002@news.pond.com>
Source record: 91351
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

In article <340AC3D8.247C05A9@nh.ultranet.com>, Peter Egelston <smutty@nh.ultranet.com>
wrote:
>Man Bites Old Brown Dog!
>
>9/1/97
>
>Hi, there. My name is Peter Egelston. I am President and principal owner
>of Smuttynose Brewing Company, a small craft brewery located in
>Portsmouth, New Hampshire (for those of you who may not be familiar with
>us). We are a small company (fewer than ten full-time employees) whose
>products - Shoals Pale Ale, Old Brown Dog Ale, and Chuck Wheat Ale - are
>distributed throughout New England, with smaller spot markets along the
>eastern seaboard and the midwest. Our sales for 1997 will be
>approximately 6,800 barrels.
>

>http://www.smuttynose.com
>
>Thank you.
>

If anyone can try this beverage or get there paws on it I suggest trying it.!!
It is a very good product... I had a few when I was up in portsmyth
(portsmith?) during the summer... very very good...

mattz

-- My favorite Fortune Cookie 'fortunes'

Share your happiness with others today!
4,48,24,19,18,30

Smile if you like this fortune cookie
Your lucky numbers 23,24,27,29,30,31

Tell the truth then run... (Yugoslav Proverb)

# 2283. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <340ABB48.19E@one.net>
Source record: 91352

jason zawodny wrote:
>
> Well the question this week goes as such. Computer power supplies
> supply both 5V and 12V, and there are plenty laying around at work that
> I could rig to produce the necessary current (and have backup) for
> my VHF/UHF rig. Do you think that these supplies, powering a car battery
> which provides that actual feed (and emergency backup power) to the
> radio would be sufficient? Im trying to avoid spending the 130 dollars
> I've seen radio power supplies going for...
>
> Thanks
>
> jtz
>
>
> --
> ---------------------------------------------------------------------------
> Jason T. Zawodny; U of Notre Dame; Computer Engineer
> zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> ---------------------------------------------------------------------------

The computer supplies I have actually measured (2 of them) were a true
12 Volts. A nominal 12-V battery has a resting voltage of 12.6 to 12.7
volts, needs about 13.2 V for maintenance charging, and needs over 14 V
to recharge.

The computer supply is not adequate. Besides, most can't deliver enough
current. I run much of my equipment off a deep-cycle battery. After
about one minute of transmitting using my 20-Watt 2-meter rig, the battery
draws over 2 Amps from the charger.

Rich

# 2284. Re: RAMSEY SR-1 SW kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <340AC2CD.2FF@one.net>
Source record: 91353

Tony Zugec wrote:
> <snip>

> I have significant audio gain. I can't
> turn the volume up very far before the
> 386 starts squealing.
>
> I appear to have significan rf gain. With
> the gain up all the way, the agc can't
> cope with some strong stations in the
> 4-8 MHz coverage range of this rcvr.

I built one of these about two years ago.
My memory is fuzzy on it, but I recall having the
same problems. I added and extra 0.01 uF
bypass caps on the +V trace near U1 and U2,
0.1 uF and 6.8 ohms in series from the
output to ground (provides high-frequency
roll-off), 0.1 uF and 1500 ohms in series
from the output of the 602 to ground
(similar purpose), and two other 0.01 uF caps
for reasons I can no longer remember. These
mods made the receiver much tamer.

> I dont see much change in the tuning
> slugs of the RF, IF and OSC cans unless
> I'm at the extremes.
Mine have a clear effect. Maybe you'll see
more if you try the mods.

> I have drift. AM comes in fine, and
> being 10 Kc wide, one would not know
> the difference, but when CW or RTTY
> etc. mixes with another carrier and can
> be heard, these signals waver around like
> crazy indicating the local osc may be
> moving around.

For sure. When you try to extract as much
tuning range from one oscillator as Ramsey
did, you get drift and some instability.

> In the presence of strong AM carriers,
> the osc will pull and any carriers beating
> with the AM signal give an annoying waver.
>

> I have another MV209 (or whatever it uses,
> I dont have the schematic in front of me),
> and another NE612 (pin for pin replacement,
> updated version of the NE602) but
> before minor surgery, I wanted to find out
> if this is normal for a little rcvr like
> this, as I haven't any experience yet with
> these mixer chips and varactors.
>
> The battery is a new fresh 9V.
>
> Thanks in advance,
>
> Your pal Tony

If you've got the parts, experiment. It *is*
only minor surgery, and you should be able to
restore the receiver if you don't like the
results.

But I wouldn't expect much. If you want
noticeably better performance, you'll need
better up-front filtering (which Ramsey's
80/40-meter kits have), and less tuning
range (ditto).

73

Rich W2RG

# 2285. TEK Probe parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Jason G Skalski <jskalski@acsu.buffalo.edu>
Message-ID: <340B4539.549F6123@acsu.buffalo.edu>
Source record: 91354

Does anyone know a source of parts for TEKTRONICS probes?

I have a TEK P6131 that needs a resistor element. It is a screw in deal
that looks about the width of a metal ink pen refill and has stainless
steel pins coming out of each end. It is situated between the handpiece
and the removable grabber attachment.
The probe is 10 Megohm it is used with a 100Meg scope.

Any leads would be appreciated. (pun intended)

Jim (N2GO)

# 2286. Re: AM Radio Reception Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: psam@giraffe.ru.ac.za
Message-ID: <psam.170.340AD3E9@giraffe.ru.ac.za>
Source record: 91355

In article <01bcb5ae$3bdbf8a0$e001aace@kinsnt> "Kin" <kng@pacbell.net> writes:
>From: "Kin" <kng@pacbell.net>
>Subject: AM Radio Reception Questions
>Date: 31 Aug 1997 01:37:19 GMT

>The reception for AM radio in the high-rise building I am working in is
>terrible. I would like to hear any suggestions as to how to solve this
>problem.

>Problem: Radio reception is bad in cubicles because of interference from
>Computers and normal office equipment. But receipt near the building
>Windows is OK. In my cubicle, the reception is extremly noisy.

>Goal: Listen to only one AM radio station.

>Possible solutions:

>1. Put an AM radio near a window and run a long long long wire to my
>cubicle. This is not very practical.

>2. Put a custom AM radio near a window and rebroadcast the good reception
>into FM and receive the FM broadcast in my cubicle. Do I violate any FCC
>laws by doing that?

>3. Build an extremely and highly selective AM radio. Anybody have a
>schematic?

>Any more suggestions?

>Kin

Buy a receiver card for the PC and use that...

# 2287. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <340B47A7.359E@sj.bigger.net>
Source record: 91356

Rich Griffiths wrote:
>
> jason zawodny wrote:
> >
> > Well the question this week goes as such. Computer power supplies
> > supply both 5V and 12V, and there are plenty laying around at work that
> > I could rig to produce the necessary current (and have backup) for
> > my VHF/UHF rig. Do you think that these supplies, powering a car battery
> > which provides that actual feed (and emergency backup power) to the
> > radio would be sufficient? Im trying to avoid spending the 130 dollars
> > I've seen radio power supplies going for...
> >
> > Thanks
> >
> > jtz
> >
> >
> > --
> > ---------------------------------------------------------------------------
> > Jason T. Zawodny; U of Notre Dame; Computer Engineer
> > zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> > Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> > ---------------------------------------------------------------------------
>
> The computer supplies I have actually measured (2 of them) were a true
> 12 Volts. A nominal 12-V battery has a resting voltage of 12.6 to 12.7
> volts, needs about 13.2 V for maintenance charging, and needs over 14 V
> to recharge.
>
> The computer supply is not adequate. Besides, most can't deliver enough
> current. I run much of my equipment off a deep-cycle battery. After
> about one minute of transmitting using my 20-Watt 2-meter rig, the battery
> draws over 2 Amps from the charger.
>
> Rich
Hi Rich,
Yeah, they are everywhere and cheap...but they won't charge your bloody
battery worth a damn, and they are NOISY as all get out. They are
switching power supplies and thier clam to fame is how cheap they are
and the fact that they work at all. Find a decent linear power
supply...or a battery charger and run it only when off the air to
recharge the battery. That's a better way to go.
friend,
Lute

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

# 2288. Re: Scope from TV CRT - please don't skip :)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970901232400.TAA04041@ladder01.news.aol.com>
Source record: 91357

This isn't what you asked for but just in case. There are some interfaces out now that will let you use your computer for an O'scope. Some of the cheaper ones are under $100 and would be much better than the TV. A handheld LCD display scope can be had for about $120.

# 2289. For Sale TE Systems 0550G 10 in 375 out 59 Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Pieter Ibelings <n4ip@amsat.org>
Message-ID: <5ufip1$vc6@camel2.mindspring.com>
Source record: 91358
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a like new condition amplifier. It will do about 370 watts with about 12 watts in. It has very little use and is in new condition. Will take $375 shipped . The amplifier is close to $500 new. Works, and sounds very clean on SSB.

Pieter Ibelings
N4IP

# 2290. Re: Switching Mixer using DMOS 2N7000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970901233601.TAA12033@ladder02.news.aol.com>
Source record: 91359

"P. Singh"

>(PS:I dont think that I have ever seen a SD 5000 in my life OR
>will ever be able to buy one. So, the 2n7000 might be the only way
>I could build a switching DMOS FET mixer.)

What is the problem? You can buy them single quantity with no minimum order from Tech America, 1-800-877-0072 for under $5 each. They also have the SD-5001, same die lower permissable drive but eminently better than diode rings in the drive required for a given Ip3. The price for that one is just over $4. single quantity, under $4 for 10 -99.

I have mixers using the 5000, and aside from ticklish on the initial balance, they are phenomenal.

W4ZCB

# 2291. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: Premium Bill Mugrage <premium@pc-breweriana.com>
Message-ID: <340B6BB7.42FA@pc-breweriana.com>
Source record: 91360
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

Anonymous wrote:
>
> In article <340AC3D8.247C05A9@nh.ultranet.com>, Peter Egelston
> <smutty@nh.ultranet.com> wrote:
>
> Hell, no wonder no-one ever responds to my ham radio posts.
> rec.radio.amateur.homebrew is really only for ham operators who brew their
> own beer. Who would have known????
>
> Since I am cross posting to all these other groups, maybe someone could
> answer a question. I am very allergic to most beer. I start sneezing and
> my lungs tighten up and I start wheezing. Sometimes I get a red rash on my
> chest. I have always thought that it was from the yeast that is left over
> in the beer.
>
> It seems that German Pilsners are the only beers that I can drink without
> this happening. Whats going on???
>
> Jim
R-I-C-E, check your allegeries againest rice or rice adjuants
--
Premium Bill Mugrage Pacific Coast Breweriana
premium@pc-breweriana.com http://www.pc-breweriana.com/

# 2292. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <340B7639.4752@pop.removethistomailme.net>
Source record: 91361
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

Peter Egelston wrote:
>
><snip>
>It came to my attention
>this morning that the story on the street here in Portsmouth is that my
>former sales manager was let go because he refused my directive to sell
>a batch of contaminated Old Brown Dog.
>

Probably the same clown who sold me a batch of defective diode-ring
modulators at Weird Stuff Warehouse awhile back...

-- 73 de KE5FX (oops, wrong 'homebrew' group)

---
Note: My E-mail address has been altered to avoid spam
---

# 2293. New Micro Radio Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-01 00:00:00 UTC
From: San Francisco Liberation Radio <dove@slip.net>
Message-ID: <340BB8E5.4261@slip.net>
Source record: 91362
Cross-posted to:
rec.animals.wildlife,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,

Check out the new Web site for San Francisco Liberation Radio at 93.7 FM. We broadcast seven afternoons and evenings a week without license from the government. We feature revolutionary music, radical talk shows, uncensored news, and children's programs--the kind of programming that you will not hear on government licensed radio stations. The Web site contains a weekly program guide complete with program notes written by our broadcasters, who specialize in topics such as social justice, government corruption, the environment, animal rights, poverty, homelessness, police brutality, prisoners' rights, etc. Locally produced original programming! No commercials! No corporate support!

http://www.slip.net/~dove

# 2294. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <5ufkle$rqa@basement.replay.com>
Source record: 91266
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

In article <340AC3D8.247C05A9@nh.ultranet.com>, Peter Egelston
<smutty@nh.ultranet.com> wrote:

Hell, no wonder no-one ever responds to my ham radio posts.
rec.radio.amateur.homebrew is really only for ham operators who brew their
own beer. Who would have known????

Since I am cross posting to all these other groups, maybe someone could
answer a question. I am very allergic to most beer. I start sneezing and
my lungs tighten up and I start wheezing. Sometimes I get a red rash on my
chest. I have always thought that it was from the yeast that is left over
in the beer.

It seems that German Pilsners are the only beers that I can drink without
this happening. Whats going on???

Jim

## 2295. need audio add-on schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: stewl@sprynet.com
Message-ID: <5ufp8k$ev9$1@juliana.sprynet.com>
Source record: 91267

Can anyone provide a schematic for an audio add-on for a SW rec.

I'd like to implement a Squelch function, a 60 & 120 Hz filter,
and a tuneable notch / peak filter with sharp walls - for home use.

Thanks -
Stew Lindenberger wsl@bell-labs.com

# 2296. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Wayne Smith <wsmith8@ix.netcom.com>
Message-ID: <01bcb73c$9d89b620$cdcbb7c7@wsmith8.ix.netcom.com>
Source record: 91268
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

It's a shame things like this can happen so easily. One of the risks of being one of the people trying to bring the craft back to brewing, I guess. As a fan of your beers, I recommend them highly, and will continue to do so.

BTW, the pubs in Northampton and Portsmouth are among the coolest, too.

Keep Brewin'

Wayne Smith

Peter Egelston <smutty@nh.ultranet.com> wrote in article <340AC3D8.247C05A9@nh.ultranet.com>...
> Man Bites Old Brown Dog!
>
> 9/1/97
>
> Hi, there. My name is Peter Egelston. I am President and principal owner
> of Smuttynose Brewing Company, a small craft brewery located in
> Portsmouth, New Hampshire (for those of you who may not be familiar with
> us). We are a small company (fewer than ten full-time employees) whose
> products - Shoals Pale Ale, Old Brown Dog Ale, and Chuck Wheat Ale - are
> distributed throughout New England, with smaller spot markets along the
> eastern seaboard and the midwest. Our sales for 1997 will be
> approximately 6,800 barrels.
>
> Earlier this week, I made the decision to let my sales manager go.
> Because as an employer I am legally obligated to protect the privacy of
> this individual, I am not able to discuss the precise circumstances that
> led up to his departure. Suffice it to say that this was a difficult
> decision that I felt was necessary for the long-term benefit of the
> company.
>
> But let me get to the reason for this posting. It came to my attention
> this morning that the story on the street here is Portsmouth is that my
> former sales manager was let go because he refused my directive to sell
> a batch of contaminated Old Brown Dog. Although several variations of
> this story are floating around, they all share that basic point. I must
> say, the story is effective in that is simultaneously attacks my
> company's and my personal reputation, both of which I value highly.
> Furthermore, it exploits the fact that as an employer, my response must
> be extremely cautious and measured.
>
> I thought long and hard before deciding to address this publicly - it's

> like responding to the question "When did you stop beating your wife?" -
> the fact is, we at Smuttynose can't win. Deny it or ignore it - the
> damage is done.
>
> But I have to go on record and say that this story is patently false. We
> are a small company struggling to survive in a difficult market full of
> larger and better financed competitors. The good will we have received
> from our customers has been well fought for and, in my opinion, well
> deserved. We do not deserve to be slandered like this. Like many small
> breweries, Smuttynose Brewing is comprised of a small number of
> individuals who are deeply dedicated to making great beer. We must make
> up for our lack of financial resources with hard work, creativity and
> persistence.
>
> This particular accusation hurts especially, due to the fact that last
> spring we did have a batch of Old Brown Dog that went bad (a lactic
> infection, for the record). We recovered most of it before it hit the
> market, but several hundred cases found their way into the hands of our
> customers, and it cost us dearly. While we have taken that setback as an
> opportunity to do some soul-searching and to make some serious
> improvements in our quality control, the incident will haunt us for a
> long time.
>
> Now we are faced with a disgruntled ex-employee trying to exploit this
> for the sole purpose of exacting some sort of revenge for what he
> perceives as a wrong done to him. This is beneath contempt.
>
> It hurts to have to go public with this, yet, reluctantly, I feel that
> some sort of response is necessary. As I began this posting by saying,
> we are damned if we do, and damned if we don't. I am confident that we
> will come out of this better off than before. Certainly, I get some
> grim satisfaction in feeling justified after the fact for making the
> decision I did.
>
> Feel free to respond to this posting, or email me directly with any
> feedback you may wish to share.
>
> If you wish to learn more about us, warts and all, visit our website,
> which is still under construction but is now accessible at:
>
> http://www.smuttynose.com
>
> Thank you.
>
>

# 2297. Re: heathkit sb 200 with kenwood ts850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <340BF6DB.6028@erols.com>
Source record: 91269

Bill Harris wrote:
>
> Terry Simonds wrote:
> >
> > "Rodney Herwerth" <kc5tax@laplaza.com> wrote:
> >
> > ->i just retained a amp from my brother who has un fortunatley left
> > the
> > ->ammetuer world. im wondering how to interface an old amp with a new
> > radio?
> > ->seems to me i need a relay of sorts because of power dirrerence. any
> > ->thoughts would be helpful . please send any info to
> > kc5tax@laplaza.com
> >
> > As I remember, the SB200 required closure of a circuit at some 150V dc
> > or so to pull in a TR relay in the amplfier. I would suggest you use
> > the TR circuit in your "new radio" to actuate an external TR relay
> > whose normally open contacts would then complete the HV circuit in the
> > amplfier.
> >
> > Terry/WB4FXD in Ft. Lauderdale
>
> You do not need an external voltage to operate the antenna relay
> in the SB-200, that is provided in SB-200. There is an RCA phono
> jack on the back of the amp marked 'ant relay'. On the back of the
> TS520 is an octal socket marked 'remote'. Pin 5 of this socket is the
> normally open contact
> of the transmit/receive relay in the 520. All you need to do is connect
> the a cable from the 'ant relay' of the SB-200 to the remote socket
> on the 520.
> When the 520 is placed in transmit mode, this will close the circuit
> and operate the antenna relay in the SB-200.
>
> K5MIL

It'll work for a while - until the TS850 relay goes south switching 150
VDC to ground.

# 2298. Re: TEK Probe parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <340c1377.3578455@news.atl.bellsouth.net>
Source record: 91270

On Mon, 01 Sep 1997 18:44:09 -0400, Jason G Skalski <jskalski@acsu.buffalo.edu>
wrote:
>Does anyone know a source of parts for TEKTRONICS probes?

The only source I've found is Tektronix. They do sell parts, but
they aren't cheap.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2299. Re: Milita Radio (was: New Micro Radio Web Site)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Greg Dean <n9nwo@gte.net>
Message-ID: <5uhf4f$se8$1@gte2.gte.net>
Source record: 91271
Cross-posted to: rec.animals.wildlife,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.law-enforcement,alt.rush-limbaugh,alt.fan.rush-limbaugh

San Francisco Liberation Radio wrote:
>
> Check out the new Web site for San Francisco Liberation Radio at 93.7
> FM. We broadcast seven afternoons and evenings a week without license
> from the government. We feature revolutionary music, radical talk shows,
> uncensored news, and children's programs--the kind of programming that
> you will not hear on government licensed radio stations. The Web site
> contains a weekly program guide complete with program notes written by
> our broadcasters, who specialize in topics such as social justice,
> government corruption, the environment, animal rights, poverty,
> homelessness, police brutality, prisoners' rights, etc. Locally produced
> original programming! No commercials! No corporate support!
>
> http://www.slip.net/~dove

Is this the Left's version of the milita? They are talking about
revolution. When do the bombings start?

# 2300. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: "P. Singh" <nospam@screwed.net>
Message-ID: <340C09CA.3F9@screwed.net>
Source record: 91272

Actually, it is possible to increase the voltage of these
bloody noisy computer supplies just by changing the value
of one resistor in the switching controller circuit
( LM3524 or equiv.)

This resistor will be in the 5.0V feedback loop to LM3524.

I remember having done that years back.

Yes, it does work OK for a lot of uses .

You will have to turn it off and let your rig run of the battery
once the battery has charged , as, these supllies are definitely
NOISY.

P. singh
(singhpk@exit109.com)

Howard N. Lute wrote:
>
> Rich Griffiths wrote:
> >
> > jason zawodny wrote:
> > >
> > > Well the question this week goes as such. Computer power supplies
> > > supply both 5V and 12V, and there are plenty laying around at work that
> > > I could rig to produce the necessary current (and have backup) for
> > > my VHF/UHF rig. Do you think that these supplies, powering a car battery
> > > which provides that actual feed (and emergency backup power) to the
> > > radio would be sufficient? Im trying to avoid spending the 130 dollars
> > > I've seen radio power supplies going for...
> > >
> > > Thanks
> > >
> > > jtz
> > >
> > >
> > > --
> > > ---------------------------------------------------------------------------
> > > Jason T. Zawodny; U of Notre Dame; Computer Engineer
> > > zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> > > Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> > > ---------------------------------------------------------------------------
> >
> > The computer supplies I have actually measured (2 of them) were a true
> > 12 Volts. A nominal 12-V battery has a resting voltage of 12.6 to 12.7

> > volts, needs about 13.2 V for maintenance charging, and needs over 14 V
> > to recharge.
> >
> > The computer supply is not adequate. Besides, most can't deliver enough
> > current. I run much of my equipment off a deep-cycle battery. After
> > about one minute of transmitting using my 20-Watt 2-meter rig, the battery
> > draws over 2 Amps from the charger.
> >
> > Rich
> Hi Rich,
> Yeah, they are everywhere and cheap...but they won't charge your bloody
> battery worth a damn, and they are NOISY as all get out. They are
> switching power supplies and thier clam to fame is how cheap they are
> and the fact that they work at all. Find a decent linear power
> supply...or a battery charger and run it only when off the air to
> recharge the battery. That's a better way to go.
> friend,
> Lute
>
> --
> I am:
> Howard N. Lute
> Electronics Instructor / Terrible Mechanic / Worse Plumber
> Solano County Regional Occupation Program
> Hogan Senior High School
> Room 90, "The Garage"
> Vallejo, CA
> OptCamel@sj.bigger.net
> 8:36 AM 5/25/97

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

## 2301. PLL and DDS plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: klettke@cnx.net
Message-ID: <340b7273.3025818@news.cnx.net>
Source record: 91273

I ordered plans for a PLL and a DDS frequency synthesizer from a Texas company, I got the info and address on the internet; I have now waited 8 weeks and received nothing. I have lost the address and the internet address (good record keeping).
If any of you know this company please email me so I can correct the errors.
Thank you
Duan

## 2302. FYI: Electronics News Groups

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <340C5EC8.3995@ix.netcom.com>
Source record: 91274
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In addition to the 17 "Rec Ham News Groups" and the 22 "Alt Ham News Groups", you may want to look at the following electronics oriented news groups -- all easily accessible from URL:
http://pw2.netcom.com/~ac6v/page9.html#N

sci.electronics.basics
Basic Theory and Practice Discussions
sci.electronics.cad
CAD Stuff
sci.electronics.components
Parts Stuff
sci.electronics.design
Electronic Design Discussions
sci.electronics.equipment
Electronic Equipment Discussions
sci.electronics.misc
Misc Electronic Discussions
sci.electronics.repair
Fixing Electronics Discussions
sci.engr.semiconductors
Semiconductor Discussions
sci.physics.electromag
Electromagnetic Discussions

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 2303. Re: HIGH VOLTAGE P.S HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970902191400.PAA13898@ladder02.news.aol.com>
Source record: 91275

>
>Second, the value of the capacitors is not critical, and
>anything from 0.001 uF to 0.01 uF works OK, in my experience.
>
>Third, the diode string method is outmoded, ineffective,
>and prone to failure. It's something we developed to
>replace mercury-vapor rectifier tubes. You'll be a LOT
>happier, and save a lot of time and money, if you use
>real high-voltage diodes. You can scrounge these out of
>microwave ovens, or you can order them from "Silicon Alley,"
>the guy who advertises in QST. No, I don't work for him.
>I'm just one of MANY satisfied customers.
>
>N6OTQ
>
>P.S. You need to look at the cost of Silicon Alley's parts vs.
>the cost of building diode strings. Real HV rectifiers are
>cheaper if you're buying new parts -- maybe even cheaper if
>you're only replacing a few parts in an assembled string!
>And don't use the "1A 1000V" generic diodes or 1N4007. They
>blow up at about 100 mA. Use the (I believe) 1N5407, the fat 2.5A
>diode. Those will last longer, maybe a month or so.
>
>
>
>
>
>
>

Use strings of 8 diodes with equalizing resistors and caps in 2kv 1 amp
power supply, no problems for 2 years now. Normal current draw is about .5
amp.

## 2304. Okay, I get the picture!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Peter Egelston <smutty@nh.ultranet.com>
Message-ID: <340C4392.8A7C4906@nh.ultranet.com>
Source record: 91276

To all of you who expressed annoyance at my misposted message (Man Bites Old Brown Dog), my sincerest apologies.

Thanks for the lesson on posting etiquette. I won't be bothering you any more with messages that (obviously) don't pertain to your interests.

Peter

# 2305. Re: Man Bites Old Brown Dog, BAD DOG!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Des McCaffrey <mccafdes@ct1.nai.netspammee>
Message-ID: <01bcb7e4$58b95a20$85a085d0@default>
Source record: 91277
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

Pete,

I was at Smutty Nose this summer and loved it. Got loose enough to buy 3 cool tee's as well. A funny story related to your "bad batch" goes like this.

2 Friends and I were out one night at local Brew pub. We started thinking "wow, better go home" So away we went...only to imbibe more beverage upon return. Soon, no beers remained...except one smutty nose. I said" Hey Darrick, what about that Old Brown Dog, I was in portsmouth this summer and it was great. Smiling he says" Naw, its bad. "
"Bad" says I "Smutty Nose is GREAT!!!"
"well, this is different, this is the penalty beer. But you can have it if you want..."
What a deal, I thought, Darrick is a drunk ninny and does not know what he does giving me the last Brown Dog. SO I TAKE IT!!

And it tasted like rotten lemonade if I recall correctly. No beer taste at all, just pure sour and bitter and rot.

Well, needless to say Darrick and Rick fell down laughing at my reaction.

However, I still havent found out what happened to the last 5 penalty beers that they had...hmmmm

BUT just like those Burger King Triple Cheese Addicts who fear no eboli, I am right back on the Smutty Nose Bandwagon. Havent had a bad batch since...in fact that one bad taste was worth all the good stuff out there now.

Keep on brewin

Des

# 2306. Re: Scope from TV CRT - please don't skip :)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <340c8a61.2145095@news.online.no>
Source record: 91278

On 29 Aug 1997 10:21:07 GMT, Nuno Sucena Almeida
<slug@bbs.aeminium.pt> wrote:

>Hello guys,
>
>could some one point me some *information* on how to build a scope from an
>old TV *CRT* and other spare parts? And where can i get info about the CRT
>pinouts, voltages , etc ? I know it has been done and its seems easy to me
>but with adicional *guidelines* it would be easier to start with the
>project. I'm aware of the BW CRT deflection coil limitations but how much
>BW could I espect from a tipical CRT?
>And about tipical Deflection and electron source ( the lamp:)
>voltages/currents and *other* info that you might think is important.
>
>The primary use would be checking signals under 1MHz ( laser beam
>audio and data communications , FSK analisys , spectral analisys ,
>etc ).
>Thank you *very* much!
>
>--
>
it is an English language book, written by DJ9HO: UHF Compendium
(believe it is the first. I have only the German language version of
this book - which is number 2) it shows some info on usage of TV
screen for panoramic receiver
73
Jan-Martin N&#65533;ding, ** My email address: la8ak@online.no **
LA8AK, Voielia 39B, N-4623 Kristiansand, Norway/EUROPE
RSGB - NRRL - NRHF. tel: +47-380-87178 QTH (52660 QRL)

# 2307. Re: Help Identify Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: "Gary I. Robin" <k9hdu@webspun.com>
Message-ID: <340CBB32.511E@webspun.com>
Source record: 91279
Cross-posted to: sci.electronics.components,sci.electronics.repair,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur.equipment,rec.ham-radio.swap

Greg (KB6WKW) wrote:
>
> Salvaged the following diodes with associated markings, but can't find
> specs:
>
> HI Q CK72AX 102M
>
> FRIE CK80AW 102M 1000
>
> M MR2901S 7426
>
> IN3209 SI 7412
>
> IR X5M4
>
> Can anyone identify or give me specs i.e. Hi current, UHF.
>
> Have old 1956 ARRL but they are not listed there either.
>
> Thanks
> Greg KB6WKW

Hi Greg:

I think the first two might be capacitors. The values being 102X10^-6. The second unit having a 1KV rating. The manufacturer is likely ERIE (not frie).

MR usually indicates Motorola Rectifier. "M" is the Motorola symbol. The 7426 and 7412 are date codes interpreted as 26th week in 1974 and 12th week in 1974.

IR was International Rectifier. The X5M4 is likely a proprietary designation.

I hope I'm not a source of too much confusion for you, Greg.

73,

Gary, K9HDU

# 2308. Re: Color burst characteristics/QST on CDROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Bill Newkirk <wnewkirk@iu.net>
Message-ID: <340CDAE9.37F@iu.net>
Source record: 91280

eurppa@prrmenet.com wrote:
>
> In article <3404440E.133D@taxes.net>, jstrohm@.texas.net wrote:
> :in radio. Now if only the ARRL would put all the QST back issues
> :on CD-ROM!!
> :N6OTQ

well, it looks like they're back to 1970, last i checked (seriously thinking about buying the disc set and then chucking the paper out to whoever wants it. i have everything from 1971 forward in OK shape...i doubt anyone really wants all that paper.)

>
> I'd like to see the now defunct Ham Radio magazine on CD ROM. That
> magazine still is an indispensible resource of technical info. The local
> community college here threw out their whole collection!
>
> Rob.

go beat up on buckmaster, they have the fiche files you can buy (something like $300 or so per set). maybe they could scan 'em in and get it all in a DVD-Rom...?

# 2309. Need diagram for Ranger 2980

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Jim Smith <jimsmith@2xtreme.net>
Message-ID: <5uik15$esd$1@news.wco.com>
Source record: 91281
Cross-posted to:
alt.ham-radio.hf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

A friend of mine who does not have a computer is looking for a wiring diagram for a Ranger 2980. He especially needs information on the built in power supply . Any help would be appreciated.
Jim Smith
KF6IEG

# 2310. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: R&D PC's <qrz@klondyke.net>
Message-ID: <340CCCC2.884A2813@klondyke.net>
Source record: 91282
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

This is a multi-part message in MIME format.
--------------DA41F17BE221FE8A962A6018
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Perhaps it's not the yeast, but the type of hops they are using, or the use of corn sugar...
according to the German Purity Law, It can only contain Malted Barley, water, yeast, and hops to be called beer. Also, most German beers use German strains of hops. It might be worth experimenting (in small quantities) to see if it is just German Pilsners or German Beers in general. If it turns out to be German beers in general, then perhaps homebrewing is for you as you control what goes in your beer.

Anonymous wrote:

> In article <340AC3D8.247C05A9@nh.ultranet.com>, Peter Egelston
> <smutty@nh.ultranet.com> wrote:
>
> Hell, no wonder no-one ever responds to my ham radio posts.
> rec.radio.amateur.homebrew is really only for ham operators who brew their
> own beer. Who would have known????
>
> Since I am cross posting to all these other groups, maybe someone could
> answer a question. I am very allergic to most beer. I start sneezing and
> my lungs tighten up and I start wheezing. Sometimes I get a red rash on my
> chest. I have always thought that it was from the yeast that is left over
> in the beer.
>
> It seems that German Pilsners are the only beers that I can drink without
> this happening. Whats going on???
>
> Jim

--------------DA41F17BE221FE8A962A6018
Content-Type: text/x-vcard; charset=us-ascii; name="vcard.vcf"
Content-Transfer-Encoding: 7bit
Content-Description: Card for R&D PC's
Content-Disposition: attachment; filename="vcard.vcf"

begin: vcard
fn: R&D PC's
n: ;R&D PC's
org: R&D PC's
adr;dom: PO Box 177;;;Richmond;MI;48062;

```
email;internet: qrz@klondyke.net
tel;work: 810-727-1750
note: http://www.klondyke.net/qrz
x-mozilla-cpt: ;0
x-mozilla-html: TRUE
version: 2.1
end: vcard

--------------DA41F17BE221FE8A962A6018--
```

## 2311. Printer Switchbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: meyerb@NOSPAM.mankato.msus.edu
Message-ID: <5ug6il$51q$2@nitrogen.mankato.msus.edu>
Source record: 91283

I know this is a bit off the topic of the group, but, being a Ham, know how you guys like to build your own stuff. Has anyone seen plans anywhere on how to make your own Printer Switchbox for an IBM Computer? I want to be able to switch between my printer and my Connectix QuickCam.
Thanks!

---
Ben Meyer
meyerb@NOSPAM.mankato.msus.edu
Remove "NOSPAM" to reply

# 2312. ## Need RFI help: Symponic TV/VCR Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19970902110601.HAA20019@ladder02.news.aol.com>
Source record: 91284

I have a Symphonic TVCR13B1 combination TV/VCR (that has been talked about much on this forum). Problem: The switching power supply that stays on at all times when the unit is plugged in creates SIGNIFICANT radio frequency interference to my amateur radio HF receivers. Enough so that I have to unplug the TV when I am operating, which with this TV, causes it to lose all of its channel programming. The interference is coming in via the HF radio antenna, not via the power line of the HF receiver.

Some time ago, I placed a standard Corcom RFI line filter module in line with the sets normal power cord, but had no success in reducing the interference. I also tried taking a one-half inch diameter by ten inch long ferrite rod and winding the line cord around this, which did not seem to help, either. It is very difficult to tell if this noise is power line conducted or radiated directly from the set. The schematics indicate that the TV has two sets of line filters (L1001/C1001/C1036 & L1012/C1040). I hate to go to the step of building shields for the PS if it is not really radiated from the board. Does anyone have any thoughts on reducing the RFI at the source (unplugging it is sometimes not an option!). Given that this set has a semi-hot chassis, finding widespread really good grounding points is difficult.

If so, please respond here and / or to : WB4LNM@aol.com

Thanks

John...
WB4LNM

# 2313. Re: heathkit sb 200 with kenwood ts850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <340BF60F.527C@erols.com>
Source record: 91285

Terry Simonds wrote:
>
> "Rodney Herwerth" <kc5tax@laplaza.com> wrote:
>
> ->i just retained a amp from my brother who has un fortunatley left
> the
> ->ammetuer world. im wondering how to interface an old amp with a new
> radio?
> ->seems to me i need a relay of sorts because of power dirrerence. any
> ->thoughts would be helpful . please send any info to
> kc5tax@laplaza.com
>
> As I remember, the SB200 required closure of a circuit at some 150V dc
> or so to pull in a TR relay in the amplfier. I would suggest you use
> the TR circuit in your "new radio" to actuate an external TR relay
> whose normally open contacts would then complete the HV circuit in the
> amplfier.
>
> Terry/WB4FXD in Ft. Lauderdale

You are right! The T/R relay in the amp is tied into the bias circuit. The open circuit voltage (when the relay in not closed) is around 150 volts DC. Most modern transceiver control circuits (relay contacts) are NOT rated for this voltage. You must add a relay, an optical coupler, or something to keep this voltage off the transceiver.

# 2314. Re: Cleartone CM6500 UHF Transceiver - Information?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Bill <bill@birchnet.demon.co.uk>
Message-ID: <rALi3CAskJD0EwlP@birchnet.demon.co.uk>
Source record: 91286
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <CEG6uCAaJyC0Ew4J@northop.demon.co.uk>, Eric Warner
<eric@northop.demon.co.uk> writes
>Hello All,
> I've just bought one of the above radios at a rally and was
>told enough about the keypad programming to determine that the set
>works OK on it's original 450 - 470Mhz channels.
>
>I now want to mod it to the UK 430 - 440Mhz amateur allocation and
>wonder if anyone has done this before? Simple re-tuning doesn't look
>like the answer as the local oscillator gives up before it gets down to
>the 70cm band :-(
Good luck .
>
>A web search has drawn a blank - even on the "Cleartone" company! - so I
>wonder if anyone out there has wrestled with one of these sets before?
>
They are in Newport Gwent
I can't remember the No offhand but I'm sure directory enquiries will
do.
>TIA,
>
>Eric

--
Bill

# 2315. Re: heathkit sb 200 with kenwood ts850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: Bill Harris <billharr@flash.net>
Message-ID: <340CEDB0.35A2@flash.net>
Source record: 91287

Bob Lewis wrote:

> It'll work for a while - until the TS850 relay goes south switching 150
> VDC to ground.

That may be true with the 820, I didn't pay enough attention to the header and thought for some reason, he was trying to hook it up to a 520. I have been using the SB-200 with a 520 for some time and haven't had any problems with the switching. Need to stop reading this stuff so late at night.

K5MIL

# 2316. Re: ## Need RFI help: Symponic TV/VCR Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-02 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19970902223500.SAA28804@ladder02.news.aol.com>
Source record: 91288

John,

Saw your post on TV/VCR. You might try putting the entire set in a shielded enclosure (refrigerator?) temporarily with it plugged in. Even one of those large pick-up truck tool boxes would work. I don't think it would fit in a filing cabinet drawer.

This would aid in determining whether it was radiating direct or through the line cord. If thru line cord, use a ferrite doughnut to act as rf choke. If direct, you can then try to shield the offending components, leave it in the icebox or build a screen room for it!!

Seriously though, there is one good point: at least it is not the other way around and it DOESN'T belong to your neighbor. You can control things somewhat.

Another idea. You mentioned the lack of suitable grounding points. Why not replace the line cord with a 3 wire cord? Just be sure the outlet is really grounded. Good luck.

Bill

## 2317. Jpole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: Michael Serowik <michael77@earthlink.net>
Message-ID: <01bcb82d$5b4ad040$1b4a0c26@default>
Source record: 91289

hi,
I remember seeing article about making a j-pole out of copper pipe, does
anyone happen to have the article or know how to make one?

if so please reply

mike - n3bsq

# 2318. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: ivey@walrus.com
Message-ID: <340cc8b4.15826612@news.walrus.com>
Source record: 91290
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

On Mon, 01 Sep 1997 14:53:09 -0400, "Cecil A. Galbraith"
<cgalbrai@concentric.net> wrote:

>Peter Egelston wrote:
>>
>> Man Bites Old Brown Dog!
>>
>> 9/1/97
>>
>> Hi, there. My name is Peter Egelston. I am President and principal owner
>> of Smuttynose Brewing Company, a small craft brewery located in
>> Portsmouth, New Hampshire (for those of you who may not be familiar with
>> us). We are a small company (fewer than ten full-time employees) whose
>> products - Shoals Pale Ale, Old Brown Dog Ale, and Chuck Wheat Ale - are
>> distributed throughout New England, with smaller spot markets along the
>> eastern seaboard and the midwest. Our sales for 1997 will be
>> approximately 6,800 barrels.
>>
>> Earlier this week, I made the decision to let my sales manager go.
>> Because as an employer I am legally obligated to protect the privacy of
>> this individual, I am not able to discuss the precise circumstances that
>> led up to his departure. Suffice it to say that this was a difficult
>> decision that I felt was necessary for the long-term benefit of the
>> company.
>>
>> But let me get to the reason for this posting. It came to my attention
>> this morning that the story on the street here is Portsmouth is that my
>> former sales manager was let go because he refused my directive to sell
>> a batch of contaminated Old Brown Dog. Although several variations of
>> this story are floating around, they all share that basic point. I must
>> say, the story is effective in that is simultaneously attacks my
>> company's and my personal reputation, both of which I value highly.
>> Furthermore, it exploits the fact that as an employer, my response must
>> be extremely cautious and measured.
>>
>> I thought long and hard before deciding to address this publicly - it's
>> like responding to the question "When did you stop beating your wife?" -
>> the fact is, we at Smuttynose can't win. Deny it or ignore it - the
>> damage is done.
>>
>> But I have to go on record and say that this story is patently false. We
>> are a small company struggling to survive in a difficult market full of
>> larger and better financed competitors. The good will we have received

>> from our customers has been well fought for and, in my opinion, well
>> deserved. We do not deserve to be slandered like this. Like many small
>> breweries, Smuttynose Brewing is comprised of a small number of
>> individuals who are deeply dedicated to making great beer. We must make
>> up for our lack of financial resources with hard work, creativity and
>> persistence.
>>
>> This particular accusation hurts especially, due to the fact that last
>> spring we did have a batch of Old Brown Dog that went bad (a lactic
>> infection, for the record). We recovered most of it before it hit the
>> market, but several hundred cases found their way into the hands of our
>> customers, and it cost us dearly. While we have taken that setback as an
>> opportunity to do some soul-searching and to make some serious
>> improvements in our quality control, the incident will haunt us for a
>> long time.
>>
>> Now we are faced with a disgruntled ex-employee trying to exploit this
>> for the sole purpose of exacting some sort of revenge for what he
>> perceives as a wrong done to him. This is beneath contempt.
>>
>> It hurts to have to go public with this, yet, reluctantly, I feel that
>> some sort of response is necessary. As I began this posting by saying,
>> we are damned if we do, and damned if we don't. I am confident that we
>> will come out of this better off than before. Certainly, I get some
>> grim satisfaction in feeling justified after the fact for making the
>> decision I did.
>>
>> Feel free to respond to this posting, or email me directly with any
>> feedback you may wish to share.
>>
>> If you wish to learn more about us, warts and all, visit our website,
>> which is still under construction but is now accessible at:
>>
>> http://www.smuttynose.com
>>
>> Thank you.
>
>If you can be certain that this man is the source of the tale, I suggest
>that you need to speak to an attorney....
>
>Cecil
>
>--
>Cecil Galbraith
>CustomSoft mail to cgalbrai@concentric.net
>
>Free programmer's utilities and MFC tips at
>http://www.concentric.net/~cgalbrai

I don't suppose any of your product gets down to New York by any chance, from all accounts it's beer worth seeking out.

Cheers, Toby

# 2319. Re: Milita Radio (was: New Micro Radio Web Site)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: Ranma <METOT@worldnet.att.net>
Message-ID: <01bcb828$f134c020$426974cf@ibm>
Source record: 91291
Cross-posted to: rec.animals.wildlife,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.law-enforcement,alt.rush-limbaugh,alt.fan.rush-limbaugh

Greg Dean <n9nwo@gte.net> wrote in article <5uhf4f$se8$1@gte2.gte.net>...
> San Francisco Liberation Radio wrote:
> >
> > Check out the new Web site for San Francisco Liberation Radio at 93.7
> > FM. We broadcast seven afternoons and evenings a week without license
> > from the government. We feature revolutionary music, radical talk
shows,
> > uncensored news, and children's programs--the kind of programming that
> > you will not hear on government licensed radio stations. The Web site
> > contains a weekly program guide complete with program notes written by
> > our broadcasters, who specialize in topics such as social justice,
> > government corruption, the environment, animal rights, poverty,
> > homelessness, police brutality, prisoners' rights, etc. Locally
produced
> > original programming! No commercials! No corporate support!
> >
> > http://www.slip.net/~dove
>
> Is this the Left's version of the milita? They are talking about
> revolution. When do the bombings start?

A station like that would be better off skipping radio broadcast
altogether and instead putting all of the programming on Real Audio. That
way, anybody in the country with a cheap computer and a modem can hear it.
As we all know, there are no regulations for the net just yet.

# 2320. Re: 2304MHz / 2403MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: John Clarke <jclarke@tpgi.com.au>
Message-ID: <01bcb815$2ee95980$2a9d1dcb@johnc>
Source record: 91292
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

No they are still here but it is about to get really crowded with all the new short haul
data links being set up. CAA is looking at interested party submissions on moving the pay TV,internet acess and video conferencing services up to 23.85-25.85GHZ. It will bring the dish size down to approx 12 inches which will be pleasing to almost everyone and every council across Australia,who were worried we would wind up looking like a lunar base station. Should be good when it happens. Cheers John

## 2321. TS440s

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: nicky@profm.ro
Message-ID: <873215380.26629@dejanews.com>
Source record: 91293

Desperately searching for any material about TS 440S. I've been looking everywhere but still don't find anything interesting to satisfy me.Just send me one mail with a precise site or something to search about this one.

Grateful, Nick YO3GNO email nicky@profm.ro

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2322. Doorknob HV Capasitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: Fred Thiesen <permo@online.no>
Message-ID: <01bcb83e$1e0294a0$13354382@permo.online.no>
Source record: 91294

Hello group,
Does anyone know where to buy high voltage door-knob
type capasitors? at reasonable prices?
Looking especially for 67pf - 7,5KVDC
Suppose they are made by HEC as these letters are
printed on the capasitors.
Tnx in advance.

---
LA4UM Fred

## 2323. Re: Anzac Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: Greg Boren <symntlab@netxpress.com>
Message-ID: <340D5E5B.64E3@netxpress.com>
Source record: 91295

ANZAC now belongs to M/A-COM if you go looking for them on the WEb

Good luck.

# 2324. Re: Jpole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: "Howard N. Lute" <OptCamel@sj.bigger.net>
Message-ID: <340D5AA7.4ED@sj.bigger.net>
Source record: 91296

Michael Serowik wrote:
>
> hi,
> I remember seeing article about making a j-pole out of copper pipe, does
> anyone happen to have the article or know how to make one?
>
> if so please reply
>
> mike - n3bsq
Mr Moron's page or MYCAL's web site both have J-Pole plans...They are easy to build and tune...but you gotta' take your time when tuning. Basically it goes like this. The "J" has a little extra length down the backbone, that is your mounting only. The coax ground feeds the small part of the J, the coax "hot" feed the long part. Start with the two in opposition along those lengths, then "tune" only the "HOT" lead, up or down to get a close match. Then tune the long "J" pole up or down for a closer match...then re-tune the "HOT" lead...etc. etc. It works quite well.

Oh, the web pages...try WWW.DEJANEWS.COM for articles by/about those sites, you'll fine 'em. If not, e-mail me and I'll dig 'em out for you.

fiend,
Lute

--
I am:
Howard N. Lute
Electronics Instructor / Terrible Mechanic / Worse Plumber
Solano County Regional Occupation Program
Hogan Senior High School
Room 90, "The Garage"
Vallejo, CA
OptCamel@sj.bigger.net
8:36 AM 5/25/97

# 2325. Old chip data - LM3075 and LM3053

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: rburden@student.ecel.uwa.edu.au
Message-ID: <340e615d.5404807@news.uwa.edu.au>
Source record: 91297

Hi all,

I have an old VHF commercial radio which I thought could serve as an IF system for a 'cheap' spectrum analyser if one of the IC's had a signal strength pin.

Does anyone know what a LM3075 or LM3053 is? I checked the National site but these weren't found, no doubt to their age :)

Thanks in advance

Richard
---
Richard VK6FKB
"Nothing better than home-brew, except perhaps an absence of Spam"

# 2326. Re: Doorknob HV Capasitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <8I1vOBAX7SD0Ew2p@pacsat.demon.co.uk>
Source record: 91298

In article <01bcb83e$1e0294a0$13354382@permo.online.no>, Fred Thiesen
<permo@online.no> writes
>Hello group,
>Does anyone know where to buy high voltage door-knob
>type capasitors? at reasonable prices?
>Looking especially for 67pf - 7,5KVDC
>Suppose they are made by HEC as these letters are
>printed on the capasitors.
>Tnx in advance.
>
>---
>LA4UM Fred

Mainline electronics in the UK, Try www.mainlinegroup.com

73 Simon
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 2327. Re: Old chip data - LM3075 and LM3053

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: dunnt@cco.caltech.edu
Message-ID: <dunnt-0309971235590001@tom-dunn.caltech.edu>
Source record: 91299

In article <340e615d.5404807@news.uwa.edu.au>,
rburden@student.ecel.uwa.edu.au.NoSpam-Thanks wrote:

> Hi all,
>
> I have an old VHF commercial radio which I thought could serve as an IF
> system for a 'cheap' spectrum analyser if one of the IC's had a signal
> strength pin.
>
> Does anyone know what a LM3075 or LM3053 is? I checked the National site
> but these weren't found, no doubt to their age :)
>
> Thanks in advance
>
> Richard
> -----------------------
> Richard VK6FKB
> "Nothing better than home-brew, except perhaps an absence of Spam"

NTE semiconductor list the NTE 724( Diff.Casacode Amp) as cross reference
for the LM3053H (8 lead metal can), and the NTE 723(FM sounds sys.) as a
cross for the LM3075. You can go to thier Web site and take a look.
http://www.nteinc.com/

73 Tom WB6IQD dunnt@cco.caltech.edu

# 2328. Re: Printer Switchbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: Harry Hurst <hhurst@delaware.infi.net>
Message-ID: <01bcb8b2$1d391160$3c4b9ace@wil-tech1>
Source record: 91300

Doesn't sound like a good project to me... you can buy printer switch boxes
for $5 at shows... you can't buy a box for that price anywhere.

Ben Meyer <meyerb@NOSPAM.mankato.msus.edu> wrote in article
<5ug6il$51q$2@nitrogen.mankato.msus.edu>...
> I know this is a bit off the topic of the group, but, being a Ham, know
how
> you guys like to build your own stuff. Has anyone seen plans anywhere on
how
> to make your own Printer Switchbox for an IBM Computer? I want to be
able to
> switch between my printer and my Connectix QuickCam.
> Thanks!
>
> -----------------------------------
> Ben Meyer
> meyerb@NOSPAM.mankato.msus.edu
> Remove "NOSPAM" to reply
>

## 2329. Need Transistor info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970903224001.SAA11573@ladder01.news.aol.com>
Source record: 91301

Bought a $5.00 box of junk at a hamfest. ther were several RF power transistors in the box, All same kind. Would greatly appreciate if someone could identify.
What are the specs.
Thought they might be something I could use in an amp.
as written on the transistor:

CTC
839-3
BC874

# 2330. Re: Old chip data - LM3075 and LM3053

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970903175544.23755A-100000@oso.slonet.org>
Source record: 91302

What you want is a 3089 chip. Use the "S" meter pin for an analog output.
It is nearly logarithic and useful as a spectrum analyser display. K7RR

On Wed, 3 Sep 1997, Tom Dunn wrote:

> In article <340e615d.5404807@news.uwa.edu.au>,
> rburden@student.ecel.uwa.edu.au.NoSpam-Thanks wrote:
>
> > Hi all,
> >
> > I have an old VHF commercial radio which I thought could serve as an IF
> > system for a 'cheap' spectrum analyser if one of the IC's had a signal
> > strength pin.
> >
> > Does anyone know what a LM3075 or LM3053 is? I checked the National site
> > but these weren't found, no doubt to their age :)
> >
> > Thanks in advance
> >
> > Richard
> > ----------------------
> > Richard VK6FKB
> > "Nothing better than home-brew, except perhaps an absence of Spam"
>
> NTE semiconductor list the NTE 724( Diff.Casacode Amp) as cross reference
> for the LM3053H (8 lead metal can), and the NTE 723(FM sounds sys.) as a
> cross for the LM3075. You can go to thier Web site and take a look.
> http://www.nteinc.com/
>
> 73 Tom WB6IQD dunnt@cco.caltech.edu
>
>

# 2331. FS: New Tubes, NOS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <5ulebh$hpo$24@ha1.rdc1.occa.home.com>
Source record: 91303

NEW TUBES: New Old Stock (NOS)

1AD4 $2.20
1T4/DF91 $1.60
5R4WGB $4.00
5U4G USA $17.50
5U4G Russian $6.50
5V4G RCA $9.00
6AG7 RCA $4.00
6AS8 $2.50
6AZ8 Phillips $4.50
6BX7GT RCA (black plate) $7.10
6C8G $3.00
6CB6A $2.00
6EW6 $2.50
6F6 $5.00
6H6 RCA $1.25
6J6WB $1.50
6K8 $3.25
6L6WGB Phillips $19.00
6L6GC Russian $6.50
6X9/ECF200 $3.25
12AT7 Sylvania $5.00
12AX7 Westinghouse $9.00
12BA6 GE $2.75
39/44 RCA $2.50
84/6Z4 RCA $4.00
572B/T160L Centron $94.00
572B Chinese $65.00
809 $20.00
1626 Sylvania $3.00
JAN 5687 Tung-Sol $5.00
JAN 5751 GE $5.00
5751WB GE (black plate) $8.50
5829WA $5.00
5844 $2.50
5933(807W) Sylvania $11.00
6082A RCA (black plate) $10.50
JAN 6072 (black plate) $9.50
6146 GE $19.00
6146 Chinese $13.00
JAN 6922 Sylvania $5.00
7062/180CC Amperex $5.00
EL84/6BQ5 Sovtek $4.25

3-500Z Eimac $160.00
3-500Z Penta $105.00
3-500C Chinese $120.00

Shipping in USA, 1 to 6 tubes $4.00, 7 or more tubes free.
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
TEST EQUIPMENT, RECONDITIONED, CALIBRATED, 120 DAY WARRANTY,
FREE SHIPPING IN USA.

Hewlett Packard 8640B/323 signal generators (military
AN/USM 323), .5 MHz to 512 Mhz, $675 ea

Tektronix 455 , 50 MHz Dual trace oscilloscope, $395
Tektronix 465, 100 MHz dual trace oscilloscope, $550
TEKTRONIX 465M 100MHz Oscilloscopes, reconditioned
and calibrated,120 day warranty,shipping free in the USA
$465.00 each!
Tektronix 475A, 250 MHz dual trace oscilloscope, $750
HP8405A, Vector Voltmeter, $325
Power Design 6050,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $225
Power Design 6050A,0 to 60 Volts,1 Amp,Regulated Pwr Supply, $200

**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

# 2332. Re: Help Identify Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-03 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEFzrL2.45L@netcom.com>
Source record: 91304
Cross-posted to: sci.electronics.components,sci.electronics.repair,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur.equipment,rec.ham-radio.swap

In article <340CBB32.511E@webspun.com>,
Gary I. Robin <k9hdu@webspun.com> wrote:
>Greg (KB6WKW) wrote:
>> Salvaged the following diodes with associated markings, but can't find
...
>> FRIE CK80AW 102M 1000
...
>I think the first two might be capacitors. The values being 102X10^-6.
>The second unit having a 1KV rating. The manufacturer is likely ERIE
>(not frie).

Erie also made semiconductors back in the 60's-70's, but I couldn't
find this one on their pages in some old catalogs of that vintage.
(So did a lot of companies that don't seem to exist any more like
Hoffman, and Sakes-Tarzian).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 2333. WTB: Bleeder, relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: ron ab6zx <dom@shocking.com>
Message-ID: <01bcb902$301532a0$87cc77cc@JeanneAngle.csuchico.edu>
Source record: 91213

Looking for a heavy duty bleeder resistor or two, 100+ watts, 50K-100K.
Also need a heavy duty antenna relay, 12V coil, speed not a factor.
--
ron ab6zx chico ca
email: dom@shocking.com

# 2334. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <340F9C79.4ED1@mwt.net>
Source record: 91214
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

Peter Egelston wrote:
>
> Man Bites Old Brown Dog!
>
> 9/1/97
>
> Hi, there. My name is Peter Egelston. I am President and principal owner
> of Smuttynose Brewing Company, a small craft brewery located in
> Portsmouth, New Hampshire

8< snip...edited here...

>
> http://www.smuttynose.com
>
> Thank you.

Where's the homebuilt radio in this post...I must have missed it.
Scott, N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

amended 8-29-97: Now after feeling the "Need for Speed", building an
RV-4!
No, the Super Chief is NOT for sale :)

## 2335. XPWARE and RITTY Mailing Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <340F582E.3A2F@primenet.com>
Source record: 91215

XPWARE and RITTY Mailing Lists

>>>> info ritty
RITTY is a mailing list (reflector) devoted to the
discussion of the RITTY software program by K6STI.

RITTY is a software program which allows very high
quality demodulation of RTTY signals using a sound
card in an IBM PC computer, employing sophisticated
Digital Signal Processing (DSP) techniques.

* Software User Group
* Hints and Tips for the Advanced User
* Update Notices, Support
* Anything RITTY Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe ritty

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe ritty

To post information/questions to the list:

TO: ritty@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

-----
>>>> info xpware
XPWare is a mailing list (reflector) devoted to the
discussion of the XPWare software programs by KF7XP.

This includes XPWin (program of the year), XPKAM,
and all other versions for DOS and Microsoft Windows.

* Software User Group
* Hints and Tips for the Advanced User
* Update Notices, Support
* Anything XPWare Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe xpware

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe xpware

To post information/questions to the list:

TO: xpware@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

---

# 2336. Re: Microcontroller as freq synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEG1zA5.2qw@netcom.com>
Source record: 91216

In article <340B0275.37F54C00@direct.ca>,
laura halliday <ve7ldh@direct.ca> wrote:
>P. Singh wrote:
>> what kind of synthesizer PLL chips are available and where
>> can I buy these?
>>
>> I have only been able to buy MC145106 and MC145151 chips.
>>
>> I seem unable to locate any of the better synthesize chips
>> like MC145170-1 etc.
>
>You can get stuff like this all over the place. I'd try Digi-Key,
>Mainline and Future/Active in a first round of phone calls. Have
>you contacted your local Motorola distributor? What did they say?

For low volume Motorola orders: try Newark, Allied/Avnet and Future-Active.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 2337. Re: Milita Radio (was: New Micro Radio Web Site)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEG1z9z.2p4@netcom.com>
Source record: 91217
Cross-posted to: rec.animals.wildlife,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.law-enforcement,alt.rush-limbaugh,alt.fan.rush-limbaugh

In article <5uhf4f$se8$1@gte2.gte.net>, Greg Dean <n9nwo@gte.net> wrote:
>San Francisco Liberation Radio wrote:
>>
>> Check out the new Web site for San Francisco Liberation Radio at 93.7
>> FM. We broadcast seven afternoons and evenings a week without license
>> from the government. We feature revolutionary music, radical talk shows,
>> uncensored news, and children's programs--the kind of programming that
>> you will not hear on government licensed radio stations.
...
>Is this the Left's version of the milita? They are talking about
>revolution. When do the bombings start?

About 1965 or so. (I think these guys are stuck in a time warp. Wow
man, far out).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 2338. Ericsson SRA P-204 ht

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: Deen Attan <denatan@tm.net.my>
Message-ID: <340DE162.6544733A@tm.net.my>
Source record: 91305

Got a pair's of VHF 6 Channels Ericsson SRA P-204 but both have no receive or transmit XTAL. I need the crystal specification and I have send e-mail to one or tow XTAL mfg but they have no records on the Ericsson Model P-204.They are made around 1984 and seem in good condition...just a dumb....

# 2339. FOR SALE NEW PC8/E DIGIBOARD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5ukudo$4ac@cletus.bright.net>
Source record: 91306

Hi All,

I have a number of new in the box PC8/E digi boards and cable sets with junction box. These are the ones with the on board processor that will gather and buffer all 8 serial ports without droping any data. Drivers for DOS win95 and winNT

These units new are $500 through the wholesalers. I want $225.

Norm N8GRG

## 2340. Re: Ham shops in Tennessee

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5ukqhq$5jd@apple.telalink.net>
Source record: 91307

bry@REMOVE.mnsinc.com (Bry) wrote:
>There is a ham store in Nashville too - MADISON, TN to be exact.

Unfortunately, this store closed a year or two ago. Too much
competition from the 800-number national operations. The Memphis shop
and HRO Atlanta are the closest shops to Nashville.

73 Doug

# 2341. www.potg.com = Free comedy radio; unique and award-winning

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970904045000.AAA24780@ladder01.news.aol.com>
Source record: 91308

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 2342. FS:Gonset G-66 Receiver, G-77 Transmitter and Power Supply Modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5umple$8mk$1@bigdog.eli.net>
Source record: 91309
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur,rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.equipment,rec.ham-radio.swap

G66, g77 and Power Supply Modulator. Set up for AC operation.
Also manuals and schematics (from Hi-Manuals)
Set works on AC, transmitter loads up into antenna.

Missing microphone. NO MICROPHONE OFFERED AS PART OF SALE.

Would prefer you pickup but will ship.
Shipping weight is 80 pounds from zip 95822
$225.00 plus shipping.

Greg
KB6WKW

## 2343. Dan's 80m Centenial SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: kusnadi <kusnadi@u.arizona.edu>
Message-ID: <5un8kf$r38$1@news.ccit.arizona.edu>
Source record: 91310

Hi,
I'm wondering if anybody has had any experience with this kit, i.e.
its design (IF filter etc), performance (e.g. stability) ?
Any comment would be appreciated. Thanks.

73

kc7zaq

# 2344. Re: NE602 where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970904220500.SAA28393@ladder01.news.aol.com>
Source record: 91311

Hi Zack--

>I've used the SA602 as a replacement, as well as the SMD
version, but haven't seen the AN602 yet--Zack W1VT

You are 1000% correct, and I apologize for handing out an incorrect number (must have been thinking application note at the time). The SA602 is, indeed, the correct number for the mil spec version.

73

Rick K1BQT

# 2345. Re: Dan's 80m Centenial SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-04 00:00:00 UTC
From: "P. Singh" <nospam@screwed.net>
Message-ID: <340EFA8B.287F@screwed.net>
Source record: 91312

hi :,

Yes, I did build this kit.
These are my observations regd it:-

1. XTAL filter is very wide and badly designed.
Substituting an conventinal ladder XTAl filter
where the XTAL are in series rather than shunt
improves it a lot. Also use 32 pf shunt caps
between xtals.

I really never found out the reason for the
funny ladder XTAL filter with shunt xtals
as used by DANS centennial kit.

2. VFO does drift a lot. Could use TC.

3. Could use alot more audio rolloff to reduce all thos
high pitched tones.

4. An simple audio AGC around the first LM386 audio preamp
helps a lot.

Yes, I was able to get this thing up and running tolerably
ultimately. It is sensitive enough for 80M but I would not try
to convert it to 20 M or so as this thing has no IF amp.

I think that this thing could use a good simple synthesizer
using MC145106 and a microcontroller. I am currently working
on the same.

If you decide to build this kit , let us know how it goes.

73

P. Singh

kusnadi wrote:
>
> Hi,
> I'm wondering if anybody has had any experience with this kit, i.e.
> its design (IF filter etc), performance (e.g. stability) ?
> Any comment would be appreciated. Thanks.
>
> 73
>
> kc7zaq

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2346. FREE MOTOROLA EMAIL PAGER OR SEIKO WATCH!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: info@pagrez.com
Message-ID: <340f8494.0@news.west-tech.com>
Source record: 91218

**********

FREE MOTOROLA PAGERS OR SEIKO MESSAGE WATCH!!!

CALL 1-800-784-6452 CERTIFICATE #4248000

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NO CONTRACTS

NO HASSLE

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*****Motorola Pronto Flex*****
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-16 number mem, clock, vibration, time stamps, and many colors avail!!

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-buitl in pager, weather,sports,stocks,lotto,ski, and other info!!
time zone correction and many other features!!

*****Motorola Email Pager*****
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features of a answering machine! 10 volume setting and tons other features!

MANY OTHERS TO CHOSE FROM JUST ASK!!!

**********CALL 1-800-784-6452 CERTIFICATE #4248000**********

# 2347. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: Howard Leveque <hl@home.com>
Message-ID: <340F8C58.A6541D40@home.com>
Source record: 91219
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

William E. Sabin wrote:

> Gary Coffman wrote:
>
> > Any reasonable HF receiver is limited by atmospheric noise, not
> > internal noise,
>
> Not always true.
>
> CCIR studies in the 1950's found situations at certain times of the year
> (e.g. winter) and in certain locations (e.g. at sea), and at certain
> frequencies (e.g. in the 5 to 6 MHz region) where the noie level was
> quite low.
>
> I have also noticed it with rotary beams at 20, 15 and 10 meters in
> certain directions (e.g. due north) in certain daylight hours in the
> winter time. I think a lot of HF DXers in quiet rural locations would
> agree. The situation is characterized by low noise and very weak signals
> coming over the polar (north or sometimes even south) regions.
>
> In these situations, some receivers with noise figures of 12 dB or more
> could benefit from the gain and increased sensitivity of a
> preselector/preamp and possibly even antenna tuning. Receiver overload
> in this unusual environment is not usually a big problem.
>
> Bill W0IYH

Bill,

Wasn't the final conclusion that 9 dB is the lowest NF usable at HF?

Howard

# 2348. Re: Ham shops in Tennessee

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970905134001.JAA00895@ladder02.news.aol.com>
Source record: 91220

In article <340aa1e5.2657051@news1.mnsinc.com>, bry@REMOVE.mnsinc.com
(Bry) writes:

>On Sun, 24 Aug 1997 11:03:26 -0700, KD4AFW <kd4afw@wingnet.net> wrote:
>
>>ernie wrote:
>>>
>>> Hello
>>> I'm looking for any information on the subject and all will be highly
>>> appreciated.
>>> Thanks in advance de Isaac, 4Z4TL
>>> 73
>>Memphis Amateur Electronics,Wells Stn Rd,Memphis Tn
>
>There is a ham store in Nashville too - MADISON, TN to be exact.
>Just off the main drag, a block south of Madison Church of Christ,
>in a row of shops on the WEST side of the main street. Look for
>antennas. Ask for MIKE.
>I forget the name of his store.
>
>Years ago it was called ARSON (Amateur Radio Supply of Nashville)
>before he owned it. They had the corny ads in QST - "We're burning to
>make hot deals!"
>
>Groan!
>
>

Sorry but the Music City Ham Shack mentioned above closed a few years ago.

Carl

## 2349. Re: Doorknob HV Capasitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970905143901.KAA03843@ladder02.news.aol.com>
Source record: 91221

Try Dans Small Parts he's on the web But I don't know the address.

# 2350. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <34102E24.4B257215@direct.ca>
Source record: 91222
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

William E. Sabin wrote:

> Gary Coffman wrote:
>
> > Any reasonable HF receiver is limited by atmospheric noise, not
> > internal noise,
>
> Not always true.
>
> CCIR studies in the 1950's found situations at certain times of the year
> (e.g. winter) and in certain locations (e.g. at sea), and at certain
> frequencies (e.g. in the 5 to 6 MHz region) where the noie level was
> quite low.

Why split hairs? For a very few lucky individuals, HF reception is
indeed limited by receiver noise at certain times of the year. For the
vast majority, it is limited by atmospheric noise.
--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens
Grid: CN89mg du confort et du plaisir en tout."
- C. Deneuve

# 2351. Re: Dan's 80m Centenial SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <5updnn$ija@freenet-news.carleton.ca>
Source record: 91223

"P. Singh" (nospam@screwed.net) writes:
>
>
> I think that this thing could use a good simple synthesizer
> using MC145106 and a microcontroller. I am currently working
> on the same.
>
>

P. Singh;

Have you found a source for the 145106 where you don't have to buy a minimum order? I tried Motorola in Toronto for a sample, but I guess my technique needs some work.

e-mail me direct, I haven't your e-mail address. (Unless your domain really IS screwed.net)

73 de va3rr@amsat.org

# 2352. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34103DFF.6BB9@crpl.cedar-rapids.lib.ia.us>
Source record: 91224
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

laura halliday wrote:

>
> Why split hairs?

There is no hair splitting. I am just reporting what I know about the
suject, for what it may be worth. The sarcasm is not appreciated.

Bill W0IYH

# 2353. FS: Tube Equipment/ Parts/ Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <341051F9.7210@ix.netcom.com>
Source record: 91225
Cross-posted to: rec.music.makers.marketplace,alt.guitar.amps,rec.radio.amateur.homebrew

9/5

For Sale:

Sherwood S-1000-III mono Integrated amp
-excellent working and cosmetic condition
-2 x 7868- NOT included
-2 x 6eu7 / 1 x 6k11
-has 2 mic inputs AND 4/8/16 ohm taps and 70v
-with metal case

$40.00 + shipping

Sherwood S-3000-III FM-stereo capable Tuner
-excellent working condition; in good alignment; very sensitive;
accurate tracking
-no MPX-operating mono/ proprietary jack easily modded into universal
MPX out
-original Sherwood branded tubes
-the tuner sounds wonderfull!!
-with metal case

$80.00 + shipping

both Sherwood Pieces $110.00 + shipping

NOS Oil Caps

11 Westcap 1uf 400v
8 Sangamo 1uf 300v

$60.00 for all.

TUBES

2 x 7868 Used (Bogen) test and work well

both for $40.00 + shipping

Will not separate for the following tubes

NOS-

RCA- 6am4 / 3hm5(ha5)marked Holland / 6md8 /5u5 /
-6mk8 / 8ba11 / 6hb7 / 6mq8 / 6cg8a / 3dt6/ 6gm6 /
-8bm11 / 6ja6 / 6bh8 / 5aq5 / 3au6 / 6mu8 / 6aq5a /
-2cy5 / 3x-5cL8a/ 12hg7 / 6n7a /6jc6a
Zalytron- 2as2 / 3ha5 / 2x 4bz6 6ea8 / 6ba11 / 6hg8 / 17jn6

Raytheon- 12cn5/ 2x-6ak5 / 2x 10gk6
GE- 3a3c(aw3/b2) / 13z10 / 6gm6
Westinghouse- 2x-6k6gt
Sylvania- 2cy5 / 10gk6
Realistic- 6bn6
Clarostat -60-92-a
Zenith - 13z10
Hytron -1269
Tung Sol 6eu8
Mullard- 15cw5/PL84

Used-

RCA- 2x-6fq7(cg7) / 6hq5 / 4x 6bq6gtb / 6cu6 / 6gm6 /
-12d4 / 17jn6 / 8am8 / 12L6gt / 6ea8 / 6dr7 / 6cj3(ch3)
GE- 6cj3 / 6dw4b / 6bk4 / 6eL4a
Tung Sol- 6bj6 / 6bq6gtb(cu6)
Sylvania- 6le8 / 6ea3
Connectron 5u8 / 6gy6
Raytheon- 2x-22bw3
Magnavox 6hq5 / 6dt6a
Zalytron- 17jn6

$60.00 for all + shippping

Please reply to:

rl1856@ix.netcom.com

Thank you,

Ross Lipman

--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

# 2354. Re: data sheet site?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: Rand Gray <rand.gray@worldnet.att.net>
Message-ID: <5upemj$r4l@bgtnsc03.worldnet.att.net>
Source record: 91226

Hi Bob,

Yes, look at:

http://www.intel.com/intel/product/index.htm

Regards,
Rand Gray W1GXN

Bob Liesenfeld <wb0poq@visi.com> wrote in article
<340F7487.636E4451@visi.com>...
> Hi gang,
> A bit off topic but.... Anyone know a site to DL data sheets on Intel
ICs?
> Thanks
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com
>

## 2355. FS: High Voltage transformers/cases

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: worley@snowhill.com
Message-ID: <873487608.6009@dejanews.com>
Source record: 91227
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

I have at least 50 HV current or voltage sensing transformers. They measure 5" x 6" x 7" tall with two 3" long porcelain feedthru insulators sticking out opposite sides. Also has a 4-terminal barrier strip on top. I de-potted one of them using a small heat gun but only found three small toroids, a diode bridge and small cap. and lots of glass marbles and resin. The case itself is 1/8" thick solid aluminum plate with a 1/16" thick gray rubber coating on inside and out ( the top is removable ) and may be useful for housing your own HV project if you can economically de-pot the inside. The feedthrus have 1/4"-20 x 5" long long solid copper threaded studs with brass nuts on each end. Unit weighs 16 lbs. Asking $7.50 each or 3/$20 plus shipping from S.E. Alabama. Email or call 334-347-5281.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2356. Re: Has any one used CircuitMaker and/or TraxMaker

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcba37$39f11600$5a90f5ce@wa6vse>
Source record: 91228

Peter D. Richeson <peter.d.richeson@boeing.com> wrote in article
<340EAE7E.5F4C@boeing.com>...
> I am looking into geting an electrical CAD package. The package must
> include schmatic capture/simulation and PCB layout. CircuitMaker and
> TraxMaker looks like they will do the job. Question, has any one on the
> net ever used eather of them? What did you think of them? Other them
> microsim(cant afford it) what are some other CAD packages that you have
> used.
>
> Thanks.
>
> Peter/KA5COI

Peter,

I've recently purchased a new (for me) Schematic/PCB/Router package
called Eagle by CadSoft for my use at home. I also purchased a 5 seat
license for my group at work ... it's very impressive, especially when one
considers it costs a small fraction of others like Orcad, MicroSim, etc.

Check out http://www.cadsoftusa.com/ for a downloadable demo ... take
the time to play with it a bit and see what you think ... I think you'll be
very
surprised at how much you get for the price.

I am not affiliated with, nor do have any financial interest in, this company
..
I'm just a happy customer ...

Carl - wa6vse
wa6vse@fast.net

# 2357. Re: FS: Tube Equipment/ Parts/ Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: Dan Mikos <dmi853@swbell.net>
Message-ID: <34108CA4.6EE7@swbell.net>
Source record: 91229
Cross-posted to: rec.music.makers.marketplace,alt.guitar.amps,rec.radio.amateur.homebrew

Ross Lipman wrote:
>
> 9/5
>
> For Sale:
>
> Sherwood S-1000-III mono Integrated amp
> -excellent working and cosmetic condition
> -2 x 7868- NOT included
> -2 x 6eu7 / 1 x 6k11
> -has 2 mic inputs AND 4/8/16 ohm taps and 70v
> -with metal case
>
> $40.00 + shipping
>
> Sherwood S-3000-III FM-stereo capable Tuner
> -excellent working condition; in good alignment; very sensitive;
> accurate tracking
> -no MPX-operating mono/ proprietary jack easily modded into universal
> MPX out

> $80.00 + shipping
>
>
>
>
> Please reply to:
>
> rl1856@ix.netcom.com
>
> Thank you,
>
> Ross Lipman
>>

>
>.
>
Does the Sherwood cover the 160 - 10 meter band ?
Also what modes does it operate on ?

# 2358. Help wiring RS Speaker Mic to Kenwood TH-79A?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: Paul <_prg22@ix.netcom.com>
Message-ID: <3410AA2C.4815@ix.netcom.com>
Source record: 91230
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I want to wire a Radio Shack Speaker Mic to my Kenwood TH-79A. The mic terminates with a red wire, a yellow wire, and a shield wire. I have some plugs (3/32" and 1/8") to connect to the radio, but I have no idea how those wires connect to the plugs. Can someone explain how to do this? Please help, this has to work!! Thank You.

Paul Garcia
KF6MVO
_prg22@ix.netcom.com
remove the "_" in my e-mail to reply

# 2359. Re: Doorknob HV Capasitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-05 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000509971555390001@news.primenet.com>
Source record: 91231

In article <01bcb83e$1e0294a0$13354382@permo.online.no>, "Fred Thiesen"
<permo@online.no> wrote:

:Hello group,
:Does anyone know where to buy high voltage door-knob
:type capasitors? at reasonable prices?
:Looking especially for 67pf - 7,5KVDC
:Suppose they are made by HEC as these letters are
:printed on the capasitors.
:Tnx in advance.
:
:---
:LA4UM Fred

Peter Dahl, in El Paso, TX is the premier place to go for any high
voltage/high power fixed caps, vacuum variables, transformers, diodes or
whatever.

Their phone # is (915)751-2300.

They sell alot of used stuff that while its more expensive than hamfests,
is much cheaper than new.

Rob.

# 2360. RE: FREE MOTOROLA EMAIL PAGER OR SEIKO WATCH!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9709051618077843@atdbbs.com>
Source record: 91232

>>FREE MOTOROLA PAGERS OR SEIKO MESSAGE WATCH!!!

Funny...the "free" pager costs $56.85...anpha-numeric costs $170.00...

<g>

# 2361. Re: cathode ray tube for Yaesu YO-901?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: remarsh@juno.com
Message-ID: <5uqbt4$eo4$2@moe.thenet.net>
Source record: 91233

pmarkham@mortimer.com wrote:

>Anyone have a good, inexpensive replacement crt for a Yaesu YO-901 Multiscope
>monitor? Please state price, including shipping by UPS, ground.

> Pete/wa4hei

>
what is the number of the original tube?( number on the c.r.t. neck)
WA4JJQ richard

## 2362. instructions on converting micor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Benjamin Webster <bwebster@capital.net>
Message-ID: <01bcba67$23b69f60$12ae61cc@bwebster.capital.net>
Source record: 91234

I am looking for instructions on how to convert old mobil 110 watt micor radios to ham band. Eventually, I would like to link two together to form a repeater ( unless one could be used somehow) please send help to the newsgroup. tnx N2ROQ@juno.com

# 2363. Re: instructions on converting micor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: pauls1234@aol.com
Message-ID: <19970906032000.XAA27093@ladder01.news.aol.com>
Source record: 91235

Benjamin,

The easiest way to convert the radio to the ham range is to get a service manual for it and, in the parts list, those parts which change in the various ranges are all listed with their values for each range. The Micor manuals are still available from Motorola. Possibly a bit pricey, but will give you all the info you need. You can order through the National Parts Department at (800) 422-4210 and give them the model number of the radio. FYI, the model number for a mobile wll begin with a T followed by a digit which represents the power level, followed by a 3 for VHF or 4 for UHF. i.e. T43RTA1234 (bogus model number) or T44RTAxxxx. Hope this is of some help.

Regards,

Paul Sexauer
Sr. Systems Engineer
Motorola, Inc.

# 2364. Re: Jpole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970906031800.XAA26877@ladder01.news.aol.com>
Source record: 91236

> I remember seeing article about making a j-pole out of copper
pipe, does
>anyone happen to have the article or know how to make one?

>if so please reply

Hello, Mike - n3bsq

Why not make a Better J-Pole ?
No Tuning required, Nothing to adjust or get out of adjustment.
No open coax to get water in. (SO239 Connector)
Low VSWR, W i d e bandwidth, No Balun required.
And it won't turn green.
Can even be made as a true Dual Band J-Pole.

Here are the instructions for the Better J-Pole.
Remember, the spacing is important, If you use any element material
other than what is shown here, you may have to change the spacing
to get a low SWR.
Please e-mail me, and let me know how this works out.
and let me know if you have any questions.
You may want to print the page showing the J-Poles at....
<A HREF="http://members.aol.com/Arrow146/index.html">Arrow Antenna</A>
or
http://Members.aol.com/Arrow146/index.html

Construction Plans for the Model J146 2 Meter Solid Aluminum J-Pole

Parts Needed:

Radio Shack # 21-961 3/8&#65533;-24/SO239 Mount (Mobile CB Antenna)
Radio Shack # 15-826 TV Mast U-Bolt Clamp Assembly
About 80 inches of 3/8&#65533; diameter Solid Aluminum Rod.
5 1/2 inch piece of strut angle Aluminum 1 1/2&#65533; X 1 1/2&#65533; X 3/16&#65533; Thick.
2 Stainless Jam Nuts 3/8-24 thread

Tools needed:

Drill Press with drill Bits up to 1/2&#65533;.
Tap & Die for 3/8-24 thread.
Sander or file to de-burr the cut edges.
2 9/16 wrenches & a 3/4 wrench.
Vice-grips

Make sure the piece of angle Aluminum is exactly 5 1/2 inches long.
Drill 2 1/4&#65533; holes on one side, centered to fit the U-Bolt for mounting.
On the other surface of the angle

Measure in 1/2&#65533; in from each end and drill a 1/4&#65533; pilot hole.
This should give you 4 1/2&#65533; from center to center of the two holes.
Redrill one of the pilot holes to 11/32&#65533; Then tap the hole with a 3/8-24 Tap.
Redrill the other pilot hole to 1/2&#65533;
Finish as required.

Cut a piece of the 3/8&#65533; Aluminum rod to about 59&#65533;.
Attach a vice-grip to one end.
Using a 3/8-24 Die cut in about 8 threads in the other end.
Screw on the Coupling Nut that came with the SO239 Mount
Tighten as much as you can.
Measure the rod & coupling nut & cut to exactly 57 1/2&#65533;

Cut a piece of the 3/8&#65533; Aluminum rod to about 21&#65533;
Attach a vice-grip to one end.
Using a 3/8-24 Die cut in about 14 threads in the other end.
(If you don&#65533;t have jam nuts, cut enough threads for 2 nuts & the thickness
of the angle bracket.)
Screw on one of the Jam nuts & tighten as much as you can.
Measure from the bottom of the nut and cut the rod to exactly 19 1/4&#65533;
(Remember the nut must be included in the Measurement.)
(Put a small amount of grease on the threads)
Screw the element into the threaded hole of the angle bracket and tighten.
Screw on the other nut and tighten it.
Attach the 57 1/2&#65533; element in the 1/2&#65533; hole using the rest of the SO239 Mount.
Mount & test your new antenna.

SWR should be less than 1.2:1 at 146 MHz and
less than 1.4:1 at 144 &148 MHz.

This Model J146 is available from Arrow Antenna for only $ 35.
The J146/440 Dual Band with single SO239 feed is only $ 43.
Please add $ 6. Shipping & Handling per order (for US Funds).

73 Allen Lowe N&#65533;IMW
Arrow Antenna
1803 S. Greeley Hwy. # B
Cheyenne, WY 82007
(307) 638-2369 Fax (307) 638-3521
Arrow146@aol.com

# 2365. HELP INFO.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: DIRK BUIS <dicky.rolo@wxs.nl>
Message-ID: <34114E87.2F43C0D9@wxs.nl>
Source record: 91237

Would like to know if a ham radio can communiquate with a s.s.b.
radio?Is there a way to communiqate to my brother on a fishing ship in
the atlantic and using a single side band?Is it possible tru the
internet or relay station?
many thanks SARA..

# 2366. Find it all / Over 800 Links and growing.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Dale Wentz <dwentz@accessus.net>
Message-ID: <01bcbaaf$efc77280$a32404d0@dragon.mcs.accessus.net>
Source record: 91238
Cross-posted to: alt.ham-radio.packet,rec.ham-radio.packet,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.boat anchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

Are you looking for information about ham radio?

If so, check out http://users.accessus.net/~dwentz

Over 800 links and growing. Page is updated every monday morning,

If you have a site that is not listed, let me know!

73's and enjoy, de KB9JJA/Dale

--
---
73's de KB9JJA
dwentz@accessus.net / kb9jja@amsat.org / kb9jja@qsl.net

Links to over 800 Ham Radio Sites and growing,
http://users.accessus.net/~dwentz
---

# 2367. Re: instructions on converting micor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Dale Wentz <dwentz@accessus.net>
Message-ID: <01bcbaad$a158ef40$a32404d0@dragon.mcs.accessus.net>
Source record: 91239

Our club did some conversions as a project here a while back. While most where UHF micors we did do a few VHF units. The VHF units take 2 xtals 1 for transmit and 1 for rec. Once the xtals are changed all that needs to be done is re-align the radio. Depending on the radio you might need to add some length/width to some of the cans in the radio. We did this by adding some brass tube to the slugs inside of the cavities. On the UHF units this was not needed. I have not done any of the VHF conversions, but have compleated about 8 of the UHF ones. A service manual from Motorola cost us about 15.00 for the radio.

Good luck with the project.

73's and type at ya later, de kb9jja/dale
http://users.accessus.net/~dwentz

Benjamin Webster <bwebster@capital.net> wrote in article
<01bcba67$23b69f60$12ae61cc@bwebster.capital.net>...
> I am looking for instructions on how to convert old mobil 110 watt micor
> radios to ham band. Eventually, I would like to link two together to
form
> a repeater ( unless one could be used somehow) please send help to the
> newsgroup. tnx N2ROQ@juno.com
>
>

# 2368. Re: HELP INFO.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: w9dmk@crosslink.net
Message-ID: <341125f8.2122785@news.crosslink.net>
Source record: 91240

On Sat, 06 Sep 1997 08:37:28 -0400, DIRK BUIS <dicky.rolo@wxs.nl>
wrote:

>
>Would like to know if a ham radio can communiquate with a s.s.b.
>radio?Is there a way to communiqate to my brother on a fishing ship in
>the atlantic and using a single side band?Is it possible tru the
>internet or relay station?
> many thanks SARA..
>
I believe you are confusing the issues of technology and the issues of
legality.

Technically, the equipment used by amateurs ( hams ) can communicate
with an SSB radio - whatever form of SSB radio you have in mind. I
presume that you are speaking of a CB radio of the SSB type, or some
SSB radio in some legitimate service, such as Marine Radio.
Technology-wise there's no problem, because a large percentage of hams
operate in the SSB mode. So, aside from all the usual problems of
radio communication, such as propagation conditions, static,
interference, etc., it is possible.

Legally, however, operators in the amateur service cannot communicate
with other services (except in very specific circumstances outline in
FCC regulations). In other words, hams may not communicate with CB
operators or Marine Radio operators, even though they may be capable,
because the FCC doesn't permit it.

I have seen advertisements for satellite links into the Internet.
These take the place of the usual connections via Modem and telephone
lines. It's rather an expensive way to go. Ship to Shore radio, which
is a means of linking to land-based radio stations that can connect
into the telephone system, would be more practical for a limited
number of conversations.

73 de w9dmk

# 2369. Re: Dan's 80m Centenial SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Dale Wentz <dwentz@accessus.net>
Message-ID: <01bcbaad$ff99a860$a32404d0@dragon.mcs.accessus.net>
Source record: 91241

check out the QRP Inet group, many there have build the unit and are happy
with it. http://www.Lehigh.EDU/lists/Archives/qrp-l/

73's de kb9jja/dale
http://users.accessus.net/~dwentz

kusnadi <kusnadi@u.arizona.edu> wrote in article
<5un8kf$r38$1@news.ccit.arizona.edu>...
> Hi,
> I'm wondering if anybody has had any experience with this kit, i.e.
> its design (IF filter etc), performance (e.g. stability) ?
> Any comment would be appreciated. Thanks.
>
> 73
>
> kc7zaq
>

# 2370. Re: Jpole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: fireman@netrover.com
Message-ID: <19970906094908348 45@trois63.netrover.com>
Source record: 91242

Michael Serowik <michael77@earthlink.net> wrote:

> hi,
> I remember seeing article about making a j-pole out of copper pipe, does
> anyone happen to have the article or know how to make one?
>
> if so please reply
>
>
> mike - n3bsq

You might want to check this URL: http://www.inlink.com/~raiar

That's where I got the plan for my J-Pole.

73

Stay safe !

Jean-Pierre

---

Jean-Pierre Magnan
Firefighter
Notre-Dame-du-Mont-Carmel FD, Qu&#65533;bec, Canada G0X 3J0
Soon to be VE2 or VA2
email: fireman@netrover.com
URL: http://netrover.com/~fireman (Sorry but it's in french for now)

The opinions expressed above are mine, all mine.

# 2371. List Of Stamp Applications [970906]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: cjX@hth.com
Message-ID: <34116861.70104718@news.buller.se>
Source record: 91243
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
Here is the latest index of L.O.S.A. It includes almost 100 ideas of
what you can use your BASIC Stamp's for (many with code). You can
download the complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 Whats is L.O.S.A all about ?
--------------------------------

I started to compile L.O.S.A because I know there are lots of great
ideas and many problems that are solved with the BASIC Stamp and the
main purpose of this list is to get an idea of what other people are
using their BASIC Stamps for and maybe get some inspiration or hints.

1.1 How can I contribute to this list ?
---------------------------------------

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
-------------------------

> = Indicates a new or updated application since last time.

# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
# 004 Scrolling LED Sign
# 005 Tone Decoder
# 006 Pager
# 007 HexWalker Mobile Robot
# 008 Robo Bug
# 009 EXPBOT Robot controlled by Stamp
```

# 010 Andrews Ever Evolving Lego Robot
# 011 Factory Monitoring System
# 012 Wave to the Cats/Desk Temperature
# 013 Gamer's Die Roller
# 014 Stamp II Serial I/O
# 015 Voice and CW Fox Hunt Transmitter IDer
# 016 Lift (elevator) Controller
# 017 Paging with the Stamp
# 018 Switching Sytem
# 019 Door Entry Card Reader
# 020 Telephone Card Reader
>
# 021 DTMF Decoder
# 022 Ion chamber radiation monitor
# 023 Barn Monitor
# 024 Dallas one-wire interface
# 025 Sculpture control
# 026 Commercial clothes dryer controler
# 027 Morse Code Keyer
# 028 Traffic Light Controller
# 029 Automotive Lamp Control
# 030 Single Switch Scanning Device for Disabled
# 031 Bell timer for school bell control
# 032 RIMS controller for beer making
# 033 Stamp 1 and ISD 25XX Sound Chip Application
# 034 Camera Wireless Controller
# 035 Simple Battery Check using the BS2-IC
# 036 Photocell MIDI Controller
# 037 DCF-Clock
# 038 Radio-controlled Digital Clock
# 039 Weather Station I
# 040 Private Aid To Navigation
# 041 Stamp II in Space
# 042 MAT32 long integer math routines
# 043 Distinctive Ring Detector
# 044 Extended Stamp Memory
# 045 Debate Stoplite
# 046 Digital nametag
# 047 ST506 Disk Seeking Demo Controller
# 048 Robot: Multi-Stamps Communicate via Shared Memory
# 049 NiMH Battery Charger/Conditioner
# 050 555 Timer as A/D Converter
# 051 Bits of Light
# 052 Process Control
# 053 Near Space Capsule
# 054 PIC Debugger
# 055 DS1820 Temp Sensor
# 056 Air muscle hexapod robot
# 057 Lights
# 058 Caller-ID Interface
# 059 Wind speed and wind direction measurement device

# 060 Calibrated Dust Feeder for Air Cleaner Tests
# 061 Use of a Serial EEPROM as a Lookup Table
# 062 Displaying Quantities on a 200 mV Panel Meter
# 063 Programmable Proportional Air Valve
# 064 Basic Stamp machine control application
# 065 Compass Interface for Navigation
# 066 Truck + ? identification
# 067 Meteoreological Station
# 068 Stamp Controls Electronic Tester for flex circuits
# 069 Game Timer
# 070 Photoghrapic light meter
# 071 Data System Remote Control on unmanned aircraft
# 072 Speaking Instructor
# 073 Small Moblie Robot
# 074 R/C helicopter altitude control unit
# 075 Automobile Rally Odometer Interface to Laptop
# 076 LCD drivers
# 077 Stamp I / PC Interface Demo
# 078 Stamp Photo Meter
# 079 Stiquito(TM) 97 HexaPod Robot
# 080 XRaCS DTMF Radio X10 Control with Voice Response
# 081 Interfacing the Basic Stamp 2 with I2C Devices
># 082 Weather Station
# 083 Maxxum 7000 Remote Release Widget
# 084 Xs And Os games for college project
# 085 Stamp II Mouse Emulator (Version 6)
# 086 Basic Alarm System
# 087 Interfacing with a Printer
# 088 Dinosaur Quiz Game
# 089 Chemical Injection System
# 090 RS-232 connections between Stamp and host
# 091 Video Character Overlay Generator Controller
# 092 Suction tube depth measurement display
># 093 Electronic Compass with Basic Stamp 2
># 094 Event Logger with 8K 24C65 I2C memory
># 095 Fixing the depth of a suction-pipe with the BS 2
># 096 Superchaser
># 097 Corky'z Robotz

Have fun,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

# 2372. Re: Dan's 80m Centenial SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: "P. Singh" <nospam@screwed.net>
Message-ID: <341130A6.6C3E@screwed.net>
Source record: 91244

It seems like allied.avnet has a few motorola PLL chips in
stock:-

MC145106P( a ridiculous CB radio PLL with Fmax = 4 MHZ !?!,
N counter=9bits),
MC145151P( fairly good PLL),
MC145162P( This seems like a great dual PLL with
60 MHZ/14 bit counters but available qty=0 currently!?!)
MC145191(1.1 GHZ PLL! WOW!)

The few MC145106 and MC145151 chips that I have were bought from
Jameco a few years ago( I think in 1995) .

It seems like that digikey has One 2GHZ National Dual PLL in stock
for $16 or so, but who would really want that!

Yes, I am trying to order a few more from guess who
( Arrow/Schweber !).

Those guys have the ridiculous policy of talking to only
companies!
It is really ridiculous as these guys do take credit-card
orders.
I dont know why they make it so hard to get sample quatities
of chips. They should actually send out samples free like
National Semiconductor does!

Arrow/Schweber has almost every chip that I want like:-
Ne602, MC3359, MC13055, MC145162, MC145170, MC145173, MC145200 etc
plus really good and easily programmable cheap and powerful
microcontrollers like ATMEL 89C2051/24.
Why bother with PIC if you can get a 24 MHZ 16 IO line + UART
microcontroller with 2 K byte FLASH and 128 BYTE RAM for $4.90!

I guess that they will send me my chips eventually!

Some people have told me about trying with Newark. They might be
worth a shot as well!

Well, maybe one day I will float a company just for the purpose of
buying chips from these large monster's of distributors to sell
to people who want samples !!!

73

PS: My reply address is (singhpk@exit109.com).
It is the spammers who are really the screwed !

Russ Renaud wrote:
>
> "P. Singh" (nospam@screwed.net) writes:
> >
> >
> > I think that this thing could use a good simple synthesizer
> > using MC145106 and a microcontroller. I am currently working
> > on the same.
> >
> >
>
> P. Singh;
>
> Have you found a source for the 145106 where you don't have to buy a
> minimum order? I tried Motorola in Toronto for a sample, but I guess
> my technique needs some work.
>
> e-mail me direct, I haven't your e-mail address. (Unless your domain
> really IS screwed.net)
>
> 73 de va3rr@amsat.org

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2373. Re: Dan's 80m Centenial SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <34117794.5AA2@calweb.com>
Source record: 91245

Dale Wentz wrote:
>
> check out the QRP Inet group, many there have build the unit and are happy
> with it. http://www.Lehigh.EDU/lists/Archives/qrp-l/
>
> 73's de kb9jja/dale
> http://users.accessus.net/~dwentz
>
> kusnadi <kusnadi@u.arizona.edu> wrote in article
> <5un8kf$r38$1@news.ccit.arizona.edu>...
> > Hi,
> > I'm wondering if anybody has had any experience with this kit, i.e.
> > its design (IF filter etc), performance (e.g. stability) ?
> > Any comment would be appreciated. Thanks.
> >
> > 73
> >
> > kc7zaq
> >

Hi Folks,
Re parts and such. For Atmel, try Marshall's webb site, best one I've seen in a long time (they have the data sheets ready for download along with pricing and availability. Order via the net is easy and delivery is quick. Prices are usually 100 piece break (Signetics stuff) even on single items as near as I can tell. Not sure on the Atmel as their micros are so cheap to begin with. Did notice the ATMEL 8751 equiv but with flash rom is only $13 in singles..Jameco wants more than that for a NMOS 8751 of unknown manufacture.. Used them recently to buy Signetics/Philips I2R stuff.. good prices there as well

73 es good hunting
Bob, KE6F

# 2374. Re: Dan's 80m Centenial SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: "P. Singh" <nospam@screwed.net>
Message-ID: <34114BDF.472B@screwed.net>
Source record: 91246

I tried the Marshalls website and tried to order online
Atmel AT89c2051/24/PI. These are the problems I had:-

1. Minimum order quantity is 18.
2. When I say that I want 18 chips it says that it is going
to backorder it, though the stock search shows
that these chips are available.
3. The online registration fails with error code "customer 0001"
whatever that means. Wants me to email their webmaster . I
might as well do that.
4. I think that behind the pretty flash screens and all, they
really dont have anything that works on their website!

Yes, If you look at the terms and conditions, they have one clause
which looks like a NDA to me. They say that you should not disclose
parts informations like datasheets to third party.

Maybe they will ask anybody who wants to buy their parts and use them
to sign an 100 page NDA! (Kill all the lawyers !)

Bob Miller wrote:
>
> Dale Wentz wrote:
> >
> > check out the QRP Inet group, many there have build the unit and are happy
> > with it. http://www.Lehigh.EDU/lists/Archives/qrp-l/
> >
> > 73's de kb9jja/dale
> > http://users.accessus.net/~dwentz
> >
> > kusnadi <kusnadi@u.arizona.edu> wrote in article
> > <5un8kf$r38$1@news.ccit.arizona.edu>...
> > > Hi,
> > > I'm wondering if anybody has had any experience with this kit, i.e.
> > > its design (IF filter etc), performance (e.g. stability) ?
> > > Any comment would be appreciated. Thanks.
> > >
> > > 73
> > >
> > > kc7zaq
> > >
>
> Hi Folks,
> Re parts and such. For Atmel, try Marshall's webb site, best one I've
> seen in a long time (they have the data sheets ready for download along

> with pricing and availability. Order via the net is easy and delivery
> is quick. Prices are usually 100 piece break (Signetics stuff) even on
> single items as near as I can tell. Not sure on the Atmel as their
> micros are so cheap to begin with. Did notice the ATMEL 8751 equiv but
> with flash rom is only $13 in singles..Jameco wants more than that for a
> NMOS 8751 of unknown manufacture.. Used them recently to buy
> Signetics/Philips I2R stuff.. good prices there as well
>
> 73 es good hunting
> Bob, KE6F

--
---
Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2375. Re: FS: Tube Equipment/ Parts/ Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Dick Koehl <erk@inde.mct.anl.gov>
Message-ID: <34118A80.215E@inde.mct.anl.gov>
Source record: 91247
Cross-posted to: rec.music.makers.marketplace,alt.guitar.amps,rec.radio.amateur.homebrew

```
Dan Mikos wrote:
>
> Ross Lipman wrote:
> >
> > 9/5
> >
> > For Sale:
> >
> > Sherwood S-1000-III mono Integrated amp
> > -excellent working and cosmetic condition
> > -2 x 7868- NOT included
> > -2 x 6eu7 / 1 x 6k11
> > -has 2 mic inputs AND 4/8/16 ohm taps and 70v
> > -with metal case
> >
> > $40.00 + shipping
> >
> > Sherwood S-3000-III FM-stereo capable Tuner
> > -excellent working condition; in good alignment; very sensitive;
> > accurate tracking
> > -no MPX-operating mono/ proprietary jack easily modded into universal
> > MPX out
>
> > $80.00 + shipping
> >
> >
> >
> >
> > Please reply to:
> >
> > rl1856@ix.netcom.com
> >
> > Thank you,
> >
> > Ross Lipman
> >>
>
> >
> >.
> >
> Does the Sherwood cover the 160 - 10 meter band ?
> Also what modes does it operate on ?
Looks like an FM stereo receiver and amp, Dan. 88-108 Mhz.
```

Dick, K9FFK

# 2376. Forward: Want 450TH by WA6BZS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: John WB6GHA <occupant@ns.net>
Message-ID: <01bcba8f$2d910660$76f277cc@packard-bell>
Source record: 91248
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Please pass this to the reflectors you subscribe:

I have a builder friend that has contributed a lot to our
repeater
projects. He's a "real ham" in that as an Extra, he likes to
build his
own CW Amplifiers. He has noted that he needs a pair of 450TH's
for his
CW amplifier project. We came up with ONE new one.

If anyone has more (including a spare or two), I would be
willing to pay
cash money to endorse the building part of the hobby for Ken.
We're
loosing the "real hams" that build equipment, and I want to
acknowledge
his help by buying what he can't afford.

Please contact me at wa6bzs@amsat.org if you have any 450TH's
that I can
buy with CA$H.

Thanks

Bill Hudson
6628 Penney Way
Carmichael, California
916-966-8400 (home - recorder if I'm not here)
wa6bzs@amsat.org

## 2377. car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: phastings <peabody@onramp.net>
Message-ID: <01bcbb09$22eeb3e0$0ec932ce@peabody.onramp.net>
Source record: 91249

Has anyone heard of pressing the PTT button on a 2-meter handheld (don't know which freq) and accidentally setting off car anti-theft alarms?

kd5avx
pepper

# 2378. HELP! HELP! My FT-51R

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: trex2000@txdirect.net
Message-ID: <3412d1e6.2065002@news.txdirect.net>
Source record: 91250

I recently attempted the "Mother of Mods" on my FT-51R. The mod appeared to work, but my ADMS-1 software would not. The software took a template fine, but gave me the error message (on HT screen) when I attempted to reload. Not being very satisfied with the reception with the hardware mod, I "undid" the mod. I then tried again to reload my freqs to the HT. Again I got an error message. I then manually entered my freqs, took a template via software, and found that the software had uploaded my freqs O.K., but did not include the tones I had entered. Transmission on the HT enabled me to discover that for some reason I had changed the radio into "Euro-Mode". Then, after doing the CPU reset (vfo+mr+2), I really found out I was in the "Euro-Mode". How do I get my HT out of "Euro" and into "USA"? Could my using the ADMS-1 (No version given, but copywrite ©95, SN 07950321) have caused these problems? Could my use of WIN95 have changed my software output or compatibility? (I did use both newer and older versions of CTL3DV2.DLL). My jumpers are set at original, not MARS/CAP, that is, JP 1,4, and 7 are closed. Can someone please help? Thanks in advance, Scott (KB5YOK)

# 2379. Want: 572B Tubes, old, weak or soft

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: John in Roseville <rtwod2@ns.net>
Message-ID: <01bcbb1f$e899b8e0$77f277cc@rtwodtwo>
Source record: 91251
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Want: 572B Tubes, old, weak or soft
I'm looking for some 572B tubes that old or weak or soft and the
filament is ok.

Let me know what you have and how much you want.

John in Roseville CA.
mailto:rtwod2@ns.net
http://www.ns.net/~rtwod2/
"Never drive faster than your guardian angel can fly"

# 2380. FS: MFJ-1278 TNC with expanded mailbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: "Peter C. Buehner" <kc8er@harborcom.net>
Message-ID: <01bcbb05$d7ae82a0$8bb804d0@default>
Source record: 91252

For sale:
MFJ-1278 TNC with 128K mailbox.

Modes: packet , RTTY, AMTOR, color sstv, 16 gray scale wx FAX,
CW reader, keyer, Navtex. Built-in tuner indicator. Packet mailbox
has extended memory and can be programmed to a separate callsign.
Excellent condition. All manuals & cables. Asking $140 or best offer.

Send Email to: kc8er@harborcom.net
(216)-354-4538

de Pete, KC8ER

# 2381. Re: car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: NOSPAMtwoway@scoden.comNOSPAM
Message-ID: <5ust3c$4pv$3@decius.ultra.net>
Source record: 91253

I do it all the time with my 220 mhz acsb commercial
radio-it's fun. my cellphone also sets my wifes alarm off if
I leave it turned on inside the car. (it happens when it
registers with the system)
Scott
KA1CLX

In article <01bcbb09$22eeb3e0$0ec932ce@peabody.onramp.net>,
"phastings" <peabody@onramp.net> wrote:
>Has anyone heard of pressing the PTT button on a 2-meter
handheld (don't
>know which freq) and accidentally setting off car
anti-theft alarms?
>
>kd5avx
>pepper

# 2382. Re: Old chip data - LM3075 and LM3053

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Ack Thhpt! <SeeAddress@Sig.file.com>
Message-ID: <3412220C.118C@Sig.file.com>
Source record: 91254

Richard Burden wrote:

> Does anyone know what a LM3075 or LM3053 is?

LM3053 - Differential RF/IF Amplifier
Pin 1 - Input high
Pin 2 - Current source base
Pin 3 - Substrate and case
Pin 4 - Current source emitter
Pin 5 - Input low
Pin 6 - Output high
Pin 7 - AGC input
Pin 8 - Output low

LM3075 - FM Detector/Limiter and Audio Preamplifier
Don't have a pinout but it doesn't have a signal strength output.

---
| Ack Thhpt! ack(at)netins.net |
| http://www.netins.net/showcase/ackthhpt!/ackthhpt.htm |
---

"No man whose testicles have been crushed or whose organ has
been cut off may become a member of the assembly of the Lord."
-- Deuteronomy 23:1

---

## 2383. Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: John in Roseville <rtwod2@ns.net>
Message-ID: <01bcbb1f$4f0f14e0$77f277cc@rtwodtwo>
Source record: 91255

Q: Will a 572b take 3500 volts?

I was just wondering if I can run my 572b tubes
with 3500 volts on the plate. They are rated at
2750 volts max.

73 John

--

John in Roseville CA.
mailto:rtwod2@ns.net
http://www.ns.net/~rtwod2/
"Never drive faster than your guardian angel can fly"

## 2384. Re: car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <3411FFC2.BE4@phoenix.net>
Source record: 91256

```
phastings wrote:
>
> Has anyone heard of pressing the PTT button on a 2-meter handheld (don't
> know which freq) and accidentally setting off car anti-theft alarms?
>
> kd5avx
> pepper
Yes
```

# 2385. Re: data sheet site?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Nuno Sucena Almeida <slug@pc1.local.aeminium.pt>
Message-ID: <5urb77$t19@pc2.local.aeminium.pt>
Source record: 91257

Bob Liesenfeld <wb0poq@visi.com> sabiamente escreveu:
> A bit off topic but.... Anyone know a site to DL data sheets on Intel ICs?

Imagine that you have a 2CD's set with a lot of Intel Information,
DataSheets, Software Development, etc etc. Wouldn't that be great?
Check http://developer.intel.com/ and order the "Developers' Insight
CD-ROM"
for *FREE*

every 4 months !
bye

--
To reply by e-mail use *slug* as user and *cygnus.ci.uc.pt* as domain.
My web page & PGP sig are located at the same place.
Nuno Sucena
CT1FOX CQG9304 CQM9228 Eng.Electrote'cnica FCTUC

# 2386. Need "Scope 4 PC" Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: Nuno Sucena Almeida <slug@pc1.local.aeminium.pt>
Message-ID: <5urcjb$t19@pc2.local.aeminium.pt>
Source record: 91258
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello,

some days ago i posted about wanting to make a TV CRT + some spare parts to make a scope, just for <1MHz use. But the majority of the guys who answered told me to buy/make a A/D to be attached to a PC to work as a scope.
Some time ago i found a schematic and program called scope at the Xforms WEB site ( i work with linux/X ). I haven't tested it yet but what i'm planning to do is a some better program with spectral analyzes, voltage indication, etc but the schematic doesn't include some kind of memory, which would be required to increase the BW ( miker suggestion ) and I think It would work better on a Unix Multitasking system like linux with one attached.
Now, what I want , beg, please please please :) is a good schematic or guidelines, web pages, docs , anything that would be usefull to me to make it work. ( miker suggested to use Cache memory but are there any standards for that kind of memory? I have some here, but some "normal" static RAM wouldn't do the job? And which A/D would you advise? )
I'll start the project late setember due to some Exams.
Thank you!

--
To reply by e-mail use *slug* as user and *cygnus.ci.uc.pt* as domain.
My web page & PGP sig are located at the same place.
Nuno Sucena
CT1FOX CQG9304 CQM9228 Eng.Electrote'cnica FCTUC

# 2387. Re: Shortwave RX Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-06 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <341127fb.77419833@news.atl.bellsouth.net>
Source record: 91259
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Fri, 05 Sep 1997 12:14:39 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>laura halliday wrote:
>>
>> Why split hairs?
>
>There is no hair splitting. I am just reporting what I know about the
>suject, for what it may be worth. The sarcasm is not appreciated.

My, my, overly sensitive today aren't we?

I think Laura is correct. For any *reasonable* modern HF receiver,
the instances where atmospheric noise doesn't dominate are so
exceedingly rare that they can be ignored. As I noted in another post
listing the sensitivity of a selection of (inexpensive) SW receivers recently
reviewed in QST, modern SW receivers have a very low MDS, nearly
on a par with better VHF+ equipment. I don't think even you would
suggest that HF atmospheric noise levels ever fall below those experienced
at VHF+.

The acid test is very simple to perform, of course. If connecting the
antenna results in no discernable change in noise level, the receiver
is internal noise limited and can benefit from a low noise preamp. If
there is a change, a preamp won't help. Some (perhaps many) older
vacuum tube receivers fail this test, but in general, today's SW receivers
(even inexpensive ones) pass the test, even on 10m in quiet conditions.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 2388. RC Car Modulation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: "Robert W. Brewer" <rbrewer+usenet@op.net>
Message-ID: <m3yb59srci.fsf@monet.op.net>
Source record: 91163

Does anyone have any information or pointers to the
modulation used by a standard radio control car transmitter?
Thanks for any help.

-Rob KE3TI
--
Robert W. Brewer PGP RSA 2048-bit Key ID: 03E0E635
Jesus rules! Fingerprint: 6327 8034 7BDA D144 B40C C5E2 F760 13BB

# 2389. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970907040601.AAA11879@ladder01.news.aol.com>
Source record: 91164

In article <01bcbb1f$4f0f14e0$77f277cc@rtwodtwo>, "John in Roseville"
<rtwod2@ns.net> writes:

>I was just wondering if I can run my 572b tubes
>with 3500 volts on the plate. They are rated at
>2750 volts max.

If you know the max rating, why ask this question. Obviously the
voltage exceeds specs. If all you have is 3500 volts, use a
resistor to drop the voltage down. The plates on 572s don't draw
so much that you can't find a reasonable value resistor to drop
the voltage down to about 2600 volts.
-art clemons-

## 2390. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19970907034600.XAA16942@ladder02.news.aol.com>
Source record: 91165

john
ive run 3500 volts on 4 of them in a old home brew
just cange zener diode voltage so idle current is
within limits...ran them hard on 11 meters for two years
150 watts drive good luck
kf4toh

## 2391. Re: data sheet site?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcbb29$f73aa440$cf90f5ce@wa6vse>
Source record: 91166

Bob Liesenfeld <wb0poq@visi.com> wrote in article
<340F7487.636E4451@visi.com>...
> Hi gang,
> A bit off topic but.... Anyone know a site to DL data sheets on Intel ICs?
> Thanks
> --
> Genuine E-mail From the Land of the Everlasting Icicle...
> Bob Liesenfeld
> wb0poq@visi.com

Did you ever consider trying http://www.intel.com ??????

(here's another hint ... try looking in the section called
"product info" )

Carl - wa6vse
wa6vse@fast.net

# 2392. * QRP and QRPp Mailing Lists at QTH.Net *

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <3412670B.48CE@primenet.com>
Source record: 91167

```
* QRP and QRPp Mailing Lists at QTH.Net *

Additional Information: http://www.qth.net

--

>>>> info qrp
QRP is a mailing list (reflector) devoted to the
discussion of QRP, low power amateur radio.

Conventional thinking considers 5 watts transmitter
output or less (10w PEP SSB) to be QRP operation.

QRPp is milliwatt operation (less than 1w).

* Low Power Amateur Radio
* Homebrew Equipment
* Backpacking and Outdoor Radios
* Equipment, Antennas
* Buy, Sell
* Anything QRP Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe qrp

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe qrp

To post information/questions to the list:

TO: qrp@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qsl.net

-----
>>>> info qrpp
QRPp is a mailing list (reflector) devoted to the
discussion of QRPp, low power amateur radio.

Conventional thinking considers 5 watts transmitter
output or less (10w PEP SSB) to be QRP operation.
```

QRPp is milliwatt operation (less than 1w).

* Low Power Amateur Radio
* Homebrew Equipment
* Backpacking and Outdoor Radios
* Equipment, Antennas
* Buy, Sell
* Anything QRPp Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe qrpp

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe qrpp

To post information/questions to the list:

TO: qrpp@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qsl.net

---
>>>>

## 2393. PCB DESIGN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: craig dickson <cbd@onaustralia.com.au>
Message-ID: <34126F10.5B1F76AB@onaustralia.com.au>
Source record: 91168

I AM LOOKING TO PURCHASE SOME PCB DESIGN SOFTWARE. CAN ANYBODY RECOMMEND
IN PARTICULAR PUBLISHER,

tHANKS CRAIG

## 2394. Super Keyer 3 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: bill.henderson@zetnet.co.uk
Message-ID: <34127679.7383223@news.zetnet.co.uk>
Source record: 91169

Hello

I have heard very good reports of the keyer supplied as a kit by Idiom Press, CA in USA.

Does anyone have their phone number? I've been trying but no luck so far.

Bill

# 2395. Re: Old chip data - LM3075 and LM3053

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: rburden@student.ecel.uwa.edu.au
Message-ID: <34128386.1232021@news.uwa.edu.au>
Source record: 91170

Thanks to every one who offered their advice and suggestions. In particular I'd like to thank Ack Thhpt whose definitive statement on the 3075 was just what I was after.

All those kind people who suggested Harris meant well, but the 3075 data did not appear to be on their site.

Many thanks,
Richard

---
Richard VK6FKB
"Nothing better than home-brew, except perhaps an absence of Spam"

## 2396. Dealing with Distributors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: dmoisan@shore.net
Message-ID: <34129395.3442140@news.shore.net>
Source record: 91171

"P. Singh" <nospam@screwed.net> wrote:
>Yes, I am trying to order a few more from guess who
>( Arrow/Schweber !).
>
>Those guys have the ridiculous policy of talking to only
>companies!
>It is really ridiculous as these guys do take credit-card
>orders.
Such is life in the electronics business. They're used to dealing
with large quantities, and a small guy is just a problem to them.
Unfortunately, for many interesting/useful chips out there, you have
to deal with these people somehow.

>I dont know why they make it so hard to get sample quatities
>of chips. They should actually send out samples free like
>National Semiconductor does!

>
>Arrow/Schweber has almost every chip that I want like:-
>Ne602, MC3359, MC13055, MC145162, MC145170, MC145173, MC145200 etc
>plus really good and easily programmable cheap and powerful
>microcontrollers like ATMEL 89C2051/24.
>Why bother with PIC if you can get a 24 MHZ 16 IO line + UART
>microcontroller with 2 K byte FLASH and 128 BYTE RAM for $4.90!

Yes, but how much does the development kit cost? I was at a trade
show some time back (Embedded Systems Conference East) and I saw (and
got databooks for) lots of interesting microcontrollers. Provided, of
course, I forked out $500 for the mandatory development kit. Not
good. I understand ATMEL is trying to beat on Microchip, so perhaps
their development requirements are now competitive. But you still
have to worry about *getting* the chip from a distributor who will
speak to you.

>Some people have told me about trying with Newark. They might be
>worth a shot as well!

I don't like Newark. I had an unpleasant experience with them when
they sent the wrong parts. They weren't malicious, just very
bureaucratic, disorganized and really hard to deal with.
I am told Hamilton-Hallmark is good to deal with but I haven't tried
them yet.

>
>Well, maybe one day I will float a company just for the purpose of
>buying chips from these large monster's of distributors to sell

>to people who want samples !!!

You could pull a Don Lancaster. Come up with a good company name and a story (for the guy on the phone who asks what you make). Use that persona to get yourself into any trade shows in your area (most shows will give you an exhibits pass for free.) As long as you present yourself professionally (not hard for most people) you shouldn't have a problem. Use the same trick to get trade magazines you're interested in. Also works on manufacturer's web sites to get yourself CD's. If you do this long enough, you *will* be professional.

Dave

>
>
>
>73
>
>
>PS: My reply address is (singhpk@exit109.com).
> It is the spammers who are really the screwed !
>
>
>Russ Renaud wrote:
>>
>> "P. Singh" (nospam@screwed.net) writes:
>> >
>> >
>> > I think that this thing could use a good simple synthesizer
>> > using MC145106 and a microcontroller. I am currently working
>> > on the same.
>> >
>> >
>>
>> P. Singh;
>>
>> Have you found a source for the 145106 where you don't have to buy a
>> minimum order? I tried Motorola in Toronto for a sample, but I guess
>> my technique needs some work.
>>
>> e-mail me direct, I haven't your e-mail address. (Unless your domain
>> really IS screwed.net)
>>
>> 73 de va3rr@amsat.org
>
>--
>-----------------------------------------------------------------------
>Sending me SPAM or Junk-Mail means that you have legally agreed to
>pay me US $500 for each SPAM or Junk-Mail message you send to me.
>-----------------------------------------------------------------------

| David Moisan, N1KGH Email: dmoisan@shore.net |
| WWW: http://www.shore.net/~dmoisan n1kgh@amsat.org |
| Invisible Disabilities Page: |
| http://www.shore.net/~dmoisan/invisible_disability.html |
| GE Superradio FAQ: |
| http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html |

## 2397. Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: bohnovic@worldnet.att.net
Message-ID: <341592c9.4187178@netnews.worldnet.att.net>
Source record: 91172

Anyone know what happened ot it? I tried to connect and it seems to be
gone. I searched for it and couldn't find anything.

I tried: http://www.1eagle1.com/commercial/pwdco/
and one other site and came up with nothing.

73..de John/K4WJ

John/K4WJ in Pembroke Pines, FL
K8PXG from 18 Jun 59 to 11 Feb 97
K8WJ from 12 Feb 97 to 07 Apr 97

# 2398. ATV / Sat. audio subcarrier spec?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5uub1o$lgb@mtinsc05.worldnet.att.net>
Source record: 91173

Looking for spec on satellite broadcast audio subcarrier....

I have a camcorder used for ATV. Usually I use the camera with a hbrew 420 Mhz NTSC AM Tx. The "tape basket" was damaged (got good deal!), so I (also) built in the basket area, a 900 Mhz FM ATV xmtter. For rx, I am using a hbrew down convertor feeding a (free) old LNA sat rx box (70Mhz IF) which provides video out... Obviously the sat rx box will demod audio too, but I don't know what it "expects" to see. Have checked around the net and found audio subcarrier frequencies of 5.4, 6.8, and 7.38 Mhz. What freq is appropriate? Modulation of subcarrier-AM/FM, deviation? The old sat rx box does have left & right "audio tune" controls...

Thanks, Woody

--
de Woody, WB4QXE, woody/white@worldnet/att/net (Non-spamers, change / to . )
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

# 2399. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Michael Tracy <mtracy@arrl.org>
Message-ID: <3412EBE2.7861@arrl.org>
Source record: 91174

John,
They moved to their own site a couple of months back. Try:

http://www.pwdahl.com/

73, Michael Tracy, KC1SX

# 2400. Re: Jpole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3412BB5D.198A@one.net>
Source record: 91175

Howard N. Lute wrote:
>
> Michael Serowik wrote:
> >
> > hi,
> > I remember seeing article about making a j-pole out of copper pipe, does
> > anyone happen to have the article or know how to make one?
> >
> > if so please reply
> >
> > mike - n3bsq
> Mr Moron's page or MYCAL's web site both have J-Pole plans...They are
> easy to build and tune...but you gotta' take your time when tuning.
> Basically it goes like this. The "J" has a little extra length down the
> backbone, that is your mounting only. The coax ground feeds the small
> part of the J, the coax "hot" feed the long part. Start with the two in
> opposition along those lengths, then "tune" only the "HOT" lead, up or
> down to get a close match. Then tune the long "J" pole up or down for a
> closer match...then re-tune the "HOT" lead...etc. etc. It works quite
> well.

This only works well if you're lucky.

There are two basic ways to feed a J-pole.

One uses the lower part of the J as a parallel-wire transmission line.
This is basically an end-fed Zepp arrangement. I've never done it, but I
expect you have to be careful with dimensions to get this to work right.
Arrow Antennas makes a J-pole of this type.

Most of the Ham literature describes using the lower part of the J as
a stuned stub. It's shorted at the bottom, and you need to experiment
(as described by Howard above) to find out where to connect the feed line
to the stub.

However, you should use a balanced feed -- not unbalanced coax. In my
experience, using an unbalanced feed yields a hard-to-tune J-pole whose
behavior is strongly affected by nearby metal objects, height above ground,
and other factors. It's easy to make a balun (about 26 inches of coax
bent into a U-shape -- see the handbooks), and I recommend it highly.

It doesn't matter which side of the stub you connect the center conductor
or shield of your feed line to. Most of the books show the center
conductor connected to the short side of the J and the sheild to the long
side. This seems odd, but it doesn't matter.

Before doing too much experimenting with the connection points, you should make sure the J is the right size for the frequency you want. Connect the feed line to the recommended points on the stub (usually about 4.5 inches up from the bottom) and measure the SWR across the band. You may find that the minimum SWR is not at the center of the band (or wherever else you want it). Adjust the length of the long side of the J so that the SWR minimum is where you want it before you spend time adjusting the feed points. The location of the feed points on the stub affects the the value of your minimum SWR but not where it occurs in the band. Small changes can have a big effect, so take it slow.

73

Rich W2RG

## 2401. FS: NOS, new tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <5uujn3$bnv$24@ha1.rdc1.occa.home.com>
Source record: 91176

NEW TUBES: New Old Stock (NOS)
Tube Cost
**** ****
1AD4 $1.10
1T4/DF91 $0.80
5R4WGB $2.00
5U4G USA $15.00
5U4G Eastern Europe $5.00
5V4G RCA $7.10
6AG7 RCA $2.00
6AS8 $1.50
6AZ8 Philips $2.20 (Min. Qty 100)
6B4G $22.00
6BX7GT RCA $6.10 (black plate)
6C8G $2.10
6CB6A $1.20
6EW6 $1.20
6F6 $3.10
6H6 RCA $0.50
6J6WB $0.75
6K8 $2.10
6L6WGB Philips $15.00
6L6GC Eastern Europe $3.50
6LB6 $16.00
6LF6 $33.00
6X9/ECF200 $1.80
12AT7 Sylvania $4.10
12AU7A $3.75
12AX7 Westinghouse $7.50
12AX7A $7.50
12BA6 GE $1.80
12BH7A Eastern Europe $6.50
12BH7A USA $12.00
12BY7A $6.50
39/44 RCA $1.80
50A1 $20.00
80 (ST shape) $10.00
84/6Z4 RCA $2.10
572B/T160L Centron $77.00
572B Chinese $50.00
604 $75.00
809 $10.20
811A Chinese $10.00
811A USA $30.00

1626 Sylvania $2.10
JAN 5687 Tung-Sol $4.50 (black plate)
JAN 5751 GE $2.10
JAN 5751 GE $7.50 (black plate)
5829WA $2.50 (Min. Qty 100)
5844 $1.25
5933 (807) Sylvania $8.10
6082A RCA $9.50 (black plate)
JAN 6072 GE $8.50 (black plate)
6146 GE $16.00
6146 Chinese $11.00
JAN6922 Sylvania $2.10 (Min. Qty 100)
7062/180CC Amperex $3.10 (Min. Qty 100)
7199 $16.00
7788 $18.00
3-500Z Eimac $130.00
3-500Z Penta $85.00
3-500C Chinese $95.00 (carbon plate)
EL84/6BQ5 $2.80 Eastern Europe

Shipping FREE in USA on orders of $10.00 or more,
shipping on orders under $10.00 in USA $3.00
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

## 2402. Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <34130311.42B9@antispam.trader.com>
Source record: 91177

I've got a B+K 1479B, 30MHz, dual trace scope that I'd love to
find the docs for. I'd also like to build an analog prescaler
in the divide by 200 range. Any suggestions?
--
Elder - Westminster Presbyterian
TRA #2693
N9VEM
Remove antispam. to reply

# 2403. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: nospam <nospam@screwed.net>
Message-ID: <3412BA7D.2D3A@screwed.net>
Source record: 91178

Osciloscope prescaler! WOW !

ME TOO !!! (like aol idiots)

Well,

You might be able to build a mixer which could convert
30-60 MHZ range to 0-30 MHZ but it is just not worth it.

Get a better scope or get a life !

Dennis Erwin Thurlow wrote:
>
> I've got a B+K 1479B, 30MHz, dual trace scope that I'd love to
> find the docs for. I'd also like to build an analog prescaler
> in the divide by 200 range. Any suggestions?
> --
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM
> Remove antispam. to reply

--
---
For you automated email spammers out there, here's
the email addresses of the current board of the
Federal Communications Commission:

Chairman Reed Hundt: rhundt@fcc.gov
Commissioner James Quello: jquello@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Rachelle Chong: rchong@fcc.gov
And let's help you send some spam to the USPS, too:
customer@email.usps.gov

Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2404. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3412F8B0.5CC7@kfa-juelich.de>
Source record: 91179

Dennis Erwin Thurlow wrote:
>
> I've got a B+K 1479B, 30MHz, dual trace scope that I'd love to
> find the docs for. I'd also like to build an analog prescaler
> in the divide by 200 range. Any suggestions?
> --
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM
> Remove antispam. to reply
I was planning to email you a reply but I have stopped doing so for
persons posting with an "antispam" trick in their addresses. If you
can't be bothered by the tiny trouble with the spam you can't be needing
help very badly.

Bob

## 2405. Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: AMDX@worldnet.att.net
Message-ID: <5uuv41$5nj@bgtnsc02.worldnet.att.net>
Source record: 91180
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Where did the term HAM come from? When did it come to popular use?

Thanks for the input.
Mike Knowlton

## 2406. FS: tubes pulled from surplus

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <5uuuqh$15i$24@ha1.rdc1.occa.home.com>
Source record: 91181

Used Tubes, Pulled from Surplus Equipment, untested,
Priced accordingly, Substantial quantities available:

Type Price Each
**** **********
0A2 $0.75
1S5 $0.75
1T4 $0.75
6AH6 $0.50
6AL5 $0.50
6AN8A $0.75
6AU6 $0.50
6AU6A $0.50
6AV6 $0.75
6CB6 $0.50
6CL6 $0.75
6J6 $0.50
6X4 $0.75
12AT7 $2.00
12AU7 $2.00
12AU7A $2.50
12AX7A $2.50
12BH7A $3.00
35Z5GT $1.00
5651A $0.75
5963/12AU7A $2.50
6080 $2.50
6201/12AT7 $2.00
8068 $10.00
8136 $0.75
8532W $0.75

Shipping FREE in USA on orders of $10.00 or more,
shipping on orders under $10.00 in USA $3.00
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,

or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

## 2407. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Doran Platt <jeepp@erols.com>
Message-ID: <341316A0.3A2DFE99@erols.com>
Source record: 91182
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

one of my bosses in the past (who hated hams for some reason) said the
term ham is what they are... half a pigs *## (posterior)
AMDX@worldnet.att.net wrote:

> Where did the term HAM come from? When did it come to popular use?
>
> Thanks for the
> input.
> Mike Knowlton

# 2408. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <341317DF.5FC2@ix.netcom.com>
Source record: 91183
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

AMDX@worldnet.att.net wrote:
>
> Where did the term HAM come from? When did it come to popular use?
>
> Thanks for the input.
> Mike Knowlton
---
Hi Mike - for what it is worth -- see URL:
http://pw2.netcom.com/~ac6v/pageal.html#OH

Also of interest perhaps -- some other Ham traditions, ergo

Origin of 73 -- Via Charles A. Wimer KC8EHA

Origin of the Word "HAM" -- via Gerry Crenshaw, WD4BIS

Wouff-Hong and the Rettysnitch -- By L. B. Cebik, W4RNL

Slims, Pirates and Bootleggers

With a bit of Humor sprinkled in.

73
Rod Da Ham
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

## 2409. Wanted: "Penetrator Clips" like the ones on a phone line test set.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: John in Roseville <rtwod2@ns.net>
Message-ID: <01bcbbd4$c53e8140$24f277cc@rtwodtwo>
Source record: 91184
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Wanted: "Penetrator Clips" like the ones on a phone line test set.
I'm looking for some "Penetrator Clips" like the ones on a phone
line test set. They look like alligator clips but have a pin
inside to poke through a insulated wire.

John in Roseville CA.
mailto:rtwod2@ns.net
http://www.ns.net/~rtwod2/
"Never drive faster than your guardian angel can fly"

# 2410. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <34132358.48C4@ix.netcom.com>
Source record: 91185
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Doran Platt wrote:
>
> one of my bosses in the past (who hated hams for some reason) said the
> term ham is what they are... half a pigs *## (posterior)
---
Sounds like your boss of the past had his head attached to the other end
of the pig!!

If per chance you run in to your old boss -- tell em that several tens
of thousands of victims of earthquakes, floods, fires etc, UNEQUIVOCALLY
DISAGREE.

Hope all else is well in Monrovia Md.

73
Rod
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

## 2411. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <0179hCAzzvE0EwcS@pacsat.demon.co.uk>
Source record: 91186

In article <3412F8B0.5CC7@kfa-juelich.de>, Bob Mueller <r.mueller@kfa-juelich.de> writes
>> Remove antispam. to reply
>I was planning to email you a reply but I have stopped doing so for
>persons posting with an "antispam" trick in their addresses. If you
>can't be bothered by the tiny trouble with the spam you can't be needing
>help very badly.
>
>Bob

Thats rather childish of you.

This person has decided he does not wish to receive junk email, and to be perfectly honest, who does.

The antipspam trick is his way of getting round receiving it. Whats wromg with that? Are you so lazy that you can't remove it from the address?

I would say that if you think like this then he can do without your help. He'd be better off.

Sic, what ever happened to amateur spirit?

73 Simon GM4PLM

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

## 2412. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <5uvfb5$7mq@bgtnsc03.worldnet.att.net>
Source record: 91187
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Doran Platt wrote:
>
> one of my bosses in the past (who hated hams for some reason) said the
> term ham is what they are... half a pigs *## (posterior)
> AMDX@worldnet.att.net wrote:
>
> > Where did the term HAM come from? When did it come to popular use?
> >
> > Thanks for the
> > input.
> > Mike Knowlton

Yeah! have you ever been to Dayton? 75% of us are FAT...73

# 2413. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: dnorris@nospam.k7no.com
Message-ID: <341523a5.1844305@news.dancris.com>
Source record: 91188
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Doran Platt <jeepp@erols.com> wrote:

>one of my bosses in the past (who hated hams for some reason) said the
>term ham is what they are... half a pigs *## (posterior)
>AMDX@worldnet.att.net wrote:
>
>> Where did the term HAM come from? When did it come to popular use?
>>
>> Thanks for the
>> input.
>> Mike Knowlton
>
>

I tend to believe to old tale that it comes from a british accented
(cockney?) hamateur radio operator.

cdn

C. Dean Norris, K7NO
e-mail to dnorris@k7no.com
Due to a lack of qualified trumpet players,
the end of the world has been postponed 2 days!

# 2414. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: miker <mreiney@SPAMNOThevanet.com>
Message-ID: <341345BE.7AA9@SPAMNOThevanet.com>
Source record: 91189

nospam wrote:
>
> Osciloscope prescaler! WOW !
>
> ME TOO !!! (like aol idiots)
>
> Well,
>
> You might be able to build a mixer which could convert
> 30-60 MHZ range to 0-30 MHZ but it is just not worth it.
>
> Get a better scope or get a life !
>

If you don't understand the question, you should ask for clarification
instead of posting instults worldwide.

--
Please remove NOSPAM from return address before replying.

## 2415. WTB: Meter movement for Knight Kit T-60

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: kr4wm@sccoast!.net
Message-ID: <MPG.e7d2dd0840d718e9896c1@news.infoave.net>
Source record: 91190

Shucks, I know it's not a big-ticket item! But I do need one. Or at least for somebody to tell me what the meters correct current rating is- along with a source for replacement edge-type meters of it's size. THANKS- Web

kr4wm@sccoast!.net
remove the ! to reply

# 2416. CW-124/GRA-4 Antenna for trade ATTN: DXers SF Bay area

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Tom Montgomery <monty55@ix.netcom.com>
Message-ID: <34134DE3.1AA0A7C0@ix.netcom.com>
Source record: 91191
Cross-posted to: rec.radio.swap,rec.radio.amateur.dx,rec.radio.amateur.equpment,rec.radio.amateur.homebrew,alt.ham-radio.vhf.uhf,alt.ham-radio.hf,alt.ham-radio.dxing
Body handling: HTML body converted to readable text

I have in my garage a complete GRA-4 military antenna pole set made by Guytronics. I am a novice at antennas, so I am offering this great trade for someone in the SF Bay area.

I really need someone to manufacture for me a directional antenna with as much gain as possible for the 118-136 commercial aircraft band. (I don't know the term but I think it is a yagi) I need to stress the maximum amount of gain is needed. I saw one for sale at a hamfest but as usual it was cut for 2 meters.

I know there is someone out there in the SF Bay area that has the materials needed to make this for me. In return I will trade you the GRA-4 antenna.

I don't know how high it will go but I believe it is really up there. The fella I got it from says you need to put the guy wire rings at the 3rd, 5th, and 8th poles.

It is a complete set including the small sledge to pound it in. This is a heck of a deal for anybody in the SF Bay area that can call me back the fastest. I would really like to pick it tomorrow if possible. I will deliver the antenna set if you're close or meet you half way if not. It would be too expensive too ship anywhere

This is a great deal for someone that needs a set for weekend dxing to get your antenna really up high.

Call me and let me know how much gain I can expect from your design or one you already have..

Thanks,
Tom Montgomery

510-803-4130

I have in my garage a complete GRA-4 military antenna pole set made by Guytronics. I am a novice at antennas, so I am offering this great trade for someone in the SF Bay area.

I really need someone to manufacture for me a directional antenna with as much gain as possible for the 118-136 commercial aircraft band. (I don't know the term but I think it is a yagi) I need to stress the maximum amount of gain is needed. I saw one for sale at a hamfest but as usual it was cut for 2 meters.

I know there is someone out there in the SF Bay area that has the materials needed to make this for me. In return I will trade you the GRA-4 antenna.

I don't know how high it will go but I believe it is really up there. The fella I got it from says you need to put the guy wire rings at the 3rd, 5th, and 8th poles.

It is a complete set including the small sledge to pound it in. This is a heck of a deal for anybody in the SF Bay area that can call me back the fastest. I would really like to pick it tomorrow if possible. I will deliver the antenna set if you're close or meet you half way if not. It would be too expensive too ship anywhere

This is a great deal for someone that needs a set for weekend dxing to get your antenna really up high.

Call me and let me know how much gain I can expect from your design or one you already have..

Thanks,

Tom Montgomery

510-803-4130

## 2417. What's a good source for locating a 5 millihenry plate choke?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: kr4wm@sccoast!.net
Message-ID: <MPG.e7d2d02c2fe9d9b9896c0@news.infoave.net>
Source record: 91192

I need one for a Knight Kit transmitter....thanks- Web

Please respond to kr4wm@sccoast!.net
(remove the ! to e-mail)

## 2418. Lowfer Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <34138414.1286@primenet.com>
Source record: 91193

Lowfer Mailing List

Additional Information: http://www.qth.net

Lowfer is a mailing list (reflector) devoted to the
discussion of Lowfer, the 1750m band (160-190khz) and
the United Kingdom's new 73khz band.

* Monitoring Activities, Beacons, NDBs, etc
* FCC Part 15 Operation
* Digital Techniques
* Coherent CW, BPSK, DSP
* Natural Radio Signals
* Equipment and Antennas
* Construction, Commercial Gear, Modifications
* Anything Lowfer Related

To join the mailing list, send email:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe lowfer

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe lowfer

To post information/questions to the list:

TO: lowfer@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: n4js@qsl.net

## 2419. My ham stuff home page published

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Francis Lee <kitfai@asiaonline.net>
Message-ID: <3411A4D3.D2D@asiaonline.net>
Source record: 91260
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi hams,

My ham radio homepage published, the URL is
http://www.asiaonline.net.hk/~kitfai/ham.htm
. Feel free to visit it.

Rgds

VR2XKP

# 2420. Re: car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: Joe Orrico <eugene@loop.com>
Message-ID: <01bcbae9$320b5100$c13ed3cf@joe>
Source record: 91261

The Cheap Alarms are not designed with rf bypassing and go off in the presence of rf.
I've set off alarms of people on the freeway next to me, it really brings a confused look on the drivers face.

de Joe WB6HRO

# 2421. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-07 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970907022800.WAA09160@ladder02.news.aol.com>
Source record: 91262

>
>Q: Will a 572b take 3500 volts?
>
>

Sure. takes more bias, and they probably won't last as long. The
insulation is there.

W4ZCB

# 2422. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Brian Grier <reirgjb@ac.rnb>
Message-ID: <5v1dg7$muv@brtph500.bnr.ca>
Source record: 91113
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Barry O'Grady wrote:
>
> "John in Roseville" <rtwod2@ns.net> wrote:
>
> :AC6V <ac6v@ix.netcom.com> wrote in article <34132358.48C4@ix.netcom.com>...
> :> Doran Platt wrote:
> :> >
> :> > one of my bosses in the past (who hated hams for some reason) said the
> :> > term ham is what they are... half a pigs *## (posterior)
> :> ---
> :> Sounds like your boss of the past had his head attached to the other end
> :> of the pig!!
> :>
> :> If per chance you run in to your old boss -- tell em that several tens
> :> of thousands of victims of earthquakes, floods, fires etc, UNEQUIVOCALLY
> :> DISAGREE.
>
> Even though their lives were put at risk by amateurs playing two way radios
> and getting in the way of rescue workers?
>
> Barry

They're so cute when they put their foot in their mouth, all the way
to their kneecap ;)

Brian

# 2423. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Cecil Moore <cecil_a_moore@ccm.intel.com>
Message-ID: <341429EF.123E@ccm.intel.com>
Source record: 91114
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Ohrstal wrote:
> I tend to believe to old tale that it comes from a british accented
> (cockney?) hamateur radio operator.

Hi Dean, that's what my elmer told me in the early 1950's. Also there's
a word-origin column called "Word For Word" that appears in some
newspapers.
A column from years ago sez, "A 'ham' radio operator is certainly a play
on
the word 'amateur'. The term was coined in the 1920s."
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 2424. MICOR MANUAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: lewk4hr@erols.com
Message-ID: <34154ba3.5778834@news.erols.com>
Source record: 91115

Looking for Motorola Manual 688100E40.

73's
Lew

# 2425. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <34144906.DAA@kfa-juelich.de>
Source record: 91116

nospam wrote:
>
> hello everyone,
>
> I apologize for posting that bad response to that scope
> question.
>
> I guess that I just dont have a lot of patience left.
>
> But, the gist of the response was that there is no
> osciloscope analog prescaler in this world. What
> do you mean by a osciloscope analog prescaler anyway?
>
> The closest that I know to an scope analog prescaler is
> a sampling osciloscopes as made by Hp tens of years ago.
> They used some sort of chopper circuit in a sampling probe to
> sample a 1 GHZ repititive signal say at 100 MHZ or
> 10 MHZ I think. Not a very good thing to build either way.
>
> So, the next think you could do was to build an scope
> mixer as they say in the ARRL handbook. That is the
> suggestion I posted. But that shifts the spectrum and in no
> way is going to pre-scale it.
>
> God knows what that mixer will do to the waveforms.
> Didnt they say that multiplication (or mixer) in frequency
> domain will equal convolution in the(frequency) other domain.
> So, to get the original waveform back he will have to
> de-convolve the resulting waveform back. RIGHT.
>
> (You DSP geniuses can say something here.)
>
> But, the gist of this whole thing is that there is no real
> solution to this guys problem of making a 10 MHZ scope work like
> 1000 MHZ scope. If he needs a 1 GHZ scope, he will have to buy one.
> That is it.
>
> Well, he will probably be able to find some manuals for that scope
> anyway.
>
> That is what I think!
>
> My apologies again!
>

> Yes spam is a big problem!
>
> Bob Mueller wrote:
> >
> > Bob Mueller wrote:
> > >
> > > miker wrote:
> > > >
> > > > nospam wrote:
> > > > >
> > > > > Osciloscope prescaler! WOW !
> > > > >
> > > > > ME TOO !!! (like aol idiots)
> > > > >
> > > > > Well,
> > > > >
> > > > > You might be able to build a mixer which could convert
> > > > > 30-60 MHZ range to 0-30 MHZ but it is just not worth it.
> > > > >
> > > > > Get a better scope or get a life !
> > > > >
> > > >
> > > > If you don't understand the question, you should ask for clarification
> > > > instead of posting instults worldwide.
> > > >
> > > > --
> > > > Please remove NOSPAM from return address before replying.
> > > I found this layer of the responses rather interesting. I am the jerk
> > > who complained about the antispam trick in the request for help. In
> > > this case I was about to write for clarification of what the fellow
> > > needed as I am not sure what an analog prescalar is! Rather than
> > > guessing it seemed wiser to ask what was intended in the original
> > > request. The antispam was a putoff- am I the lazy one or the folks who
> > > want help but are too lazy to spent a few seconds a day purging their
> > > spam (Yes, I hate it too, but I don't slam the door in the face of those
> > > who are attempting to bring me something I want- forcing them to jump
> > > over a hurdle to reach me!)
> > > Email did and still does seem like the better solution, rather than
> > > the public discussion of unclear concepts in the newsgroup. Why make
> > > email harder than it needs to be?
> > >
> > > Incidently, if every user of the Internet simply ignores the spam
> > > no matter what its content, eventually the spammers would realize it is
> > > a useless advertising method. Perhaps they would then just dry up and
> > > blow away.
> > Incidently, to all those of you who saw fit to object to my wish to
> > find an open door when someone seeks help; may I assume you have
> > privately provided him with a technical solution to his problem?
> > Afterall, THAT is what he wants.
> >

> > Bob
>
> --
> ---------------------------------------------------------------------
> For you automated email spammers out there, here's
> the email addresses of the current board of the
> Federal Communications Commission:
>
> Chairman Reed Hundt: rhundt@fcc.gov
> Commissioner James Quello: jquello@fcc.gov
> Commissioner Susan Ness: sness@fcc.gov
> Commissioner Rachelle Chong: rchong@fcc.gov
> And let's help you send some spam to the USPS, too:
> customer@email.usps.gov
>
> Sending me SPAM or Junk-Mail means that you have legally agreed to
> pay me US $500 for each SPAM or Junk-Mail message you send to me.
> ---------------------------------------------------------------------
I, like you, am not sure what was meant by "analog prescalar", but if we assume it is a method to read in data (analog voltages) at a high rate and read it out at a low rate, and thereby display waveforms faster than our 'scopes can handle, there is a way. Well, more or less there is a way. It is intrinsic that information will be thrown away.
The method has been used in some digital scopes. The voltage is recorded in a fast CCD, loading the cells with a fast clock rate, and then reading the data out at a slower clock rate. In the digital oscilloscopes the ADC then digitizes the slowly emerging voltage stream but there is no reason why it could not just as well be displayed on an analog scope.
The trouble with mixer schemes is that you are pretty well assured of loosing a lot of harmonic structure which going to a fast oscilloscope would reveal. In short, they seem to be useful only for a rather limited range of applications.
Whether any of the above has anything to do with what the questioner wanted remains a guess.

Bob

## 2426. Help wanted to identify/source components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <bdJ2LKA$eHF0EwyC@pacsat.demon.co.uk>
Source record: 91117

Hi All

Need a little help identifying some parts used in a past radcom project
by GM4DJS, for a magneto-resistive magnetometer.

Sensor, possibly hall effect(?) part no. KMZ10A (4 pin square device)

Opamp, simply identified by no. 759 (4 pin device)

Be obliged if anyone can help identify/source these items.

Cheers

Simon GM4PLM

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 2427. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Joss Navarro <jocelyn.navarro@hol.fr>
Message-ID: <01bcbc75$f8dc1660$9fa495c2@none.hol.fr>
Source record: 91118
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

The reason of this is being sat on a chair for so long HI HI!

N8XYN <jim.N8XYN@worldnet.att.net> a écrit dans l'article
<5uvfb5$7mq@bgtnsc03.worldnet.att.net>...
> Doran Platt wrote:
> >
> > one of my bosses in the past (who hated hams for some reason) said the
> > term ham is what they are... half a pigs *## (posterior)
> > AMDX@worldnet.att.net wrote:
> >
> > > Where did the term HAM come from? When did it come to popular use?
> > >
> > > Thanks for the
> > > input.
> > > Mike Knowlton
>
> Yeah! have you ever been to Dayton? 75% of us are FAT...73
>

## 2428. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: mfraser@obelix.helix.net
Message-ID: <5v1uud$kpe@van1s03.cyberion.com>
Source record: 91119
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Also rumored to have been a "What??? Ohhhh, OK!" exchange between
a French amateur and someone from the English speaking world,
"A Hamateur Radio Operator"..... just kidding / mark

Cecil Moore (cecil_a_moore@ccm.intel.com) wrote:
: Ohrstal wrote:
: > I tend to believe to old tale that it comes from a british accented
: > (cockney?) hamateur radio operator.

: Hi Dean, that's what my elmer told me in the early 1950's. Also there's
: a word-origin column called "Word For Word" that appears in some
: newspapers.
: A column from years ago sez, "A 'ham' radio operator is certainly a play
: on
: the word 'amateur'. The term was coined in the 1920s."
: --
: 73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 2429. Re: Super Keyer 3 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: knoll003@gold.tc.umn.edu
Message-ID: <3414AB3A.1CD5@gold.tc.umn.edu>
Source record: 91120

Bill Henderson wrote:
>
> Hello
>
> I have heard very good reports of the keyer supplied as a kit by Idiom
> Press, CA in USA.
>
> Does anyone have their phone number? I've been trying but no luck so
> far.
>
> Bill
I have their CMOS Super Keyer II which works like a charm. I recently purchased the Super Keyer III kit, but have not had time to put it together yet. I've heard good reports on it. The II model sure is great!!

73/DX

Henry WA0GOZ

# 2430. WTB: MVAM125 Varactors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000809971734490001@news.primenet.com>
Source record: 91121

Does any one know of a surplus source for Motorola MVAM125 varactors?

I need 50 to 100 and don't want to pay $1.00/pc from Newark or other distributor.

Thanks, Rob.

ps. if anyone has a lot of these lying around, I would be willing to barter IF filters and/or SD5002 DMOS mixer chips for them.

# 2431. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34141cf1.9037853@news.atl.bellsouth.net>
Source record: 91122
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

On 7 Sep 1997 19:25:53 GMT, <AMDX@worldnet.att.net> wrote:
> Where did the term HAM come from? When did it come to popular use?

The *real* explanation appears to be lost in the mists of time. There are a number of theories. Some more plausible than others. The one you'll likely hear the most is about "little station HAM". It goes like this. In the early days of radio, the government didn't assign call letters to amateurs. They just made up their own. Supposedly, three students at Harvard named Hyman, Almay, and Murray set up a station. They decided to use their initials as the call. Thus we have the little station HAM. When the Navy tried to grab control of all radio frequencies, these guys are supposed to have testified before Congress, and the story of little station HAM supposedly didn't leave a dry eye in the house. The press is supposed to have picked up this story of little station HAM, and amateurs have been known as hams ever since.

Unfortunately for this story, none of it checks out. A past president of the ARRL did extensive research in an attempt to confirm this story. There is nothing in the Congressional record about little station HAM. There is nothing in contemporary press records. And there is no record of a Hyman, Almay, or Murray at Harvard at the time this supposedly happened. This story first surfaced in an amateur publication in 1948, and doesn't seem likely to die. But it appears to have no factual basis.

Another story you may hear is that ham is the result of a Cockney pronounciation of (h)amateur. But that is unlikely for two reasons. First, the term was in use in America before there was substantial amateur activity in Britian. And second, voice transmission wasn't used by amateurs of the era, so how did a pronounciation get propagated by Morse?

Another story you may hear is that it comes from a landline telegrapher's insult. Many operators of the day came from a landline background, and on the landlines a common insult was that someone was "ham fisted" in his sending. It is possible that commerical operators used this slang to refer to amateurs and it caught on. Certainly, the term LID came from landline telegrapher slang. (LID was a reference to use of a tobacco can lid on the sounder to aid a poor operator in copying Morse.) This one may be true. It wouldn't be the first time that a group adopted a term originally meant as an insult to serve as a slang term for themselves.

But the one I like best goes like this. This era was filled with pulp magazines catering to the experimenter. (Everyone at the end of

the Victorian age apparently viewed himself as a closet inventor or tinkerer.) One of these magazines was called Home Amateur Mechanic, and it featured many simple radio sets a person could build. It is likely that when asked what kind of radio an operator was using, he might send back RIG HR ES HAM, meaning that it was one of the circuits shown in Home Amateur Mechanic magazine. Since telegraphers tend to abbreviate everything, due to the low throughput of Morse, this is plausible, and Home Amateur Mechanic magazine certainly did exist in the correct era. So it was those HAM radios which started the use of ham in amateur radio.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2432. FS: NOS, new tubes old stock

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <5v27d0$g5t$24@ha1.rdc1.occa.home.com>
Source record: 91123

NEW TUBES: New Old Stock (NOS) This corrects pricing of the 9-7-97 posting.
Tube Cost
**** ****
1AD4 $2.20
1T4/DF91 $1.75
5R4WGB $4.00
5U4G USA $18.25
5U4G Eastern Europe $6.75
5V4G RCA $9.25
6AG7 RCA $4.00
6AS8 $2.50
6AZ8 Philips $4.50 (Min. Qty 100)
6B4G $28.00
6BX7GT RCA $7.75 (black plate)
6C8G $3.25
6CB6A $2.00
6EW6 $2.50
6F6 $5.00
6H6 RCA $1.25
6J6WB $1.50
6K8 $3.25
6L6WGB Philips $19.00
6L6GC Eastern Europe $6.50
6LB6 $19.00
6LF6 $42.00
6X9/ECF200 $3.25
12AT7 Sylvania $5.25
12AU7A $4.75
12AX7 Westinghouse $9.25
12AX7A $9.50
12BA6 GE $2.75
12BH7A Eastern Europe $8.50
12BH7A USA $13.75
12BY7A $8.00
39/44 RCA $2.50
50A1 $22.50
80 (ST shape) $15.00
84/6Z4 RCA $4.00
572B/T160L Centron $94.00
572B Chinese $65.00
604 $90.00
809 $20.00
811A Chinese $12.00
811A USA $34.00

1626 Sylvania $3.25
JAN 5687 Tung-Sol $5.75 (black plate)
JAN 5751 GE $5.00
JAN 5751 GE $8.75 (black plate)
5829WA $5.00 (Min. Qty 100)
5844 $2.50
5933 (807) Sylvania $11.00
6082A RCA $10.75 (black plate)
JAN 6072 GE $9.75 (black plate)
6146 GE $19.00
6146 Chinese $13.00
JAN6922 Sylvania $5.00 (Min. Qty 100)
7062/180CC Amperex $5.00 (Min. Qty 100)
7199 $20.00
7788 $25.00
3-500Z Eimac $160.00
3-500Z Penta $105.00
3-500C Chinese $120.00 (carbon plate)
EL84/6BQ5 $4.25 Eastern Europe

Shipping FREE in USA on orders of $10.00 or more,
shipping on orders under $10.00 in USA $3.00
**********
JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin
miniature made by Philips in the USA 1986, NOS, individual
boxes, 3000 available, shipping in the USA: 1 - 199 $4.00,
200 or more shipping free!
$0.12 each
**********
Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks, wire transfers,
or cash by registered mail.
---
For a complete list of ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO, MICROWAVE COMPONENTS or ELECTRONIC TEST
EQUIPMENT, please E-mail: sales@emodus.com

Thank you!!

Kevin
sales@emodus.com

## 2433. Search schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Joss Navarro <jocelyn.navarro@hol.fr>
Message-ID: <01bcbc76$511625a0$9fa495c2@none.hol.fr>
Source record: 91124

I want to build a 100mW to 10W 145MHz amplifier (ro replace an old hybrid) with transistors. Has anybody a diagram with values, as I do not want to run experimentations for days.
73's fm F6IQA.

# 2434. Re: Milita Radio (was: New Micro Radio Web Site)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: David Abrams <david084@flash.net>
Message-ID: <341495D0.3AFD@flash.net>
Source record: 91125
Cross-posted to: rec.animals.wildlife,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.law-enforcement,alt.rush-limbaugh,alt.fan.rush-limbaugh

Ranma wrote:
>
> Greg Dean <n9nwo@gte.net> wrote in article <5uhf4f$se8$1@gte2.gte.net>...
> > San Francisco Liberation Radio wrote:
> > >
> > > Check out the new Web site for San Francisco Liberation Radio at 93.7
> > > FM. We broadcast seven afternoons and evenings a week without license
> > > from the government. We feature revolutionary music, radical talk
> shows,
> > > uncensored news, and children's programs--the kind of programming that
> > > you will not hear on government licensed radio stations. The Web site
> > > contains a weekly program guide complete with program notes written by
> > > our broadcasters, who specialize in topics such as social justice,
> > > government corruption, the environment, animal rights, poverty,
> > > homelessness, police brutality, prisoners' rights, etc. Locally
> produced
> > > original programming! No commercials! No corporate support!
> > >
> > > http://www.slip.net/~dove
> >
> > Is this the Left's version of the milita? They are talking about
> > revolution. When do the bombings start?
>
> A station like that would be better off skipping radio broadcast
> altogether and instead putting all of the programming on Real Audio. That
> way, anybody in the country with a cheap computer and a modem can hear it.
> As we all know, there are no regulations for the net just yet.

Yet is right. When "WE THE PEOPLE" begin to think too much, and
then we talk about it via the web, suddenly, new rules will be made.
--
*** DO NOT READ THESE WEBPAGES !!! ***
NO LIBERALS ALLOWED!
http://webusers.anet-stl.com/~civil/imamericadying.html
http://www.instanet.com/~vct/

# 2435. Re: Milita Radio (was: New Micro Radio Web Site)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: David Abrams <david084@flash.net>
Message-ID: <34149408.2105@flash.net>
Source record: 91126
Cross-posted to: rec.animals.wildlife,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.law-enforcement,alt.rush-limbaugh,alt.fan.rush-limbaugh

Greg Dean wrote:
>
> San Francisco Liberation Radio wrote:
> >
> > Check out the new Web site for San Francisco Liberation Radio at 93.7
> > FM. We broadcast seven afternoons and evenings a week without license
> > from the government. We feature revolutionary music, radical talk shows,
> > uncensored news, and children's programs--the kind of programming that
> > you will not hear on government licensed radio stations. The Web site
> > contains a weekly program guide complete with program notes written by
> > our broadcasters, who specialize in topics such as social justice,
> > government corruption, the environment, animal rights, poverty,
> > homelessness, police brutality, prisoners' rights, etc. Locally produced
> > original programming! No commercials! No corporate support!
> >
> > http://www.slip.net/~dove
>
> Is this the Left's version of the milita? They are talking about
> revolution. When do the bombings start?

No right minded American is going to resort to bombs. We do have a
major developing problem. It is that our government is becoming out of
control and more dangerous to our health and freedoms, but we still have
time to simply change it. No force is needed. Marching in the streets
is not a bad idea, but only peacefull marches. Let Big Brother be
guilty of excessive force.
--
*** DO NOT READ THESE WEBPAGES !!! ***
NO LIBERALS ALLOWED!
http://webusers.anet-stl.com/~civil/imamericadying.html
http://www.instanet.com/~vct/

# 2436. Re: Milita Radio (was: New Micro Radio Web Site)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: David Abrams <david084@flash.net>
Message-ID: <34149591.693A@flash.net>
Source record: 91127
Cross-posted to: rec.animals.wildlife,alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.law-enforcement,alt.rush-limbaugh,alt.fan.rush-limbaugh

That group is a bunch of environmental wackos. Just another
bunch of Al Gore look-a-likes!
--
*** DO NOT READ THESE WEBPAGES !!! ***
NO LIBERALS ALLOWED!
http://webusers.anet-stl.com/~civil/imamericadying.html
http://www.instanet.com/~vct/

# 2437. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Chris Overbeek <coverbeek@nospamcomshare.com>
Message-ID: <341464B6.4FB8@getting.spam>
Source record: 91128

In case you've never heard of it, 'homebrew' (part of your newsgroup title) also refers to beer brewed in the home. Unfortunately, someone posted to your group assuming that is what the 'homebrew' in the group title meant. I am sure it refers to home-made amateur radios, but someone got confused.

Flame if you must -- I only replied since you cross-posted an off-topic comment to groups which the original poster had correctly identified as being interested in what what he was talking about (like rec.crafts.brewing). Perhaps you could let things like this slide some, or respond to the poster directly, instead of continuing the cross-posting which bugs us all when done haphazardly. I apologize if I have offended anyone, this wasn't meant as a flame.

-Chris

scott wrote:
<snip>
>
> Where's the homebuilt radio in this post...I must have missed it.
> Scott, N0EDV

# 2438. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: John in Roseville <rtwod2@ns.net>
Message-ID: <01bcbbed$5ca08c00$7af277cc@rtwodtwo>
Source record: 91194
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

See:
http://www.arrl.org/whyham.html
http://www.mv.com/ipusers/wd1v/hamradio.faq.html

AC6V <ac6v@ix.netcom.com> wrote in article <34132358.48C4@ix.netcom.com>...
> Doran Platt wrote:
> >
> > one of my bosses in the past (who hated hams for some reason) said the
> > term ham is what they are... half a pigs *## (posterior)
> ---
> Sounds like your boss of the past had his head attached to the other end
> of the pig!!
>
> If per chance you run in to your old boss -- tell em that several tens
> of thousands of victims of earthquakes, floods, fires etc, UNEQUIVOCALLY
> DISAGREE.
>
> Hope all else is well in Monrovia Md.
>
> 73
> Rod
> --
> AC6V's HAM AND DX REFERENCE GUIDE
> 60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
> Main Page: http://pw2.netcom.com/~ac6v/index.html
> Master Index: http://pw2.netcom.com/~ac6v/pageas.html
>

## 2439. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: rollo@trib.com
Message-ID: <5uvk4q$63o@news.trib.com>
Source record: 91195
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Doran Platt <jeepp@erols.com> wrote:

>one of my bosses in the past (who hated hams for some reason) said the
>term ham is what they are... half a pigs *## (posterior)
>AMDX@worldnet.att.net wrote:

>> Where did the term HAM come from? When did it come to popular use?
>>
>> Thanks for the
>> input.
>> Mike Knowlton

Hatdly Any Money
my source of schematic diagrams: http://w3.trib.com/~rollo/bomcat.htm

# 2440. Neat Radio Kits !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcbbfe$87227180$c903d9cf@radiodan.earthlink.net>
Source record: 91196
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a bunch of really neat radio and related kits at my web site

Check it out! Click on link or copy to your browser below.

73
--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/
Ramsey Kits "closeout" see my web page ! **

# 2441. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: jphipps@aztec.asu.edu
Message-ID: <5uvgm6$m7d@news.asu.edu>
Source record: 91197

In a previous article, pacsat@pacsat.demon.co.uk (Simon Lewis) says:

>In article <3412F8B0.5CC7@kfa-juelich.de>, Bob Mueller <r.mueller@kfa-
>juelich.de> writes
>>> Remove antispam. to reply
>>I was planning to email you a reply but I have stopped doing so for
>>persons posting with an "antispam" trick in their addresses. If you
>>can't be bothered by the tiny trouble with the spam you can't be needing
>>help very badly.
>>
>>Bob
>
>Thats rather childish of you.
>
>This person has decided he does not wish to receive junk email, and to
>be perfectly honest, who does.
>
>The antipspam trick is his way of getting round receiving it. Whats
>wromg with that? Are you so lazy that you can't remove it from the
>address?
>
>I would say that if you think like this then he can do without your
>help. He'd be better off.
>
>Sic, what ever happened to amateur spirit?
>
>73 Simon GM4PLM
>
>+---------------------------------------------------------------------+
>| Simon Lewis GM4PLM Editor - EMN |
>| European Microwave News - Supporting Microwave Radio Across Europe |
>| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
>+---------------------------------------------------------------------+

Simon, I couldn't agree with you more! Thank you for saying it better than
I would have.

John Phipps K7BTA
--

# 2442. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <34135523.623728@news.zippo.com>
Source record: 91198

On Sun, 07 Sep 1997 20:55:44 +0200, Bob Mueller
<r.mueller@kfa-juelich.de> wrote:

>
>Dennis Erwin Thurlow wrote:
>>
>> I've got a B+K 1479B, 30MHz, dual trace scope that I'd love to
>> find the docs for. I'd also like to build an analog prescaler
>> in the divide by 200 range. Any suggestions?
>> --
>> Elder - Westminster Presbyterian
>> TRA #2693
>> N9VEM
>> Remove antispam. to reply
>I was planning to email you a reply but I have stopped doing so for
>persons posting with an "antispam" trick in their addresses. If you
>can't be bothered by the tiny trouble with the spam you can't be needing
>help very badly.
>
>Bob

Boy, now that he knows this guy wont be sending him an e-mail,
he will probably have a breakdown.

Steve Carlisle VE7AHL

## 2443. Toner Transfer System

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: gt8769a@mindspring.com
Message-ID: <341358c9.260233183@news.mindspring.com>
Source record: 91199

I am trying to make a printed circuit board using the Toner Transfer system sold by Digi-Key. I've done this several times at my old job - really nice surface mount stuff too - but I had the luxury of having the nice little heater/roller made specifically for doing pc boards. But I've changed jobs and no longer have the heater. I tried doing it on an electric stove top - I place a sheet of .060 copper on the eye then the transfer paper then my board then another sheet of copper then a weight. But this just doesn't seem do be working. I can't seem to get it to work out after six attempts. I'm getting tired of wasting my transfer paper & would like any suggestions. Please email to:

slankford@scires.com

Tks

Spence

# 2444. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3413C05B.41C9@kfa-juelich.de>
Source record: 91200

miker wrote:
>
> nospam wrote:
> >
> > Osciloscope prescaler! WOW !
> >
> > ME TOO !!! (like aol idiots)
> >
> > Well,
> >
> > You might be able to build a mixer which could convert
> > 30-60 MHZ range to 0-30 MHZ but it is just not worth it.
> >
> > Get a better scope or get a life !
> >
>
> If you don't understand the question, you should ask for clarification
> instead of posting instults worldwide.
>
> --
> Please remove NOSPAM from return address before replying.
I found this layer of the responses rather interesting. I am the jerk who complained about the antispam trick in the request for help. In this case I was about to write for clarification of what the fellow needed as I am not sure what an analog prescalar is! Rather than guessing it seemed wiser to ask what was intended in the original request. The antispam was a putoff- am I the lazy one or the folks who want help but are too lazy to spent a few seconds a day purging their spam (Yes, I hate it too, but I don't slam the door in the face of those who are attempting to bring me something I want- forcing them to jump over a hurdle to reach me!)
Email did and still does seem like the better solution, rather than the public discussion of unclear concepts in the newsgroup. Why make email harder than it needs to be?

Incidently, if every user of the Internet simply ignores the spam no matter what its content, eventually the spammers would realize it is a useless advertising method. Perhaps they would then just dry up and blow away.

# 2445. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3413D0AC.1469@kfa-juelich.de>
Source record: 91201

Bob Mueller wrote:
>
> miker wrote:
> >
> > nospam wrote:
> > >
> > > Osciloscope prescaler! WOW !
> > >
> > > ME TOO !!! (like aol idiots)
> > >
> > > Well,
> > >
> > > You might be able to build a mixer which could convert
> > > 30-60 MHZ range to 0-30 MHZ but it is just not worth it.
> > >
> > > Get a better scope or get a life !
> > >
> >
> > If you don't understand the question, you should ask for clarification
> > instead of posting instults worldwide.
> >
> > --
> > Please remove NOSPAM from return address before replying.
> I found this layer of the responses rather interesting. I am the jerk
> who complained about the antispam trick in the request for help. In
> this case I was about to write for clarification of what the fellow
> needed as I am not sure what an analog prescalar is! Rather than
> guessing it seemed wiser to ask what was intended in the original
> request. The antispam was a putoff- am I the lazy one or the folks who
> want help but are too lazy to spent a few seconds a day purging their
> spam (Yes, I hate it too, but I don't slam the door in the face of those
> who are attempting to bring me something I want- forcing them to jump
> over a hurdle to reach me!)
> Email did and still does seem like the better solution, rather than
> the public discussion of unclear concepts in the newsgroup. Why make
> email harder than it needs to be?
>
> Incidently, if every user of the Internet simply ignores the spam
> no matter what its content, eventually the spammers would realize it is
> a useless advertising method. Perhaps they would then just dry up and
> blow away.
Incidently, to all those of you who saw fit to object to my wish to
find an open door when someone seeks help; may I assume you have
privately provided him with a technical solution to his problem?

Afterall, THAT is what he wants.

Bob

# 2446. Re: car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <LPVWFUAAd6E0EwJ7@lfheller.demon.co.uk>
Source record: 91202

In article <34138035.30428196@nntp.hip.cam.org>, Patrick De Gagne
<pdg@KILL_THIS.cam.org> writes
>On 6 Sep 1997 21:09:31 GMT, "phastings" <peabody@onramp.net> wrote:
>
>>Has anyone heard of pressing the PTT button on a 2-meter handheld (don't
>>know which freq) and accidentally setting off car anti-theft alarms?
>
>Yup... I often set off cheap car alarms while chatting in the shopping
>mall's parking lot with my 2M.
>
>Seems many alarms do not like 5W fed into a 5/8... never mind what
>happens at 45W at rest stops on the highway... :o)
>

The radio club where I used to live regularly set off the alarm in a
nearby house when we were Txing on 2m.

Here in the UK, many car entry systems use a frequency in the 433 MHz
band (it's a shared allocation here). People often find they can't get
into their cars when they are in the vicinity of a 70 cms Tx. The
manufacturers have learnt their lesson, and are now using sensible
frequencies.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 2447. Re: car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: pdg@KILL_THIS.cam.org
Message-ID: <34138035.30428196@nntp.hip.cam.org>
Source record: 91203

On 6 Sep 1997 21:09:31 GMT, "phastings" <peabody@onramp.net> wrote:

>Has anyone heard of pressing the PTT button on a 2-meter handheld (don't
>know which freq) and accidentally setting off car anti-theft alarms?

Yup... I often set off cheap car alarms while chatting in the shopping
mall's parking lot with my 2M.

Seems many alarms do not like 5W fed into a 5/8... never mind what
happens at 45W at rest stops on the highway... :o)

Pat

--
\/ Scouter Pat - Patrick De Gagne - Montreal, Canada
/\ Dollard Des Ormeaux Scouts & Venturers
/ \ http://www.cam.org/~pdg IRC: I-Spy on #Scouting
/ \ PDG@KILLME.CAM.ORG - VE2VFD - I used to be a Flying Frog!

# 2448. Re: Low Noise HF Pre-amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: d.NOrdquest@juno.COM
Message-ID: <19970908.080930.4831.0.d.nordquest@juno.com>
Source record: 91204

Gary wrote in response to Bill:

<The acid test is very simple to perform, of course. If connecting the antenna results in no discernable change in noise level, the receiver is internal noise limited and can benefit from a low noise preamp. If there is a change, a preamp won't help. >

Does it make no difference how the input is terminated? A similar test at the input to the audio stages of Rick Campbell's R1 and R2 led to a design inferior to what Rick and Wes Hayward later found to be possible. There the problem was that changing the termination of the input network from 50 ohms to an open circuit dramatically changed the impedance seen by the low-noise pre-amp.

Dave KE9ED

## 2449. Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-970908130558Z-26319@whpost.wh.lucent.com>
Source record: 91205

The correct URL is:

http://www.pwdahl.com/

or

http://www.pwdahl.com/hamcat.html

Seth KC2WE

## 2450. Doorknob HV Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-970908132309Z-26355@whpost.wh.lucent.com>
Source record: 91206

Try the web site for the High Energy Corp.

http://www.highenergycorp.com/

I can't say where their distributors are located, but check the web page. Maybe someone out there has a source for "surplus" units.

Seth KC2WE

# 2451. Re: Low Noise HF Pre-amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34140038.2498@crpl.cedar-rapids.lib.ia.us>
Source record: 91207

d.NOrdquest@juno.COM wrote:
>
> Gary wrote in response to Bill:
>
> <The acid test is very simple to perform, of course. If connecting the
> antenna results in no discernable change in noise level, the receiver
> is internal noise limited and can benefit from a low noise preamp. If
> there is a change, a preamp won't help. >
>

The correct test is to replace the antenna lead-in with a 50 ohm resistor at room temperature. If the receiver was designed for a 50 ohm generator impedance, then the ratio of antenna noise to 50 ohm thermal noise is accurately determined and the receiver is undisturbed. If the antenna line impedance is not 50 ohms then there may be a discrepancy that needs to be resolved.

My receiver has this ability, using the 50 ohm transmitter dummy load. I can easily determmine atmospheric noise level. Sometimes the noise margin is not as great as one would suspect. To be completely free of receiver noise the antenna noise should be about 6 to 10 dB greater than receiver noise with the 50 ohm resistor.

A quite common problem occurs in narrow CW modes, where the receiver noise figure degrades because of the wideband IF/AF noise that follows the narrow CW filter. I have seen this many times.

Bill W0IYH

# 2452. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <341401df.8613067@news.fastlink.com.au>
Source record: 91208
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

"John in Roseville" <rtwod2@ns.net> wrote:

:AC6V <ac6v@ix.netcom.com> wrote in article <34132358.48C4@ix.netcom.com>...
:> Doran Platt wrote:
:> >
:> > one of my bosses in the past (who hated hams for some reason) said the
:> > term ham is what they are... half a pigs *## (posterior)
:> ---
:> Sounds like your boss of the past had his head attached to the other end
:> of the pig!!
:>
:> If per chance you run in to your old boss -- tell em that several tens
:> of thousands of victims of earthquakes, floods, fires etc, UNEQUIVOCALLY
:> DISAGREE.

Even though their lives were put at risk by amateurs playing two way radios
and getting in the way of rescue workers?

Barry

==========
To reply via email please remove the XX from my
return address.

# 2453. Re: Low Noise HF Pre-amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: frussle@erols.com
Message-ID: <3415114a.6475141@news.erols.com>
Source record: 91209

On 8 Sep 97 12:09:21 GMT, d.NOrdquest@juno.COM wrote:

>Gary wrote in response to Bill:
>
><The acid test is very simple to perform, of course. If connecting the
>antenna results in no discernable change in noise level, the receiver
>is internal noise limited and can benefit from a low noise preamp. If
>there is a change, a preamp won't help. >
>
>Does it make no difference how the input is terminated? A similar test
>at the input to the audio stages of Rick Campbell's R1 and R2 led to a
>design inferior to what Rick and Wes Hayward later found to be possible.
>There the problem was that changing the termination of the input network
>from 50 ohms to an open circuit dramatically changed the impedance seen
>by the low-noise pre-amp.

That's usually a secondary factor. This was the case with the R1 (and
later the R2). Most radios have an RF preamp with a bandpass filter
ahead of it. That usually limits the effects of poor terminations.

If one suspects poor termination is affecting the internal noise
measurement, replace the antenna with a dummy load.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

# 2454. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: nospam <nospam@screwed.net>
Message-ID: <3413E124.3ABB@screwed.net>
Source record: 91210

hello everyone,

I apologize for posting that bad response to that scope
question.

I guess that I just dont have a lot of patience left.

But, the gist of the response was that there is no
osciloscope analog prescaler in this world. What
do you mean by a osciloscope analog prescaler anyway?

The closest that I know to an scope analog prescaler is
a sampling osciloscopes as made by Hp tens of years ago.
They used some sort of chopper circuit in a sampling probe to
sample a 1 GHZ repititive signal say at 100 MHZ or
10 MHZ I think. Not a very good thing to build either way.

So, the next think you could do was to build an scope
mixer as they say in the ARRL handbook. That is the
suggestion I posted. But that shifts the spectrum and in no
way is going to pre-scale it.

God knows what that mixer will do to the waveforms.
Didnt they say that multiplication (or mixer) in frequency
domain will equal convolution in the(frequency) other domain.
So, to get the original waveform back he will have to
de-convolve the resulting waveform back. RIGHT.

(You DSP geniuses can say something here.)

But, the gist of this whole thing is that there is no real
solution to this guys problem of making a 10 MHZ scope work like
1000 MHZ scope. If he needs a 1 GHZ scope, he will have to buy one.
That is it.

Well, he will probably be able to find some manuals for that scope
anyway.

That is what I think!

My apologies again!

Yes spam is a big problem!

Bob Mueller wrote:
>
> Bob Mueller wrote:
> >

> > miker wrote:
> > >
> > > nospam wrote:
> > > >
> > > > Osciloscope prescaler! WOW !
> > > >
> > > > ME TOO !!! (like aol idiots)
> > > >
> > > > Well,
> > > >
> > > > You might be able to build a mixer which could convert
> > > > 30-60 MHZ range to 0-30 MHZ but it is just not worth it.
> > > >
> > > > Get a better scope or get a life !
> > > >
> > >
> > > If you don't understand the question, you should ask for clarification
> > > instead of posting instults worldwide.
> > >
> > > --
> > > Please remove NOSPAM from return address before replying.
> > I found this layer of the responses rather interesting. I am the jerk
> > who complained about the antispam trick in the request for help. In
> > this case I was about to write for clarification of what the fellow
> > needed as I am not sure what an analog prescalar is! Rather than
> > guessing it seemed wiser to ask what was intended in the original
> > request. The antispam was a putoff- am I the lazy one or the folks who
> > want help but are too lazy to spent a few seconds a day purging their
> > spam (Yes, I hate it too, but I don't slam the door in the face of those
> > who are attempting to bring me something I want- forcing them to jump
> > over a hurdle to reach me!)
> > Email did and still does seem like the better solution, rather than
> > the public discussion of unclear concepts in the newsgroup. Why make
> > email harder than it needs to be?
> >
> > Incidently, if every user of the Internet simply ignores the spam
> > no matter what its content, eventually the spammers would realize it is
> > a useless advertising method. Perhaps they would then just dry up and
> > blow away.
> Incidently, to all those of you who saw fit to object to my wish to
> find an open door when someone seeks help; may I assume you have
> privately provided him with a technical solution to his problem?
> Afterall, THAT is what he wants.
>
> Bob

--
---
For you automated email spammers out there, here's
the email addresses of the current board of the

Federal Communications Commission:

Chairman Reed Hundt: rhundt@fcc.gov
Commissioner James Quello: jquello@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Rachelle Chong: rchong@fcc.gov
And let's help you send some spam to the USPS, too:
customer@email.usps.gov

Sending me SPAM or Junk-Mail means that you have legally agreed to
pay me US $500 for each SPAM or Junk-Mail message you send to me.
---

# 2455. Re: Toner Transfer System

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: geotek@flex.net
Message-ID: <3413ffef.497085193@news.zippo.com>
Source record: 91211

gt8769a@mindspring.com (J. Spence Lankford) wrote:

>I am trying to make a printed circuit board using the Toner Transfer
>system sold by Digi-Key. I've done this several times at my old job -
.....

I have had much better luck with a product called PNP Blue. The base
is plastic, not paper as in the Toner Transfer material. This
eliminates the problem of shrinkage during the fusing process.
Check-out http://www.flex.net/~geotek/nars/pcboards.htm for details.

George Carlson KC5RCC
Geotek Design Services, Houston,TX
geotek@flex.net

# 2456. Re: Toner Transfer System

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-08 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <tYoraKA7oCF0Ewlk@pacsat.demon.co.uk>
Source record: 91212

In article <341358c9.260233183@news.mindspring.com>, "J. Spence
Lankford" <gt8769a@mindspring.com> writes
>I am trying to make a printed circuit board using the Toner Transfer
>system sold by Digi-Key. I've done this several times at my old job -
>really nice surface mount stuff too - but I had the luxury of having
>the nice little heater/roller made specifically for doing pc boards.
>But I've changed jobs and no longer have the heater. I tried doing it
>on an electric stove top - I place a sheet of .060 copper on the eye
>then the transfer paper then my board then another sheet of copper
>then a weight. But this just doesn't seem do be working. I can't
>seem to get it to work out after six attempts. I'm getting tired of
>wasting my transfer paper & would like any suggestions. Please email
>to:
>
>slankford@scires.com
>
>Tks
>
>Spence

Oh this one's easy!

Use an iron! I dunno what you call them in the US (the thing used for
uncreasing clothes!)

Print the layout onto laser transparency film (no expense spared here!)
Makre sure the print is the right way so the ink is down facing and the
right way round!

Place some kitchen tissue paper over it with the pcb layered like
this:(we call it kitchen roll over here!)

```
| | iron
-----------------------------

============================== Kitchen roll

------------------------------ film

============================== pcb copper
```

Put the iron on hot and when ready place it on the tissue paper , apply
pressure (but not too much) for a minute or so, gently pressing on it.

Remove the iron and leave to cool (don't try and peel it off straight
away)

GENTLY peel the film off from one corner and it will leave a hard shiny ink layer on the copper! Easy!

Make sure the copper is clean and dry and get a nice dense print on your film too.

I have done a few pcb's like this inc a 3.4 GHz tvtr board and they all turned out great!

Cheap too!

Good luck!

73 Simon

+----------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------------+

# 2457. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: mrusso@hoflink.com
Message-ID: <3414e9af.3048721@news.hoflink.com>
Source record: 91129
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

On 7 Sep 1997 19:25:53 GMT, <AMDX@worldnet.att.net> wrote:

> Where did the term HAM come from? When did it come to popular use?
>
> Thanks for the input.
> Mike Knowlton
>

Gary Coffman, KE4ZV got it right. It means Home Amateur Mechanic!!

73, Mark N2FLF

# 2458. Re: New RCA Scanner to hit market

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: jfeng@ibm.com
Message-ID: <19970908.182136.091@vnet.ibm.com>
Source record: 91130
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.animals.wildlife,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,alt.law-enforcement

In article <34149CE8.33BF@flash.net>, on Mon, 08 Sep 1997 19:48:40 -0500,
David Abrams <David> writes:

>
> Would you please draw a small example of what this tank would look
>like if I used RS parts. I really enjoy making tank circuits, but I
>have never used this method, and I have never seen an example of it to
>duplicate for small transmitters.
> Thanks!!

This is absolutely amazing! It is hard to believe that David Abrams has
actually posted something of relevance to the radio newsgroups. If he were
any old newby, I would say that he would deserve a polite and helpful reply.
However, he is one of the worst and most flagrant posters of irrelevant
political diatribes in these newsgroups. The explanation by Steve S is
correct. If he had had any kind of reasonable education, he would be able
to understand what Steve S wrote. Now he displays his ignorance and
incompetence in radio related areas. It goes well with his inability to
show some maturity and self-restraint by keeping his political postings
to appropriate newsgroups. Or maybe he has tried that and could not keep
up with the arguments, so he wandered off thinking he could impress us
with his knowledge as he shows off his stupidity.

## 2459. test(dont read)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: koystravas dimitris <sv2dsu@med.auth.gr>
Message-ID: <01bcbce5$8d456800$LocalHost@slirp.med.auth.gr>
Source record: 91131

```
test test
```

## 2460. balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: koystravas dimitris <sv2dsu@med.auth.gr>
Message-ID: <01bcbce6$2578b960$LocalHost@slirp.med.auth.gr>
Source record: 91132

i need to make an 1:1 balun. if there is something please lave a message.
73 ...sv2dsu(dimitris)

# 2461. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: Roger Basford <Roger@g3vkm.demon.co.uk>
Message-ID: <HtIkLBARLOF0EwCI@g3vkm.demon.co.uk>
Source record: 91133
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

In article <5uuv41$5nj@bgtnsc02.worldnet.att.net>, AMDX@worldnet.att.net
writes
> Where did the term HAM come from? When did it come to popular use?
>
>
I'm sure that this was discussed in the RSGB's Radio Communication
magazine some years ago but I'm not about to start digging through the
pile in the attic!! From what I remember "Ham" is derived from the
acting profession, a "ham actor" basically being a poor one. My Concise
Oxford dictionary certainly agrees with this, " an inexperienced or
ineffective actor, one who rants and raves"! IIRC from the Radcom
discussion the acting term came from the fact that the early greasepaint
used as makeup was based on pig grease - hence "ham"!

I expect we'll never learn the real origin but I learned something from
this discussion, although I haven't heard the term "lid" for years I
always wondered what it came from, mni tks to tt poster!

Roger Basford

G3VKM
////////////////////////////////
* e-mail Roger@g3vkm.demon.co.uk *
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

# 2462. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: m.farrimond@zetnet.co.uk
Message-ID: <5v2sro$rad$1@roch.zetnet.co.uk>
Source record: 91134
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

In message <34141cf1.9037853@news.atl.bellsouth.net>
ke4zv@bellsouth.net (Gary Coffman) writes:

> Another story you may hear is that ham is the result of a Cockney
> pronounciation of (h)amateur. But that is unlikely for two reasons.
> First, the term was in use in America before there was substantial
> amateur activity in Britian. And second, voice transmission wasn't
> used by amateurs of the era, so how did a pronounciation get propagated
> by Morse?

The term "Ham" is intensley disliked by many UK Amateur operators -
Where on earth did you get the idea that the term was in use before
there was *substantial* amateur activity in Britain. The UK has a
proud history of radio experimentation preceding the introduction of
the word Ham.

Mike

M1APW

# 2463. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <76fKoKAsqPF0Ew0R@lfheller.demon.co.uk>
Source record: 91135
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

In article <34141cf1.9037853@news.atl.bellsouth.net>, Gary Coffman
<ke4zv@bellsouth.net> writes
>On 7 Sep 1997 19:25:53 GMT, <AMDX@worldnet.att.net> wrote:
>> Where did the term HAM come from? When did it come to popular use?

The Concise Oxford Dictionary has it as slang for an amateur, as in ham
actor. It also mentions the terms ham-handed and ham-fisted, for someone
who is clumsy. This is probably why "ham" isn't used much by radio
amateurs in the UK. You *never* see the word in RadCom, unlike QST.

73, Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 2464. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5v3knt$169$1@news.belwue.de>
Source record: 91136
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

>The UK has a
>proud history of radio experimentation preceding the introduction of
>the word Ham.

Sure it has,

Beginning with this guy who had come over from Italy. As far as
I remember he only went to the US after Britain had become too small
for his DX-tests. This was around 1901.

Moritz

# 2465. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970909134501.JAA26854@ladder02.news.aol.com>
Source record: 91137

Hi Dimitris--

Need more information--a balun for what frequency? How much power? Type of antenna?

73

Rick K1BQT

## 2466. satellites

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: kc4tzn@webtv.net
Message-ID: <5v3rus$1k9$1@newsd-103.bryant.webtv.net>
Source record: 91138

looking for listing showing uplink freq"s for commercial satellites

tnx.

# 2467. Receiver Logic Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: John Scherer <ask@me.forit>
Message-ID: <5v40db$1be$1@nnrp1.snfc21.pbi.net>
Source record: 91139

Anyone have any info on something called the "Receiver Logic Module",
manufactured my Colt Technology out of Leneax, Kansas.

I tried to call them but their number was no longer in service.. The box has
a Receiver & Transmiter module in it that operate on 457.9375 MHz. I would
like to convert it to 70cm

Thanks

John

## 2468. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: n1ist@netcom.com
Message-ID: <n1istEG9744.Cu3@netcom.com>
Source record: 91140
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

```
My favorite explanation is that HAM comes from Hiram Maxim's initials
(as long as you ignore that his middle name was Percy :-)
/mike

--
\|/ Michael L. Ardai N1IST n1ist@netcom.com \|/
-*- === Boston Amateur Radio Club: http://www.barc.org/barc === -*-
/|\ or send "info barc-list" to listserv@majordomonetcom.com /|\
```

# 2469. FS: 23cm ATV setup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5v42pk$f9q$1@techsrv1.tech>
Source record: 91141

Unfortunately the cost of going to college has caught up to me
and I must get rid of some of my toys :( I have the following
setup forsale and I will only sell it as a complete package:

1 - 23cm FM Transmitter for Video and Audio
Tunes the whole band, SMA connector on output.

1 - 1W Tron Tech amplifier with oversized heatsink
Model P26GA-1

1 - 18W Down East Microwave amplifier with repeater grade heatsink.
Model 2318PAHS

1 - Homebrew 23cm Preamp, has gains in the low 20dB range.

1 - Hewlett Packard Coaxial Relay, good from DC to 4GHz.
HP 33314A, SMA connections with hardline to connect from
the 18W brick and a SMA to female N hardline run for the
antenna connection.

Hardline connects the transmitter, and amplifiers together.
>From the transmitter to the 1W brick, SMA connectors are used,
>From the 1W brick is a SMA connector and into the 18W brick is a
N connector as is the output of the 18W brick.

1 - Microdyne receiver, Model CSD-BQR-1
Tunes whole band. Manual included.

1 - Microdyne receiver, Model 1-100-BKR
Tunes whole band. Manual included.

All schematics and notes are included on the setup. All one needs is
a camera, antenna, and 13.8V power supply for the transmitter and amplifiers
to get going.

All this for the low price of $500 plus shipping, firm.
Please email me if you are interested since I am rarely home while going
to school. My address is cmlong@mtu.edu

Thanks,
Mike
N3YPA/8

--
*------------------------------------------------------------*
* When you are content to be simply yourself *
* and don't compare or compete, *
* everybody will respect you. *

```
* Tao Te Ching, by Lao-tzu *
*-----------------------------------------------------------*
```

## 2470. WTB: AM Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: Demolition Man <demoman@rollanet.nospam.org>
Message-ID: <341595A8.7549@rollanet.nospam.org>
Source record: 91142
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

```
i would like to aquire an AM filter for a Yaesu 101 E.
cash or trade

anyone have one they would like to part with?
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/
```

# 2471. Hamfest Sunday 21 Sep, Newtown, CT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <3415E637.5B3D@ix.netcom.com>
Source record: 91143
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.homebrew

THE WESTERN CONNECTICUT HAMFEST
Sponsored by the Candlewood Amateur Radio Association

Sunday, Sept. 21, 1997 9 AM - 2 PM (setup 7 AM)
Edmond Town Hall Route 6, Newtown, CT
Ham radio equipment Computers and software
Tables inside Tailgating outside
ARRL Sanctioned Handicapped Access
Workshops Training videos
Door Prizes Ample Parking
Gourmet Fare Rain or shine

General admission $5.00 at the door (what a deal!)

Only 15 minutes from Brewster NY, 20 minutes from Waterbury CT.

Talk-in 147.12/.72 PL 141.3

Tailgating $6.00, inside table reservations $10.00 each, (both
include 1 admission), mail to:
Candlewood Amateur Radio Association, PO BOX 3441, Danbury CT 06813

For more info, phone (203) 798 2831 or (203) 790 7041.

Hope to see you all there.
73 de KD1YV
Jim

# 2472. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <3416203C.436E@inreach.com>
Source record: 91144
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

AC6V wrote:
>
> AMDX@worldnet.att.net wrote:
> >
> > Where did the term HAM come from? When did it come to popular use?

When radio was being developed at the turn of the century, and the fcc
was created, commercial interests wanted all the frequencies. However
certain portions of the high frequency band were allocated to amateur
radio enthusiasts for experimentation, the feeling being that they could
never develop radios that would transmit more than a few miles.
Thus, HAM stands for High frequency AMateur.
Anyone got one better?

# 2473. Ask a question and get answers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: John in Roseville <rtwod2@ns.net>
Message-ID: <01bcbd6d$4d0e50c0$2ef277cc@rtwodtwo>
Source record: 91145

Ask a question and get answers!

I always get many responses from the questions that I
ask in the HAM radio newsgroups. About 70% are totally
wrong and don't have a clue, 20% are on the verge of
understanding the question and 10% are right on.

It has always amazed me that so many people will respond
to a question that they know nothing about!

What do you think?

73 John

--

John in Roseville CA.
mailto:rtwod2@ns.net
http://www.ns.net/~rtwod2/
"Never drive faster than your guardian angel can fly"

## 2474. Dyna-Mite 6 meter transverter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: Harry and Joyce Johnson <panda@humboldt1.com>
Message-ID: <3416190F.5245@humboldt1.com>
Source record: 91146

Looking for info or circuit diagram for a Dyna-Mite 6 meter transverter.
Appears to have been built from a kit and dates from maybe 70s. Anyone
with info to share please e-mail Harry NV7K <panda@humboldt1.com>
Thanks.

# 2475. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34155923.5748789@news.atl.bellsouth.net>
Source record: 91147
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

On Tue, 09 Sep 1997 06:18:07 GMT, mrusso@hoflink.com (Mark Russo) wrote:

>On 7 Sep 1997 19:25:53 GMT, <AMDX@worldnet.att.net> wrote:
>
>> Where did the term HAM come from? When did it come to popular use?
>
>Gary Coffman, KE4ZV got it right. It means Home Amateur Mechanic!!
>
>73, Mark N2FLF

Well, I *may* have gotten it right, Mark. It is certainly a plausible
explanation. We don't know definitively, however. A lot of folks
have tried to track down and document the origin of the term, but
no one has been able to discover who used it first or why.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2476. Product Annoucement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: info@sparksintl.com
Message-ID: <5v6o66$cto@bilbo.w-link.net>
Source record: 91063

For complete information, visit: http//www.sparksintl.com

If you had told me a year ago that I would
be marketing a product that claims it will
remove two inches of fat in 24 hours,
I would have laughed.

"It sounds like snake oil," I would have told
you. "I wouldn't be involved with anything
that ridiculous."

...So much for predicting the future.

HERE'S WHAT CHANGED MY MIND:

Last December, I pushed my doubts aside
and tested the gel on my own "fat-prone
areas" -- stomach, hips, and thighs.
What happened just 24 hours later turned
me, an avowed skeptic, into a wide-eyed
believer. I lost 2-1/2" from my waist,
2-1/2" from my hips, and 3-1/2" from each
thigh -- overnight. I couldn't argue with
my tape measure or the way my painfully
tight jeans were suddenly comfortable.
My husband lost two inches from his worst
area -- his stomach. My mother-in-law
lost 1-1/2" from her stomach, and her problem
was a little bit of flabby skin, not serious
excess fat.

Now my company is marketing this miraculous
product around the world. And we're looking
for serious, motivated people who would enjoy
making terrific money while they sell a reliable
product that delivers results.

HOW OUR PRODUCT COMPARES TO OTHER PRODUCTS ON
THE MARKET...

1. It removes excess fat immediately, within
24 hours. You don't have to wait weeks or months
for it to work as you do with some "body contouring"
products on the market.

2. It liquefies fat naturally with common, European
herbs that have been used safely for centuries; the

fat is then eliminated by the body naturally thru
urination.

3. It's 100% safe, 100% herbal,
100% hypo-allergenic.

4. Quick and easy to use, it takes less than
an hour to apply.

5. No side effects, no after-effects, no strange
sensations - just great results!

6. It can be used repeatedly to lose multiple
inches and maintain the fat loss over months,
even years.

7. Affordable even for people on a budget.

FOR COMPLETE INFORMATION ON:
a) PRODUCT: http//www.sparksintl.com
b) BUSINESS OPPORTUNITY, reply to: info@sparksintl.com

# 2477. WTB HP 8640B manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Jason G Skalski <jskalski@acsu.buffalo.edu>
Message-ID: <3416ECF9.2399B6DA@acsu.buffalo.edu>
Source record: 91064

Hello,
I am looking for a manual for a HP 8640B signal generator.

Jim (N2GO)

# 2478. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3416E6C9.27A6@kfa-juelich.de>
Source record: 91065

Simon Lewis wrote:
>
> In article <3412F8B0.5CC7@kfa-juelich.de>, Bob Mueller <r.mueller@kfa-
> juelich.de> writes
> >> Remove antispam. to reply
> >I was planning to email you a reply but I have stopped doing so for
> >persons posting with an "antispam" trick in their addresses. If you
> >can't be bothered by the tiny trouble with the spam you can't be needing
> >help very badly.
> >
> >Bob
>
> Thats rather childish of you.
>
> This person has decided he does not wish to receive junk email, and to
> be perfectly honest, who does.
>
> The antipspam trick is his way of getting round receiving it. Whats
> wromg with that? Are you so lazy that you can't remove it from the
> address?
>
> I would say that if you think like this then he can do without your
> help. He'd be better off.
>
> Sic, what ever happened to amateur spirit?
>
> 73 Simon GM4PLM
>
> +---------------------------------------------------------------------+
> | Simon Lewis GM4PLM Editor - EMN |
> | European Microwave News - Supporting Microwave Radio Across Europe |
> | Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
> +---------------------------------------------------------------------+
Dear Simon and Sympathizerers,
Interesting responses! I suppose if you don't want junk mail
brought to you by the British Post Office or the United States Postal
Service (and I am sorry, but I do not know the official name of the
Canadian post office and don't plan to guess) you would just weld your
mail boxes shut and let anyone with anything to say to you send a FAX or
phone you up, or... Is it not the more like adult behaviour to accept
what comes, and erase it after ascertaining it it is junk mail? Perhaps
your systems for receiving are more difficult to use than mine but I
just touch a little "X" with my mouse cursor, punch the button and
forget the junk. Conversely, somebody trying to contact one of these

"nospam" address must, in order to offer help, figure which version is present here and then undo it. I would say if the user of a "nospam" method is too lazy to purge his spam, he is rather hard pressed to object if someone attempting to send a message objects to purging his particular "nospam" trick in order to enjoy the privilege of offering help. Getting rid of the spam is far easier (at least my software offers no "remove the "nospam" gimmick" button. Am I behind times?)
I checked and there is no evidence any of you defenders of "nospam" have sent any help in response to the original request. Thus, Mr. Carlisle-"Boy, now that he knows this guy wont (sic) be sending him an e-mail, he will probably have a breakdown." I assumed he would need no email from me after reading that because YOU helped him. Didn't happen!
Then we have the message quoted at the top. Please note this comes from the editor of an important microwave publication. We can take it for granted (can't we?) that he must have the technical competetence to answer the question intelligently. Furthermore, as a man living from the printed word it would be just a small effort to dash off a message to tell the fellow how to make his analog prescalar. Words are an editor's specialty. Well, it never happened as far as I can tell. At least the posting never made it to my monitor. I have been watching for it. Are YOU so lazy you can't help, although it is a small matter for you to do to do so? "....then he can do without your help....." Sure he could do without it, if you or the others offered their help. But again, it didn't happen. Sir, you are a strange one to point a finger and ask "Are you so lazy....." If I may speak in my own defense, I had expected to seek a clarification of what the analog prescalar was intended to do (until running once again into an "antispam") followed by trying to describe how such a thing could be made, what the technical limitations might be, and if it were hopelessly impractical, throw in a few words about why that is the case. None of you who were displeased about my objection to the "nospam" device seems willing to be bothered with such childishness as helping and educating. Talk about LAZY.
Finally, it is my opinion that these "nospam" devices have no future. I feel confident the spammers (or the ones supplying the software) are now busy writing software to filter the "antispams" out and this method of defense is bound to lead to endless escalation but no security. Only if the spammers one day notice they are wasting their time will they go away. In short, the problem will be gone if we ALL hit the little "erase item" button, no matter what is contained in the latest can of spam.

Bob

PS#1 I look forward to reading about the clever and original designs for analog prescalars!

PS#2 I think I will try to preserve the childish innocence which drives me to rise to a technical challenge and to help those who are having trouble with their own technical challenges. I hope I don't have to depend the the brand of adult who can't lift a finger to offer help (or is it that the entry into this sort of adulthood atrophies the brain so

coping with a technical question is no longer possible) but seems more concerned with the right to prevent any and all intrusions even if it means locking out the answer being sought. I also hope some of the innocence will be there when I run into a technical problem and beg for help. I promise not to weld my mailbox shut or to throw up unnecessary barriers to those who are ready willing and able to get me out of my bind. "God save the children....."

# 2479. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <5v6u96$n97@bgtnsc02.worldnet.att.net>
Source record: 91066

On 10 Sep 1997 08:32:58 GMT, marc_k@walrus.com (marc_k) wrote:

>John in Roseville (rtwod2@ns.net) wrote:
>: Q: Will a 572b take 3500 volts?
>
>: I was just wondering if I can run my 572b tubes
>: with 3500 volts on the plate. They are rated at
>: 2750 volts max.
>
>: 73 John

>If you bias the tubes properly, no problem....572b's are fairly
>rugged....you may shorten the tube life a bit, but 572b's are relatively
>cheap anyway.

Having just went through many batches of sample 572B's, I would NEVER
run more than 2700 volts on them.

With 2700 volts dc the peak anode voltage positive swing will reach
nearly 5200 volts IF the PA is properly loaded and much more than that
if you have a load fault or mistune the PA.

The bulk of tubes fail hi-pot tests for voltage breakdown at 7000
peak volts, and about 30% fail at much less than 5500 peak volts.

In the old days of good QC you might have gotten away with it, but
with newer tubes (including Cetrons and ESPECIALLY the Chinese tubes)
you'll be in for a bad experience.

73 Tom

## 2480. Attention High Frequency Designers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: "K. Goerg" <kgoerg@webblabs.com>
Message-ID: <3416E2F3.5B7D@webblabs.com>
Source record: 91067
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

If you are involved in the design of transmission lines, directional couplers, distributed filters, or RF & microwave electronics in general, take a few minutes to acquaint yourself with the all-new TransCad Version 4, the most comprehensive single & coupled structure synthesis offering available:

http://www.webblabs.com/transcad.htm

TransCad is without peer. And with TransCad there is no single-user limitation. The one-time $975 license fee allows department-wide TransCad usage, with no annual support fees and free upgrades for two years! TransCad is a necessity for every department involved in the design of high frequency electronics. For more information, see our web site or e-mail your questions. TransCad is in stock for daily shipping to any destination worldwide.

Sincerely,
Kathy Goerg

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI USA
kgoerg@webblabs.com
TEL 414.367.6825 FAX 414.367.6824

# 2481. WANTED PROP PITCH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Merv Schweigert <k9fd@mail.htc.net>
Message-ID: <5v6oai$n78$2@ns.htc.net>
Source record: 91068

NEED A PROP PITCH FOR PARTS OR REBUILD. WILL CONSIDER
ANY CONDITION. THANKS 73 K9FD

## 2482. EMC-tubetester

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Rolf Arnt Carlsson <rolf.carlsson@of.telia.no>
Message-ID: <34170A5F.B4CA9C74@of.telia.no>
Source record: 91069
Body handling: HTML body converted to readable text

Have tube tester from Electronic Measurements corp.-N.Y.C.-USA
EMC model is: 211 (94L001 B18.80)
Where can I get the manual or directions for use?
rolf.carlsson@usa.net

Have tube tester from Electronic Measurements corp.-N.Y.C.-USA

EMC model is: 211 (94L001 B18.80)

Where can I get the manual or directions for use?

rolf.carlsson@usa.net

# 2483. Re: Toner Transfer System

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <34171CC3.3556@phoenix.net>
Source record: 91070

J. Spence Lankford wrote:
>
> I am trying to make a printed circuit board using the Toner Transfer
> system sold by Digi-Key. I've done this several times at my old job -
> really nice surface mount stuff too - but I had the luxury of having
> the nice little heater/roller made specifically for doing pc boards.
> But I've changed jobs and no longer have the heater. I tried doing it
> on an electric stove top - I place a sheet of .060 copper on the eye
> then the transfer paper then my board then another sheet of copper
> then a weight. But this just doesn't seem do be working. I can't
> seem to get it to work out after six attempts. I'm getting tired of
> wasting my transfer paper & would like any suggestions. Please email
> to:
>
> slankford@scires.com
>
> Tks
>
> Spence
I use a regular electric iron. (no steam) turn it up as high as it will
go. Let the iron heat up for severial minutes. Put the pc board on a
smooth peice of board something that won't bend. place a peice of cotton
cloth over the transfer sheet and pc board. Iron. you will have to try
trial and error to get the right time frame.
The ol bought a new iron and I repaired her old one and keep it for this
purpose. works every time. I print out the trace on my old HP LJ II. If
I do get skips I black em out with a regular each resist pin.
Hope this helps.
joe K5ZCX

# 2484. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Cecil Moore <cecil_a_moore@ccm.intel.com>
Message-ID: <34171428.622A@ccm.intel.com>
Source record: 91071
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Anthony R. Gold wrote:
> So the *original* word was ham and amateur is a cockney derivative :-)

Hi Tony, right on. There were 'am actors long before there were any
amateur radio operators. 'am and amateur share the first syllable.
Seems like a natural progression to me.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 2485. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <5v6tjs$k0r@bgtnsc02.worldnet.att.net>
Source record: 91072

On 10 Sep 1997 08:32:58 GMT, marc_k@walrus.com (marc_k) wrote:

>John in Roseville (rtwod2@ns.net) wrote:
>: Q: Will a 572b take 3500 volts?
>
>: I was just wondering if I can run my 572b tubes
>: with 3500 volts on the plate. They are rated at
>: 2750 volts max.
>
>: 73 John

>If you bias the tubes properly, no problem....572b's are fairly
>rugged....you may shorten the tube life a bit, but 572b's are relatively
>cheap anyway.

Having just went through many batches of sample 572B's, I would NEVER
run more than 2700 volts on them.

With 2700 volts dc the peak anode voltage positive swing will reach
nearly 5200 volts IF the PA is properly loaded and much more than that
if you have a load fault or mistune the PA.

The bulk of tubes fail hi-pot tests for voltage breakdown at 7000
peak volts, and about 30% fail at much less than 5500 peak volts.

In the old days of good QC you might have gotten away with it, but
with newer tubes (including Cetrons and ESPECIALLY the Chinese tubes)
you'll be in for a bad experience.

73 Tom

# 2486. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <5v6tha$joi@bgtnsc02.worldnet.att.net>
Source record: 91073

On 10 Sep 1997 08:32:58 GMT, marc_k@walrus.com (marc_k) wrote:

>John in Roseville (rtwod2@ns.net) wrote:
>: Q: Will a 572b take 3500 volts?
>
>: I was just wondering if I can run my 572b tubes
>: with 3500 volts on the plate. They are rated at
>: 2750 volts max.
>
>: 73 John

>If you bias the tubes properly, no problem....572b's are fairly
>rugged....you may shorten the tube life a bit, but 572b's are relatively
>cheap anyway.

Having just went through many batches of sample 572B's, I would NEVER
run more than 2700 volts on them.

With 2700 volts dc the peak anode voltage positive swing will reach
nearly 5200 volts IF the PA is properly loaded and much more than that
if you have a load fault or mistune the PA.

The bulk of tubes fail hi-pot tests for voltage breakdown at 7000
peak volts, and about 30% fail at much less than 5500 peak volts.

In the old days of good QC you might have gotten away with it, but
with newer tubes (including Cetrons and ESPECIALLY the Chinese tubes)
you'll be in for a bad experience.

73 Tom

# 2487. Re: T/R Switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5v6su4$61h@sf18.dseg.ti.com>
Source record: 91074

In article <19970910025800.WAA13306@ladder01.news.aol.com>, kf6iil@aol.com says...
>
>Does anyone know where to buy a T/R coax switch or if any kits are
>available. Need one for old Hallicrafter sx 101 and ht 37 rigs I
>want to refurbish.

In keeping with the TRUE spirit of amateur radio, and going along with the neat old-timey Hallicrafters gear...

BUILD YOUR OWN!!!

For years, I've used Potter & Brumfield (and similar) octal-base DPDT relays with 115 vac coils for T/R switching between vintage amateur transmitters and receivers. These common relays will easily handle 100 Watts of RF (or at least I've never had one fail or give me any trouble). They're easy to find, cheap to buy at flea markets and swap meets, and fit a standard octal tube socket (also easy to find and cheap to buy). Use one pair of contacts for antenna switching, and use the other pair for receiver muting. Be sure to get one that runs on 115 vac, as most old transmitters supply this voltage to the rear panel connector when they are thrown into transmit mode.

This is a VERY CHEAP alternative to costly coax switches (such as the venerable Dow-key models). How costly? I just sold a Dow-key relay in as-is, untested condition (it came in a box of junk from a silent key's estate) for $35.00! I've seen them in tested, guaranteed-good condition selling for $50.00! You can probably pick up an octal-base relay and socket for a dollar at a swap meet, or free from someone's junkbox. I am not aware of any coaxial relay kits.

73 and keep on home-brewin'...

Dean W. Hemphill, K5DH
"... deep in the heart of Texas ..."

# 2488. LOWFER Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Gary Herbst <ggherb@juno.com>
Message-ID: <01bcbe25$3587f060$23022389@GGHERB.MONSANTO.COM>
Source record: 91075

I'm looking for a CW Lowerfer Transmitter circuit. Anyone have a reference to one or an Mag. article.

Thanks,

Gary-

# 2489. Re: Ask a question and get answers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Al Lorona <al_lorona@hp.com>
Message-ID: <3416FEA2.5F40@hp.com>
Source record: 91076

John in Roseville wrote:
>
>
> It has always amazed me that so many people will respond
> to a question that they know nothing about!
>
> What do you think?
>
> --
>

John,

I don't know anything about what you're talking about, but I will respond with an answer anyway.

You remind me of a guy here in the office who will often approach me with what sounds like an innocent question. I'll take a shot at answering it, only to have him shake his head and say, "Nope! That won't work!" In other words, he essentially already knew the answer and was just testing to see what my answer would be.

Instead of knocking the "wrong" answers you get on the group here, why not synthesize all answers received into a sort of consensus that is closer to the truth? After all, we are all amateurs, or at least that's our lowest common denominator, all armed with computers and access to a news group. That combination will always lead to a spectrum of answers whose accuracy will more or less follow a normal distribution.

I, like you, have experienced exactly the same phenomenon, most recently when I asked for help quieting down a noisy switching mode power supply. The 10% of answers that were "right on" solved my problem, and I couldn't be happier with that! The very ability to ask is something I've never been able to do before, and I'm very grateful to be able to do so.

Good luck to you. If I ever respond to a question incorrectly, just pitch my message and go on to the next one. And then do us a favor by posting the resolution to the problem so we can all learn a little bit more about this stuff.

R,

Al

# 2490. Re: LOWFER Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <34175201.369C@primenet.com>
Source record: 91077

You might try the Lowfer mailing list at QTH.Net. You can find
out more at: http://www.qth.net

> I'm looking for a CW Lowerfer Transmitter circuit. Anyone have a reference
> to one or an Mag. article.

-Brian

# 2491. Re: instructions on converting micor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Ron Helgerson <n7taw@pcez.com>
Message-ID: <3417517D.41A@pcez.com>
Source record: 91078

Benjamin,

The Micor is probably the second most popular repeater conversion there is. (After the GE Mastr II of course). You can build a repeater out of a single unit.

Somewhere in my bookmarks I have a website that details the conversion, but it is on a different machine. If I find it, I'll e-mail it to you directly.

Hope it helps,

Ron, N7TAW

---
Check out the Northwest Saturday Morning Swap Net at:
http://www.chatlink.com/~rickt/swap.htm
---

Benjamin Webster wrote:
>
> I am looking for instructions on how to convert old mobil 110 watt micor
> radios to ham band. Eventually, I would like to link two together to form
> a repeater ( unless one could be used somehow) please send help to the
> newsgroup. tnx N2ROQ@juno.com

## 2492. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <873923138snz@microvest.demon.co.uk>
Source record: 91079
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

In article <3416C395.4B42@ccm.intel.com>
cecilmoore@delphi.com "Cecil Moore" writes:

> Anthony R. Gold wrote:
> > And third, cockneys drop their H's, they never add extra ones. But
> > it's an 'eck of a good story.
>
> So how do they say ham? Aha - it's 'am, the first syllable of amateur.
> Sounded like 'amateur to Americans. Still does to me.

So the *original* word was ham and amateur is a cockney derivative :-)

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

# 2493. Schematic for Heath IP-18 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: astone@erols.com
Message-ID: <34178A9F.63FB@erols.com>
Source record: 91080

Hi -- Would anyone happen to have the schematic or manual for this power supply or know where I might be able to get one? It's a regulated variable 1-15V 500MA supply that I picked up at a hamfest. I was told that it works fine but guess what -- it's dead. So, time for a repair. Thanks for your help.

73,

Ron (KA3J)

# 2494. Re: Schematic for Heath IP-18 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341779E3.50F3@primenet.com>
Source record: 91081

astone@erols.com wrote:
You could try the the Heathkit mailing list at QTH.Net
(heathkit@qth.net).
For more information, see: http://www.qth.net

-Brian

> Hi -- Would anyone happen to have the schematic or manual for this power
> supply or know where I might be able to get one? It's a regulated
> variable 1-15V 500MA supply that I picked up at a hamfest. I was told
> that it works fine but guess what -- it's dead. So, time for a repair.
> Thanks for your help.

## 2495. Re: RC Car Modulation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Nuno Sucena Almeida <slug@pc1.local.aeminium.pt>
Message-ID: <5v6rm7$d8d@pc2.local.aeminium.pt>
Source record: 91082

Robert W. Brewer <rbrewer+usenet@op.net> sabiamente escreveu:
> modulation used by a standard radio control car transmitter?
Well, you can check about PPM and multi-tone control.

--
To reply by e-mail use *slug* as user and *cygnus.ci.uc.pt* as domain.
My web page & PGP sig are located at the same place.
Linux , AX25, Electronics, Amateur-Radio, Laser-coms nuts
CT1FOX CQG9304 CQM9228 Eng.Electrote'cnica FCTUC

## 2496. Re: Ask a question and get answers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: dick@libelle.com
Message-ID: <dick-ya02408000R1009972053140001@news.zippo.com>
Source record: 91083

In article <5v6gu7$e7p$1@artemis.backbone.ou.edu>,
jspatric@mailhost.ecn.uoknor.edu (John Stephen Patrick) wrote:

>I always try to answer questions when I am _positive_ I know the correct
>question.

Yes, but do you know the correct answer?! ::chortle::

73, Dick
--
Dick Flanagan W6OLD CFII Minden, Nevada (South of Reno)

# 2497. Re: Ask a question and get answers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: w9dmk-at-crosslink@crosslink.net
Message-ID: <34172922.2953599@news.crosslink.net>
Source record: 91084

On 9 Sep 1997 22:11:09 GMT, "John in Roseville" <rtwod2@ns.net> wrote:

>Ask a question and get answers!
...snip...

I think your statistics are a little pessimistic. As I read the threads I get the impression that most answers, as argumentative as they might be, are at least an order of magnitude better than the questions. Actually, I think most responders are very sincere and trying to be helpful.

For example, questions for help are often posted with almost no relevant information that one would need in order to give even a superficial answer.

People ask questions about ham radio equipment, and their questions sound like they're probably not hams - so what are they planning to do with the equipment?

I'm still laughing about the XYL who posted a request for help with TVI, etc., while her ham husband was away on a vacation. That was wild.

Whatever its faults, it's the best game in town.

## 2498. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <34169D71.7DC2@delphi.com>
Source record: 91085
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Anthony R. Gold wrote:
> And third, cockneys drop their H's, they never add extra ones. But
> it's an 'eck of a good story.

Therefore, amateur, 'amateur, and HAMateur would all be pronounced
the same, no?

73, Cecil, W6RCA, OOTC

# 2499. WWW.IW7CHV.ORG

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: iw7chv@linux.iw7chv.org
Message-ID: <34166738.146763298@news.tin.it>
Source record: 91086

The new site WWW.IW7CHV.ORG is ready to be viewed.

You can find the most complete Ham Radio Search Engine.

POWWOW Community about Ham Radio

IW7CHV Radio Gateway

Greetings from Raffaello Di Martino

---
PacketAddress : IW7CHV@IW7CHV.IPUG.ITA.EU
FidoNET : 2:335/719.6
Radio E-mail : iw7chv@linux.iw7chv.org
Job E-mail : dimartino@webdes.com
HamRadio Site : http://www.iw7chv.org
My Job Site : http://www.webdes.com (WEB design s.r.l.)
Phone : Home:080-8775895 Job:080-5576911 Cell:0347-3604205
---

# 2500. Re: MNManiac's Problems or Drew hates kids

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Proctor Hymera <username@wavetech.net>
Message-ID: <01bcbd82$14a6b8c0$669192ce@default>
Source record: 91148
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

What does this fool posting have to do with any of the groups it is posted
to?
Brian <bhilden@NOSPAMisd.net> wrote in article
<3415BDB0.7F71@NOSPAMisd.net>...
> Steve (KF2TI - Landing, NJ) wrote:
> > blah blah blah

# 2501. Re: car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: duane.vincent@greymatter.com
Message-ID: <873857311@greymatter.com>
Source record: 91149

I remember well the time I was working swing shift, and chatting with a friend on the 146.96 repeater while driving home. Sure enough, a car alarm went off. Curious, I went around the block and repeated the key down - the alarm went off again! Soon, the owner came out and turned the alarm off. It became a nightly habit on my way home to chat with my friend on the repeater...
A few weeks later, I went to graveyard shift, and continued my chatting.

Eventually, the car owner wised up and moved the car to a side street.

Duane KA7JEX

## 2502. T/R Switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: kf6iil@aol.com
Message-ID: <19970910025800.WAA13306@ladder01.news.aol.com>
Source record: 91150

Does anyone know where to buy a T/R coax switch or if any kits are available. Need one for old Hallicrafter sx 101 and ht 37 rigs I want to refurbish.

Please email responses to kf6iil@aol.com
Thanks
Ken

# 2503. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <5v5lvq$rh5$4@alice.walrus.com>
Source record: 91151

John in Roseville (rtwod2@ns.net) wrote:
: Q: Will a 572b take 3500 volts?

: I was just wondering if I can run my 572b tubes
: with 3500 volts on the plate. They are rated at
: 2750 volts max.

: 73 John

: --

: John in Roseville CA.
: mailto:rtwod2@ns.net
: http://www.ns.net/~rtwod2/
: "Never drive faster than your guardian angel can fly"

If you bias the tubes properly, no problem....572b's are fairly rugged....you may shorten the tube life a bit, but 572b's are relatively cheap anyway.

# 2504. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <A873879828Asnz@microvest.demon.co.uk>
Source record: 91152
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

In article <34141cf1.9037853@news.atl.bellsouth.net>
ke4zv@bellsouth.net "Gary Coffman" writes:

> Another story you may hear is that ham is the result of a Cockney
> pronounciation of (h)amateur. But that is unlikely for two reasons.
> First, the term was in use in America before there was substantial
> amateur activity in Britian. And second, voice transmission wasn't
> used by amateurs of the era, so how did a pronounciation get propagated
> by Morse?

And third, cockneys drop their H's, they never add extra ones. But
it's an 'eck of a good story.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

# 2505. Re: Wanted: "Penetrator Clips" like the ones on a phone line test set.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <5v5lgo$rh5$3@alice.walrus.com>
Source record: 91153
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

John in Roseville (rtwod2@ns.net) wrote:
: Wanted: "Penetrator Clips" like the ones on a phone line test set.
: I'm looking for some "Penetrator Clips" like the ones on a phone
: line test set. They look like alligator clips but have a pin
: inside to poke through a insulated wire.

: John in Roseville CA.
: mailto:rtwod2@ns.net
: http://www.ns.net/~rtwod2/
: "Never drive faster than your guardian angel can fly"

A place that sells the test sets can order these for you.
BTW, for thin wire, the little round group of tiny spikes works better
than the one larger spike.
The tiny spike type is called "bed of nails".
If you want to order them directly...the main manufacturer is J.S. Popper.
Note:the rubber boot is often not included, unless you pay extra for them.

# 2506. Radio E-mail discussion lists FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <34169293.7776336@news.mnsinc.com>
Source record: 91154
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.swap

Great new information on how to get on a REALLY GOOD E-mailing
discussion list with hams who share your interests.

A WIDE variety of topics discussed. For information on FREE
subscriptions, set your web browser to:

http://www.mnsinc.com/bry/hamlynx/hamlists.txt

Also see:

http://www.mnsinc.com/bry/hamlynx.htm

and

http://www.mnsinc.com/bry/hamfiles.htm

ENJOY! 73 de AF4K - Bry

(remove the word REMOVE from my e-mail address to respond!)

# 2507. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: ltest@rte9-sun_5.5.1
Message-ID: <5v699q$2kp@lztnsc06.att.com>
Source record: 91155

In article <341592c9.4187178@netnews.worldnet.att.net> bohnovic@worldnet.att.net (John Bohnovic) wrote:
> Anyone know what happened ot it? I tried to connect and it seems to be
> gone. I searched for it and couldn't find anything.
>

Anyone know what happened ot it? I tried to connect and it seems to be
gone. I searched for it and couldn't find anything.

I tried: http://www.1eagle1.com/commercial/pwdco/
and one other site and came up with nothing.

73..de John/K4WJ

John/K4WJ in Pembroke Pines, FL
K8PXG from 18 Jun 59 to 11 Feb 97
K8WJ from 12 Feb 97 to 07 Apr 97

# 2508. FS: Pyropen Junior (Was: Double Sided PC Boards)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3416a647.631088@news.mnsinc.com>
Source record: 91156
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

The Weller Pyropen Jr. normally sells for about $80

It's a butane powered soldering iron/heat gun device.

I have a used one for sale for $30 plus $3 shipping CONUS if anyone is interested!

Remove the word "REMOVE" from the REPLY TO address!!

On Fri, 29 Aug 1997 19:38:47 GMT, wdr@world.std.com wrote:

>In article <01bcafd5$86faa7c0$0390f5ce@wa6vse>,
>Carl R. Stevenson <wa6vse@fast.net> wrote:
>
>> The trick in soldering is to abandon the traditional soldering iron ...
>
>Gary Coffman's suggestion was to use a Weller PyroPen Jr with it's
>static-heat hood and bits of modelling clay as tinkers' dams to shape
>the heat to avoid sensitive components or joints already soldered.
>I forget if he recommended paste or eutectic microfine.
>
>Advise from our local commercial soldering guru is to use the least
>activated eutectic solder you can get away with (depends how oxidized the
>parts are), and always use the eutectic solder to control the temp of the
>joint. I know I had his website's URL here somewhere...
>
>
>73 de N1VUX BPL with Tech-No-Code
>Still certified code free, but not much longer? passed 3B and 4A!
>QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
>know you'll be voting in the next division and section elections.
>--
>Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
>http://world.std.com/~wdr to those who own one."--A.J.Liebling

(remove the word REMOVE from my e-mail address to respond!)

# 2509. Re: Doorknob HV Capasitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3416a74c.892366@news.mnsinc.com>
Source record: 91157

Also try:

http://www.mnsinc.com/bry/mega/partsupp.htm

DAN'S sMALL pARTS AND many OTHER SUPPLIERS LISTED THERE!

Oops!

On 5 Sep 1997 15:52:00 -0700, europa@primenet.com wrote:

>In article <01bcb83e$1e0294a0$13354382@permo.online.no>, "Fred Thiesen"
><permo@online.no> wrote:
>
>:Hello group,
>:Does anyone know where to buy high voltage door-knob
>:type capasitors? at reasonable prices?
>:Looking especially for 67pf - 7,5KVDC
>:Suppose they are made by HEC as these letters are
>:printed on the capasitors.
>:Tnx in advance.
>:
>:---
>:LA4UM Fred
>
>
>Peter Dahl, in El Paso, TX is the premier place to go for any high
>voltage/high power fixed caps, vacuum variables, transformers, diodes or
>whatever.
>
>
>Their phone # is (915)751-2300.
>
>They sell alot of used stuff that while its more expensive than hamfests,
>is much cheaper than new.
>
>Rob.

(remove the word REMOVE from my e-mail address to respond!)

## 2510. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: koystravas dimitris <sv2dsu@med.auth.gr>
Message-ID: <01bcbdfd$ccdad400$LocalHost@slirp.med.auth.gr>
Source record: 91158

> Hi Dimitris--
>
> Need more information--a balun for what frequency? How much power? Type
> of antenna?
>
> 73
>
> Rick K1BQT
ok Rick sorry about it...i need to make an 1:1 balun for my G5RV antenna
for
3.5 to 30 Mhz.
73....

# 2511. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3416c3f5.12822821@news.atl.bellsouth.net>
Source record: 91159
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

On Tue, 09 Sep 1997 21:21:16 -0700, Bill <whagen@inreach.com> wrote:
>
>When radio was being developed at the turn of the century, and the fcc
>was created, commercial interests wanted all the frequencies. However
>certain portions of the high frequency band were allocated to amateur
>radio enthusiasts for experimentation, the feeling being that they could
>never develop radios that would transmit more than a few miles.
>Thus, HAM stands for High frequency AMateur.

The term "ham" was in use long before the creation of the FCC in 1934,
or the displacement of amateurs to the short waves.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2512. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3416c516.13112405@news.atl.bellsouth.net>
Source record: 91160
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

On Mon, 08 Sep 1997 16:11:04 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:
>But the one I like best goes like this. This era was filled with pulp
>magazines catering to the experimenter. (Everyone at the end of
>the Victorian age apparently viewed himself as a closet inventor
>or tinkerer.) One of these magazines was called Home Amateur
>Mechanic, and it featured many simple radio sets a person could
>build. It is likely that when asked what kind of radio an operator
>was using, he might send back RIG HR ES HAM, meaning that
>it was one of the circuits shown in Home Amateur Mechanic
>magazine. Since telegraphers tend to abbreviate everything, due
>to the low throughput of Morse, this is plausible, and Home
>Amateur Mechanic magazine certainly did exist in the correct
>era. So it was those HAM radios which started the use of ham
>in amateur radio.

Er, ah, the pseudo-CW as written makes no gramatical sense.
Lets try RIG HR IS HAM or RIG HR DE HAM. The latter
makes the most sense, IE it says the rig is *from* Home Amateur
Mechanic magazine, but the former may have been the one used.
Apparently, no one alive today knows.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 2513. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: Cecil Moore <cecil_a_moore@ccm.intel.com>
Message-ID: <3416C395.4B42@ccm.intel.com>
Source record: 91161
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Anthony R. Gold wrote:
> And third, cockneys drop their H's, they never add extra ones. But
> it's an 'eck of a good story.

So how do they say ham? Aha - it's 'am, the first syllable of amateur.
Sounded like 'amateur to Americans. Still does to me.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 2514. Re: Ask a question and get answers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-10 00:00:00 UTC
From: jspatric@mailhost.ecn.uoknor.edu
Message-ID: <5v6gu7$e7p$1@artemis.backbone.ou.edu>
Source record: 91162

"John in Roseville" <rtwod2@ns.net> writes:

>Ask a question and get answers!

>I always get many responses from the questions that I
>ask in the HAM radio newsgroups. About 70% are totally
>wrong and don't have a clue, 20% are on the verge of
>understanding the question and 10% are right on.

>It has always amazed me that so many people will respond
>to a question that they know nothing about!

>What do you think?

Hmm... a question... I'll say "14 mA", John.

:)

No, seriously, there is a problem, but then people should always
remember that free advice is always worth what you pay for it. In other
words, the answer you get from this group may help, but maybe no more
than pointing your in the right (or wrong) direction.

>John in Roseville CA.
>mailto:rtwod2@ns.net
>http://www.ns.net/~rtwod2/
>"Never drive faster than your guardian angel can fly"

I always try to answer questions when I am _positive_ I know the correct
question.

John
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *
* Univ. of Oklahoma Amateur Radio Club: <http://www.ou.edu/ouarc> *

# 2515. Re: Colorburst filter and LM386

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001109972146190001@news.primenet.com>
Source record: 91013

:
:Some questions: The three pole filter as expected has significantly
:more
:insertion loss than the simple one rock filter that I'd been using
:previously.

What BW are you using?? A three pole filter made of even crappy crystals
should be usable down to 500hz or 1khz without too much IL.

However, if the three crystals are not well matched in center freq, that
would cause the problem you are talking about. If you have alot of
crystals, you could socket them, and mix and match until you get decent IL.

Rob

## 2516. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Bill Harris <billharr@flash.net>
Message-ID: <34184222.2D51@flash.net>
Source record: 91014

klocko@toad.net wrote:
>
> In article <01bcbdfd$ccdad400$LocalHost@slirp.med.auth.gr>,
> "koystravas dimitris" <sv2dsu@med.auth.gr> wrote:
> >
> > ...i need to make an 1:1 balun for my G5RV antenna
> > for 3.5 to 30 Mhz.
> > ....
>
> Hi Dimitris, One of the W2DU baluns should do the job. Get 7 or 8 ferrite
> beads (the ones that are about one inch long) that will fit over your
> coax. Make sure they are rated for 3.5 to 30 MHz. They should be fairly
> cheap. Slip them over the coax at the point where the coax meets the
> balanced line, and secure them with nylon ties. The beads should suppress
> any currents on the outside of the coax feed line without interfering
> with antenna operation. 73 and good luck. Bill N3WK

That is technically not a balun, it is only an rf choke.

# 2517. Re: LOWFER Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEGEnyL.1wG@netcom.com>
Source record: 91015

In article <01bcbe25$3587f060$23022389@GGHERB.MONSANTO.COM>,
Gary Herbst <ggherb@juno.com> wrote:
>I'm looking for a CW Lowerfer Transmitter circuit. Anyone have a reference
>to one or an Mag. article.

"Low-Frequency Transmitter", Radio-Electronics magazine, September 1989.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 2518. 900 MHz phone- extend range?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: tosca@warwick.net
Message-ID: <341e97a3.9072121@news.warwick.net>
Source record: 91016
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi all-

I'm now a (not so proud) owner of an AT&T (Lucent Tech) 9100 900MHz cordless phone. The clarity is good, and I like the design, but the range is less that what I require.

I need to go about 800 feet or so to an out-building on my property, and it just doesn't go quite that far.

I'm looking for assistance to design a proper outdoor antenna for it, that I would be able to mount anywhere between 5 feet (right outside a window) or 30 feet (onto the chimney on the roof) so I can extend its range? I used to use one years ago on my 49Mhz cordless, and it worked great until they got too popular in the area that I lived- then all sorts of weird stuff started happening!

I'm not worried about interfering with any other equipment, as these buildings are secluded, and away from any other property owners.

I would rather go with the antenna idea, but if some type of linear amp or circuit mod is available to boost range, I'll consider that too. (I have enough electronic experience)

Considerations: plastic exterior whip antenna on base unit, about 4.5" in length- cant just hook up a clip lead to it with a length of wire! How does one retrofit the proper impedance coax to something like that? (Remove and connect to the board, I would guess- There goes my warranty!!) Any ideas?

- Diagrams are proprietary and not available to ANYONE except Lucent.

Any takers?

VT
--

�ase ELECTRONICA! �1976 TE Inc.
mailto:tosca@warwick.net

## 2519. Re: Ask a question and get answers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19970911001300.UAA18026@ladder01.news.aol.com>
Source record: 91087

John, Why would you ask a question that you know the answer to anyway???
Are you a school teacher? They do those sort of things you know. But then
again, thay have an excuse Whats yours? Oh, maybe you are a jeopardy fan?
What say? LOU

## 2520. Re: Ask a question and get answers!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: rwalter7@aol.com
Message-ID: <19970911014301.VAA01601@ladder02.news.aol.com>
Source record: 91088

John, Why would you ask a question that you know the answer to anyway???
Are you a school teacher? They do those sort of things you know. But then
again, thay have an excuse Whats yours? Oh, maybe you are a jeopardy fan?
What say? LOU

Maybe he works for Radio Shack. "You've got questions. We got answers".

## 2521. Need coil winding info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: grogers2@aol.com
Message-ID: <19970911025000.WAA01065@ladder01.news.aol.com>
Source record: 91089

Looks like I am going to have to try and wind an I.F. coil for a Hallicrafters SX-117.
It is a good rig and I am not going to let it die if I can help it. I need any help I can get to locate parts and info on winding coils. I have never wound anything this small. I have the old coil and can possibly save the coil form. Any input is appreciated.
Glenn Rogers WA5ZJK
GRogers2@aol.com

## 2522. Re: car alarm activation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: scottn3xcc@aol.com
Message-ID: <19970911032401.XAA10072@ladder02.news.aol.com>
Source record: 91090

I've had the same experiance on the buisness band end of things on 150.875 MHz.
scott N3XCC

## 2523. I.F. filter drift.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: F5LCI@wanadoo.fr
Message-ID: <34177c18.3310998@news.wanadoo.fr>
Source record: 91091

Pardon me, but what is the best and simplest way to verify if an IF
filter has not drifted off after many years ?
My good old TR-7 has a Network Sciences 300Hz filter, and when I
switch to it the S meter goes down 10 dB.
I realigned the rig and found that peaking of Ls and Cs was difficult
to see on the S-meter.
Is it a symptom of ageing filter ?
More, background noise,even after audio filtering, is very annoying.
73 to all,

@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@ Jean-Marc BOURDEREAU F5LCI@wanadoo.fr @
@ 23000 GUERET / FRANCE @
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

# 2524. RF feedback problem with TS440s

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: pavel.reberc@guest.arnes.si
Message-ID: <5v82eu$lnu$1@kanja.arnes.si>
Source record: 91092

Hello,
I am using HM 2m transverter with ts440s SW transciever. On 2m i have a linear capable of 1,5kW PA, but when i increase output power on 2m to 500w or more, then RF power goes back into the mic input of the SW rig and the output sounds like GHHRRRGGGGzzzz...
PA output matching to antenna is better than 1.5:1 and all the connections between PA, transverter and rig are RF blocked with 15uH inductors series and 1nf capacitors to ground.
Any idea what to do?

73, Paul, s57ra

## 2525. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Paul Giusti <pgiusti@iaccess.com.au>
Message-ID: <3417F8A0.61C0CB21@iaccess.com.au>
Source record: 91093

```
--
Amateur Radio Station VK3FPG

Radios Decoders Software Antennas
IC-756 Hoka Code 3 RadioRaft 2.12 Alpha Delta DX-Ultra
NRD-525 Hoka Code3 Gold Hamcomm 3.1 Alpha Delta Sloper
Winradio Universal M-7000 PD-203 T2TFD
ATS 818CS Universal M-6000 Airmaster v2 Various Ham Antennas
PRO-2006/ Universal M-1200 POC32 Diamond Discone
OPTO 456 Kam+ v7 Scancat for Win
FT-50R Probe

http://www.qsl.net/vk3fpg

Located in Melbourne Australia 37.5S 145.0E +22m ASL
```

# 2526. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Paul Giusti <pgiusti@iaccess.com.au>
Message-ID: <3417F7E6.A9C9DAD1@iaccess.com.au>
Source record: 91094

```
--
Amateur Radio Station VK3FPG

Radios Decoders Software Antennas
IC-756 Hoka Code 3 RadioRaft 2.12 Alpha Delta DX-Ultra
NRD-525 Hoka Code3 Gold Hamcomm 3.1 Alpha Delta Sloper
Winradio Universal M-7000 PD-203 T2TFD
ATS 818CS Universal M-6000 Airmaster v2 Various Ham Antennas
PRO-2006/ Universal M-1200 POC32 Diamond Discone
OPTO 456 Kam+ v7 Scancat for Win
FT-50R Probe

Located in Melbourne Australia 37.5S 145.0E +22m ASL
```

# 2527. F.S. 4uf @ 4000 VDC CAPS (6)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Brian <haberlb@cadvision.com>
Message-ID: <34180503.5E4A@cadvision.com>
Source record: 91095

For sale 6 oil filled caps. Unused.
4 uf at 4000 vdc.
$60.00 CDN for all.
aprox 60lbs crated.
Brian

## 2528. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Chuck Smith <wa7rai@raibeam.com>
Message-ID: <01bcbe76$e06d2940$012bd3cf@default>
Source record: 91096
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Gary Coffman <ke4zv@bellsouth.net> wrote in article
<3416c3f5.12822821@news.atl.bellsouth.net>...
> On Tue, 09 Sep 1997 21:21:16 -0700, Bill <whagen@inreach.com> wrote:
> >
> >When radio was being developed at the turn of the century, and the fcc
> >was created, commercial interests wanted all the frequencies. However
> >certain portions of the high frequency band were allocated to amateur
> >radio enthusiasts for experimentation, the feeling being that they could
> >never develop radios that would transmit more than a few miles.
> >Thus, HAM stands for High frequency AMateur.
>
> The term "ham" was in use long before the creation of the FCC in 1934,
> or the displacement of amateurs to the short waves.
>
> Gary
> Gary Coffman KE4ZV | You Make It | Email:
> Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
> 534 Shannon Way | Guaranteed | or
> Lawrenceville, GA 30244 | | ke4zv@radio.org
>

I was once told that the word "ham" was slang for amateur in the early days
of radio.

Chuck, WA7RAI

# 2529. Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <5v92kt$d8h@harpo.cs.ubc.ca>
Source record: 91097

I post two kinds of articles on Usenet. One kind asks for help, and the other kind posts information - either in response to a question, or just to report experiences that I think are useful to other people.

When I post a question, I will always include my real return address in the article so that people can answer my question by email. I don't expect them to figure out how to fix up a mangled "nospam" address. Conversely, when I answer someone else's question by email, and it bounces because their question has a bad address, I usually just trash the reply rather than figuring out how to fix the address - so the person asking the question just lost a potentially useful reply.

Thus, I think that requests for help should always have a real address in them.

On the other hand, most of what I post is information, not questions. I don't expect a reply. So far, I use my real address in these too, so people can send me unsolicited comments anyway. But I may change to using a mangled address in these. I get far more spam than I get real mail, particularly if you count bytes and transmission time. All of the 24 kb long chain letters take a while to receive before they are junked, even if they are junked automatically. I could really do without the time spent receiving and junking these things.

Thus, I don't think it's unreasonable to use a bogus address in postings that I expect no reply to. I have not begun doing this yet, but I understand those who do.

What I don't understand is people who ask others to help them, but don't provide a valid mail address. If it's significantly harder to help you than other people, many people just won't bother.

Dave

## 2530. Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-970911140852Z-30058@whpost.wh.lucent.com>
Source record: 91098

The correct URL is:

http://www.pwdahl.com/

Seth KC2WE

# 2531. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Ray Dennis <Realtor@RayDennis.com>
Message-ID: <341824C4.35FF@RayDennis.com>
Source record: 91099
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Chuck Smith wrote:
>
> Gary Coffman <ke4zv@bellsouth.net> wrote in article
> <3416c3f5.12822821@news.atl.bellsouth.net>...
> > On Tue, 09 Sep 1997 21:21:16 -0700, Bill <whagen@inreach.com> wrote:
> > >
> > >When radio was being developed at the turn of the century, and the fcc
> > >was created, commercial interests wanted all the frequencies. However
> > >certain portions of the high frequency band were allocated to amateur
> > >radio enthusiasts for experimentation, the feeling being that they could
> > >never develop radios that would transmit more than a few miles.
> > >Thus, HAM stands for High frequency AMateur.
> >
> > The term "ham" was in use long before the creation of the FCC in 1934,
> > or the displacement of amateurs to the short waves.
> >
> > Gary
> > Gary Coffman KE4ZV | You Make It | Email:
> > Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
> > 534 Shannon Way | Guaranteed | or
> > Lawrenceville, GA 30244 | | ke4zv@radio.org
> >
>
> I was once told that the word "ham" was slang for amateur in the early days
> of radio.
>
> Chuck, WA7RAI

It is more universal than that. "Ham actor" referred to an amateur
actor and carried over into radio.

Ray W0DQ

# 2532. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <341812AF.4EB6@onramp.net>
Source record: 91100

Dave Martindale wrote:
>
> I post two kinds of articles on Usenet. One kind asks for help, and the
> other kind posts information - either in response to a question, or just
> to report experiences that I think are useful to other people.
>
> When I post a question, I will always include my real return address
> in the article so that people can answer my question by email. I don't
> expect them to figure out how to fix up a mangled "nospam" address.
> Conversely, when I answer someone else's question by email, and it
> bounces because their question has a bad address, I usually just trash
> the reply rather than figuring out how to fix the address - so the
> person asking the question just lost a potentially useful reply.
>
> Thus, I think that requests for help should always have a real address
> in them.
>
> On the other hand, most of what I post is information, not questions.
> I don't expect a reply. So far, I use my real address in these too,
> so people can send me unsolicited comments anyway. But I may change
> to using a mangled address in these. I get far more spam than I get
> real mail, particularly if you count bytes and transmission time.
> All of the 24 kb long chain letters take a while to receive before
> they are junked, even if they are junked automatically. I could
> really do without the time spent receiving and junking these things.
>
> Thus, I don't think it's unreasonable to use a bogus address in
> postings that I expect no reply to. I have not begun doing
> this yet, but I understand those who do.
>
> What I don't understand is people who ask others to help them,
> but don't provide a valid mail address. If it's significantly harder
> to help you than other people, many people just won't bother.
>
> Dave

I agree 100%. I will try to help those that ask for it but I WILL NOT try to decode their anti-spam measures. If my reply bounces I trash it. As you said if I post for help I give my real address to make it easier for people to send me e-mail. Anyone that lists something for sale and then includes an anti-spam address will not get a reply from me.

Spam is a problem but I can overlook it if I get the help I need or sell something.

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 2533. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5v9a2l$mjo@hpcvsnz.cv.hp.com>
Source record: 91101

Bob Mueller (r.mueller@kfa-juelich.de) wrote:

: Dennis Erwin Thurlow wrote:
: ....
: > Remove antispam. to reply
: I was planning to email you a reply but I have stopped doing so for
: persons posting with an "antispam" trick in their addresses. If you
: can't be bothered by the tiny trouble with the spam you can't be needing
: help very badly.

Hahahaha.... I just got EMAIL from someone asking me a question, and
his return email address was ...@nospam.com. He provided NO other
address! Talk about someone not really wanting an answer!

--
Cheers,
Tom
tomb@lsid.hp.com

# 2534. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Mike - WB0IKT <crucis@sky.net>
Message-ID: <341841D1.ED5476A@sky.net>
Source record: 91102
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Because so many amateurs are "porkers"! :-)

MDX@worldnet.att.net wrote:
>
> Where did the term HAM come from? When did it come to popular use?
>
> Thanks for the
> input.
> Mike Knowlton

--
==========
Mike Watson, WB0IKT QCWA Mbr# 28651, Mid-Continent Chapter
#35
Raymore, Missouri, USA Grid: EM28st
http://www.sky.net/~crucis E-mail: crucis@sky.net or WB0IKT@juno.com
==========

# 2535. FS 900 MHz. XVTR BOARDS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: "David R. Smith" <wa6ydi.telis@telis.org>
Message-ID: <34183F54.5D21@telis.org>
Source record: 91103

(6) CALIFORNIA MICROWAVE 925 MHz. to 10.7 MHz TRANSVERTER BOARDS. 5 watts output; Very high quality boards; DUAL receiver front-ends (diversity??) uses MMICS in the RF and IF stages and TOKO 3 pole filters; the IF can be easily changed; 12 vdc; I have no manual but do have a partial schematic. $95 ea.

Dave Smith - WA6YDI

(209) 432-0290 (H)

# 2536. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <A15wBOA+E$F0Ewyg@pacsat.demon.co.uk>
Source record: 91104

In article <3416E6C9.27A6@kfa-juelich.de>, Bob Mueller <r.mueller@kfa-juelich.de> writes

>Dear Simon and Sympathizerers,
> Interesting responses! I suppose if you don't want junk mail
>brought to you by the British Post Office or the United States Postal
>Service (and I am sorry, but I do not know the official name of the
>Canadian post office and don't plan to guess) you would just weld your
>mail boxes shut and let anyone with anything to say to you send a FAX or
>phone you up, or... Is it not the more like adult behaviour to accept
>what comes, and erase it after ascertaining it it is junk mail?

Why should I accept unsolicited mail? World advertising has gone mad. I get offers from the TV, through the door, on the phone, my fax, my email. If I wanted to buy these products I would enquire about them. Its bad enough having to watch them on TV without having it rammed down my throat elsewhere. I can't even walk down my street in the town without somebody stopping me and trying to sell me something.

That is invasive advertising, and IMHO damm annoying. As for email advertising it end up costing ME money because I have to sit and download it and sift through it in my normal mail. Is that right? Should I have to pay for someone else's advertising? I don't think so. It might be acceptable in other countries but here in the UK there is a great deal of anger over junk mailing.

Whats it doing to the environment? Do we really need to generate all this junk paper?

> Perhaps
>your systems for receiving are more difficult to use than mine but I
>just touch a little "X" with my mouse cursor, punch the button and
>forget the junk.

You must be lucky then. Mine has no such facilities.

> Conversely, somebody trying to contact one of these
>"nospam" address must, in order to offer help, figure which version is
>present here and then undo it. I would say if the user of a "nospam"
>method is too lazy to purge his spam, he is rather hard pressed to
>object if someone attempting to send a message objects to purging his
>particular "nospam" trick in order to enjoy the privilege of offering
>help. Getting rid of the spam is far easier (at least my software
>offers no "remove the "nospam" gimmick" button. Am I behind times?)

As I said, you're lucky. Most of the rest of us have to devise and test ways of getting round this and this seems a good idea for now. I am sure

someone will get round that but at least it works so far!

So if a user has no other way to ditch junk mail then he's lazy? Sic.

> I checked and there is no evidence any of you defenders of "nospam"
>have sent any help in response to the original request. Thus, Mr.
>Carlisle-"Boy, now that he knows this guy wont (sic) be sending him an
>e-mail, he will probably have a breakdown." I assumed he would need no
>email from me after reading that because YOU helped him. Didn't happen!

Maybe no-one knows the answer? Better not to send anything rather than a tirade of abuse.

> Then we have the message quoted at the top. Please note this comes
>from the editor of an important microwave publication. We can take it
>for granted (can't we?) that he must have the technical competetence to
>answer the question intelligently.

Important - thankyou, but I don't consider my newsletter to be 'that' important. As it happens I have no idea about his problem, I deal with microwave RF and operating. I am not in a place to answer his question so therefore instead of trying to look smart and give him an incorrect answer or advise, I did the right thing - I said nothing. Unlike some others who seemed more interesting in shooting him down, rather than offering constructive advice.

> Furthermore, as a man living from the
>printed word it would be just a small effort to dash off a message to
>tell the fellow how to make his analog prescalar. Words are an editor's
>specialty.

You really ought to check on your facts before you start making sweeping statements of drivel* like this. Do you know alot about my newsletter? Do you know how much it costs to subscribe? Well I would have actually checked before accusing someone of the above. My newsletter for your interest is actually free, I do not charge for it. So how can I make a living from it? I'd be a very poor man if I did, indeed I would owe money as I have to pay provider fees and telecom charges to distribute it and keep my webpages running. I do this because I offer a service to microwave operators who subscribe to it. I do it because I enjoy it, not to make money out of it.

Its called AMATEUR SPRIRIT. It something that quite a number of people seem to have forgotten and the internet seems to bring the worst out in some people.

> Well, it never happened as far as I can tell. At least the
>posting never made it to my monitor. I have been watching for it. Are
>YOU so lazy you can't help, although it is a small matter for you to do
>to do so? "....then he can do without your help....." Sure he could
>do without it, if you or the others offered their help. But again, it
>didn't happen. Sir, you are a strange one to point a finger and ask "Are
>you so lazy....."

I have already explained why I did not reply personally, and your argument is now getting boring.

> If I may speak in my own defense, I had expected to
>seek a clarification of what the analog prescalar was intended to do
>(until running once again into an "antispam") followed by trying to
>describe how such a thing could be made, what the technical limitations
>might be, and if it were hopelessly impractical, throw in a few words
>about why that is the case.

Oh so its more a case of you'd like an answer too and was upset because you didn't. What a shame!

> Finally, it is my opinion that these "nospam" devices have no
>future. I feel confident the spammers (or the ones supplying the
>software) are now busy writing software to filter the "antispams" out
>and this method of defense is bound to lead to endless escalation but no
>security. Only if the spammers one day notice they are wasting their
>time will they go away. In short, the problem will be gone if we ALL
>hit the little "erase item" button, no matter what is contained in the
>latest can of spam.

That maybe so, but they do work at the moment. You won't persuade advertisers to stop just by ignoring them, and again, why should I pay to download it in the first place. I didn't ask for it in the first placce.

>PS#2 I think I will try to preserve the childish innocence which drives
>me to rise to a technical challenge and to help those who are having
>trouble with their own technical challenges. I hope I don't have to
>depend the the brand of adult who can't lift a finger to offer help (or
>is it that the entry into this sort of adulthood atrophies the brain so
>coping with a technical question is no longer possible)

I hope you get your reply, but from someone who can help you with the right knowledge, not just someone who 'thinks' he knows the right answers and wants to be smart.

>but seems more
>concerned with the right to prevent any and all intrusions even if it
>means locking out the answer being sought. I also hope some of the
>innocence will be there when I run into a technical problem and beg for
>help. I promise not to weld my mailbox shut or to throw up unnecessary
>barriers to those who are ready willing and able to get me out of my
>bind. "God save the children......"

Eh? Noone suggested any such thing. My we do have a tendancy to exagerate a little don't we! I simply find the constant bombardment of junk through my TV, phone, fax and email account tiresome, as I am sure others do. Do I not have a right to not receive this? My right to privacy? A lack of privacy has recently caused the death of one human being, maybe its about time we were alittle more heavy handed with intruders of personal privacy?

73 Simon GM4PLM

+----------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------------+

# 2537. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: klocko@toad.net
Message-ID: <874013323.20698@dejanews.com>
Source record: 91105

In article <01bcbdfd$ccdad400$LocalHost@slirp.med.auth.gr>,
"koystravas dimitris" <sv2dsu@med.auth.gr> wrote:
>
> ...i need to make an 1:1 balun for my G5RV antenna
> for 3.5 to 30 Mhz.
> ....

Hi Dimitris, One of the W2DU baluns should do the job. Get 7 or 8 ferrite beads (the ones that are about one inch long) that will fit over your coax. Make sure they are rated for 3.5 to 30 MHz. They should be fairly cheap. Slip them over the coax at the point where the coax meets the balanced line, and secure them with nylon ties. The beads should suppress any currents on the outside of the coax feed line without interfering with antenna operation. 73 and good luck. Bill N3WK

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2538. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Cecil Moore <cecil_a_moore@ccm.intel.com>
Message-ID: <34184973.19A2@ccm.intel.com>
Source record: 91106
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Ray Dennis wrote:
> It is more universal than that. "Ham actor" referred to an amateur
> actor and carried over into radio.

Hi Ray, here's a quote from the "Word For Word" newspaper column:
"An earlier 'Word For Word' suggested that the term 'Ham Actor'
probably referred to the ham fat once used to remove make-up.
On the other hand, a 'Ham Radio Operator' is certainly a play
on the word 'amateur'. The term was coined in the 1920s."
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

## 2539. ARC-1 FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: Nelson <5560@notso.net>
Message-ID: <341874DF.3D0C@notso.net>
Source record: 91107

Have one: RT-18/ARC-1, 26 VDC with dynamotor for sale, for parts or for
a restorer with a load of enthusiasm. $50 shipped many places USA.
Please reply to : shiso@ici.net
Thank You. Bruce, KD1MW

# 2540. Re: Need coil winding info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5v9un1$eab$1@rosenews.rose.hp.com>
Source record: 91108

G Rogers2 (grogers2@aol.com) wrote:
: Looks like I am going to have to try and wind an I.F. coil for a
: Hallicrafters SX-117.
: It is a good rig and I am not going to let it die if I can help it. I
: need any help I can get to locate parts and info on winding coils. I have
: never wound anything this small. I have the old coil and can possibly save
: the coil form. Any input is appreciated.
: Glenn Rogers WA5ZJK
: GRogers2@aol.com

It's not too bad, Glenn. One thing you might try if you haven't already... is to salvage the original. In saying you can save the old form, I would assume then that the mechanicals are intact? And, possibly the original just has an open?

I had a situation where I too had intact mechanicals but one of the bank wound coils had had something contact and break a lot of wires in one spot. Thought it was a lost cause but then another reader here suggested unwinding the coil until you get to the bad spot(s) and mend it. Sure, depending on how much wire you took off, the inductance will be different..but if you dont have to unwind too much you might be able to compensate with the tuning slug or condensor.

If you had to take too much off, you can mend the break and add more wire (yes, #36 etc. is small, but with patience it can be done.)

If you want to start over and have the form to work with, you can rewind the bank. Two banks would be more time consuming and difficult. I build an AM broadcast radio using AA5 bottles and wound my own bank-wound IF transformers and it works well. Knowing the IF frequency for the SX-117... you could then calculate the required inductance and then formulate the required wire size and number of turns for that particular form that you have saved, using dimensions Hallicrafters used. I have one of those "winding your own transformer" books gotten from the pages of Pop Elec etc...

Bank winding is not difficult, you just have to be patient when winding and not let the wifey unit distract you while counting (unless you set up some sort of coil-winding jig with a counter) :-)

I wound my coils on lucite rods and kept the wire in place with round, flat pieces of plastic at each end of the rod.

You can wind them directly onto your form using removable
flat round pieces of some material that doesnt flex much,
or wind them onto a rod of similar diameter with more easily
removably flat round guides and then after spraying or applying
some laquer or glue later tranfer to the original form carefully.

This works, but remember to add a layer or two of masking tape
to the rod so the inside diameter of the finished coils will
fit over the original coil form.

This is exciting stuff, folks. (yeah, I know....zzzzzz eh pe
pe pe pe....zzzzzzz eh pe pe pe)

Let us know how your project turns out. You're right about
the old Hallicrafters. It's not a lost cause at all!!

Your radio pal, Tony.

PS...remember to get the coupling between the primary
and secondaries right or your selectivity and performance
will be way off!

## 2541. Colorburst filter and LM386

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34187c11.75623705@news.erols.com>
Source record: 91109

With the help of Leon Heller, Tom Bruhns and others I finally built and
successfully installed a narrow, three pole CW color burst (3.579) filter in
my HB superhet.
Leon's formula provided the value for the shunting caps and I just copied
the termination circuits used in Doug DeMaw's "Barebones" superhet circuit.
I had to fiddle with the LC circuit at the filter's input (had to add some
capacitance to get it to resonate). I also had problems getting the BFO
frequency in the right place: When I put one of the color burst rocks from
the same batch (same freq) in the BFO, I found that it was way too high and
was producing an annoying high-pitched CW tone. Even with the series
"wiggle" cap shorted out, it was still too high. So I moved this trimmer
cap from series to parallel across the rock and was able to set the BFO for
a pleasing 700hz tone.

I used a batch of 50 xtals purchased from Dan's small parts.

The narrow filter really makes a big difference - the RX is now truly in the
"single signal" category.

Some questions: The three pole filter as expected has significantly more
insertion loss than the simple one rock filter that I'd been using
previously. To compensate, I switched my LM386N-1 audio amp into the "high
gain" mode (cap between pins 1 and 8). The amp is now quite a bit more
fussy and I had to do some pruning to avoid feedback. I also notice that
some AC ripple from the supply is more evident in the audio. What's the QRP
conventional wisdom on the 386? Is it worthwhile to run it in the high
gain mode? Should I back off on its gain and add another AF amp stage? Or

how about another IF amp to compensate for the increased insertion loss?

73 de N2CQR
Bill Meara, Falls Church, Virginia
wmeara@erols.com
http://www.mindspring.com/~johnmb/billm.htm

# 2542. kits for no code techs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: dwayne rich <drichff@worldnet.att.net>
Message-ID: <5vaduu$4gu@bgtnsc02.worldnet.att.net>
Source record: 91110

My fiancee has become interested in ham radio and wants to know if there are any kits that she could build to get on the air once she gets her no code tech ticket? SHe has a desire to build rather than buy a rig. Building things shouldn't be a problem for her as she has a masters in electrical engineering. My only concern with her getting her license is that I will have to share radio time <grin>. Can anyone point me in the direction of kits to build?

Dwayne
KC4ADW

## 2543. Re: I.F. filter drift.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001109972153040001@news.primenet.com>
Source record: 91111

In article <34177c18.3310998@news.wanadoo.fr>, F5LCI@wanadoo.fr (Jean M.
Bourdereau) wrote:

:Pardon me, but what is the best and simplest way to verify if an IF
:filter has not drifted off after many years ?
:My good old TR-7 has a Network Sciences 300Hz filter, and when I
:switch to it the S meter goes down 10 dB.
:I realigned the rig and found that peaking of Ls and Cs was difficult
:to see on the S-meter.
:Is it a symptom of ageing filter ?
:More, background noise,even after audio filtering, is very annoying.
:73 to all,
:
:@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
:@ Jean-Marc BOURDEREAU F5LCI@wanadoo.fr @
:@ 23000 GUERET / FRANCE @
:@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

Drift of one or more xtals may be the problem. Spray the filter with
Freeze it and/or heat it up with a heat gun (be careful). That might
provide some clues.

Rob.

## 2544. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-11 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001109972149440001@news.primenet.com>
Source record: 91112

In article <341812AF.4EB6@onramp.net>, Clif <avvid@onramp.net> wrote:

:I agree 100%. I will try to help those that ask for it but I WILL NOT
:try to decode their anti-spam measures. If my reply bounces I trash it.

This is USENET. You post a question and someone POSTS a response. then
its available via DejaNews for the next 100years for people to either use
or laugh at.

I don't see why anyone should care what the return address is.

rob.

ps. please POST all responses :) :)

## 2545. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Paul Giusti <pgiusti@iaccess.com.au>
Message-ID: <3417F9AF.6FC077BA@iaccess.com.au>
Source record: 91017

```
--
Amateur Radio Station VK3FPG

Radios Decoders Software Antennas
IC-756 Hoka Code 3 RadioRaft 2.12 Alpha Delta DX-Ultra
NRD-525 Hoka Code3 Gold Hamcomm 3.1 Alpha Delta Sloper
Winradio Universal M-7000 PD-203 T2TFD
ATS 818CS Universal M-6000 Airmaster v2 Various Ham Antennas
PRO-2006/ Universal M-1200 POC32 Diamond Discone
OPTO 456 Kam+ v7 Scancat for Win
FT-50R Tigertronics BPM2 Probe

http://www.qsl.net/vk3fpg

Located in Melbourne Australia 37.5S 145.0E +22m ASL
```

## 2546. Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Sean Dyer <sean@wubios.wustl.edu>
Message-ID: <01bcbf1f$58533230$5f9585ce@sean>
Source record: 91018

Why would or wouldn't this work?

1. Take a bandpass filter of ~10khz centered somewhere in the HF spectrum.

2. Amplify this signal

3. Sample this signal at say 30khz. (16bits * 30K=480kbps) By the sampling theorem this should be more than sufficient to completely represent the information contained in the passband.

4. Put this data on a high speed bus (SCSI etc) to a desktop computer. At this point by transforming to the frequency domain the passband could be arbitrarily narrowed and other more sophisticated DSP algorithms applied. (I'm assuming a pretty powerful desktop computer here)

5. Output to a decoding/demodulation process on same computer and render as sound, text or whatever..

For me the difficulty is in step 3, I think I have a vague idea of how the rest of the process could be implemented.

I'm curious what other people with more expertise and experience think about this idea. Do you think that it could be translated into a homebrew receiver? Has this been done before. I've read some discussion of commercial/military receivers that implement a similar design, how are they similar/different.

Thanks in advance for your thoughts.

SD

# 2547. Re: Media Alert: Anti-Radio House Bills Before Congress/boo hoo

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <5vaimd$npp@basement.replay.com>
Source record: 91019
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew

In article <3408B680.4496@iu.net>, wnewkirk@iu.net wrote:

:William M. Pasternak wrote:
:> Quite the contrary, we would simply obtain the needed radios from the
:> authorities, as has already been done in many cities. Only you the
:> scanner hobbyist would not be permitted to listen in.
:> de WA6ITF
:
:very true...and with the advent of trunking types of systems, it's the
:only easy way for the media to track the action...
:
:bill n.

A hilarious take. Only ham-operators are so dumb as to not be able to defeat any kind of so-called secure communications. Only strong encryption is out of the reach of us hackers. We program our own cell phones. What makes you think we cannot program our own trunking HT's to any city in the nation?

Tell the FCC they better start requiring real written exams for ham licenses. What a bunch of "multiple-choice" morons!

Dr. EMF

# 2548. Re: Colorburst filter and LM386

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34191076.113609835@news.erols.com>
Source record: 91020

On 11 Sep 1997 21:43:00 -0700, europa@primenet.com wrote:

>
>
>:
>:Some questions: The three pole filter as expected has significantly
>:more
>:insertion loss than the simple one rock filter that I'd been using
>:previously.
>
>What BW are you using?? A three pole filter made of even crappy crystals
>should be usable down to 500hz or 1khz without too much IL.
>
>However, if the three crystals are not well matched in center freq, that
>would cause the problem you are talking about. If you have alot of
>crystals, you could socket them, and mix and match until you get decent IL.
>
>Rob

Rob: The filter is supposed to be about 250 hz wide. I think the
crystals are very close in freq. Some of the literature does talk
about adding IF amplification to compensate for insertion loss.
Doesn't seem to be a big deal here, but I do notice a difference when
comparing overall rx gain with the 3 rock filter as compared to the
simple one crystal filter I was using before.

Bill

# 2549. Re: 2304MHz / 2403MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: <>
Message-ID: <5vav47$s6q@m5.c2.telstra-mm.net.au>
Source record: 91021
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

In article <01bcb815$2ee95980$2a9d1dcb@johnc>, "John Clarke" <jclarke@tpgi.com.au> wrote:
>No they are still here but it is about to get really crowded with all the
>new short haul
>data links being set up. CAA is looking at interested party submissions on
>moving the pay TV,internet acess and video conferencing services up to
>23.85-25.85GHZ. It will bring the dish size down to approx 12 inches which
>will be pleasing to almost everyone and every council across Australia,who
>were worried we would wind up looking like a lunar base station. Should be
>good when it happens. Cheers John
>

What does this all mean ??? The antennas for MDS pay TV are already
about 12-15 inches !! Putting the Frequency up to 24GHz would appear
only to help attenuate signals better, and increase the reflector size and
make it solid instead of (what it is now) mesh ??

# 2550. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <341945C3.436F@antispam.trader.com>
Source record: 91022

Simon Lewis wrote:
> In article <3416E6C9.27A6@kfa-juelich.de>, Bob Mueller <r.mueller@kfa-
> juelich.de> writes
>
> >Dear Simon and Sympathizerers,...
> Why should I accept unsolicited mail?

I posted the prescaler question, and I rememeber reading a response from Mr. Mueller, though I can't recall whether it was posted or emailed. But I must have missed another post because I have no idea how this thread got started under Re: Oscilloscope prescaler. ???
--
Elder - Westminster Presbyterian
TRA #2693
N9VEM
Remove antispam. to reply

## 2551. Mars amp chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: bobn9lvu <bobn9lvu@lakefield.net>
Message-ID: <341936DF.E6D55F44@lakefield.net>
Source record: 91023

I am looking for some mars-1 - mars-8 chips, or the ceramic ram-1 - ram-8 chips any one know of a source, other than direct?

# 2552. Re: Schematic for Heath IP-18 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: John Doe <NewName@netusa1.net>
Message-ID: <01bcbf84$8b9ad660$7daa8bcd@crider.holli.com>
Source record: 91024

Try the Raymond Sarrio Co. Search for Sarrio on the net . He has many Heath
Kit catalogs

Chuck
KB9QNW

astone@erols.com wrote in article <34178A9F.63FB@erols.com>...
> Hi -- Would anyone happen to have the schematic or manual for this power
> supply or know where I might be able to get one? It's a regulated
> variable 1-15V 500MA supply that I picked up at a hamfest. I was told
> that it works fine but guess what -- it's dead. So, time for a repair.
> Thanks for your help.
>
> 73,
>
> Ron (KA3J)
>

## 2553. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970912143401.KAA17152@ladder01.news.aol.com>
Source record: 91025

Hi Bill--

>That is technically not a balun, it is only an rf choke.

It's purpose is still the same--to break the low impedance path to the outside surface of the coax feedline, thereby blocking unwanted RF current flow. If it does the same job, why is it "only" a choke?

Rick K1BQT

# 2554. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <34195BA0.2A12@popd.ix.netcom.com>
Source record: 91026

I used G5RV antennas for more years than I care to count, both full and half size, and never found that a balun helped much. You do however need an ATU to transform whatever wierd impedance turns up at the shack end of the coax to something near 50 ohms. Basically I think that the coax in most setups is actually part of the antenna!
73
Dan AC6AO G3NCR

## 2555. Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199709121533.LAA29001@pop.uky.edu>
Source record: 91027

Did anyone ever answer the question about the Oscilloscope
prescaler. All I have seen is talk about E-mail addresses.
You can't prescale the input to an oscilloscope like you can
to a frequency counter.
73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

# 2556. Re: Colorburst filter and LM386

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <341958D7.15B3@pop.removethistomailme.net>
Source record: 91028

Bill Meara wrote:
>
> With the help of Leon Heller, Tom Bruhns and others I finally built
> and
> successfully installed a narrow, three pole CW color burst (3.579)
> filter in
> my HB superhet.
> Leon's formula provided the value for the shunting caps and I just
> copied
> the termination circuits used in Doug DeMaw's "Barebones" superhet
> circuit.
> I had to fiddle with the LC circuit at the filter's input (had to add
> some
> capacitance to get it to resonate). I also had problems getting the
> BFO
> frequency in the right place: When I put one of the color burst rocks
> from
> the same batch (same freq) in the BFO, I found that it was way too
> high and
> was producing an annoying high-pitched CW tone. Even with the series
> "wiggle" cap shorted out, it was still too high. So I moved this
> trimmer
> cap from series to parallel across the rock and was able to set the
> BFO for
> a pleasing 700hz tone.
>
> I used a batch of 50 xtals purchased from Dan's small parts.
>
> The narrow filter really makes a big difference - the RX is now truly
> in the
> "single signal" category.
>
> Some questions: The three pole filter as expected has significantly
> more
> insertion loss than the simple one rock filter that I'd been using
> previously. To compensate, I switched my LM386N-1 audio amp into the
> "high
> gain" mode (cap between pins 1 and 8). The amp is now quite a bit
> more
> fussy and I had to do some pruning to avoid feedback. I also notice
> that
> some AC ripple from the supply is more evident in the audio. What's
> the QRP
> conventional wisdom on the 386? Is it worthwhile to run it in the

> high
> gain mode? Should I back off on its gain and add another AF amp
> stage? Or
> how about another IF amp to compensate for the increased insertion
> loss?
>
>
> 73 de N2CQR
> Bill Meara, Falls Church, Virginia
> wmeara@erols.com
> http://www.mindspring.com/~johnmb/billm.htm

I've never thought the LM386 was worth anything. Try an LM380 instead,
possibly with improved shielding and/or bypassing.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 2557. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <341983D7.218E4F39@direct.ca>
Source record: 91029

Sean Dyer wrote:
>
> Why would or wouldn't this work?
> (snip...)

Close, but not quite. If you want to process the RF, you must sample at a rate determined by the frequency of the *RF*, and not by the frequency of the modulation. Still a fairly tall order unless you're rich.

It is perfectly practical to create a receiver that converts a 10 kHz slice of RF down to, say, 15-25 kHz, and then pick it apart with DSP. Look for receivers that talk about IF DSP - it's not something marketing people keep quiet.

I'm researching this as a winter project, in fact. SD5400 front end, ADSP21061 backend. Just have to sort out the in-betweens...
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

## 2558. Re: Mars amp chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <341981FD.392AFDAC@direct.ca>
Source record: 91030

bobn9lvu wrote:
>
> I am looking for some mars-1 - mars-8 chips, or the ceramic ram-1 -
> ram-8 chips any one know of a source, other than direct?

That's MAR-1, etc.

Other than direct, you can get them from (at least) Down East
Microwave, Cirkit, and Mainline.

Mini-Circuits only sell them in packs of 10, but letting it
be known that you have some spare MAR-6s or whatever to give
away is your ticket to instant popularity. :-)
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

# 2559. FS: Tube audio Equipment/ parts/ tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <34199D1C.331@ix.netcom.com>
Source record: 91031
Cross-posted to: rec.music.makers.marketplace,rec.radio.amateur.homebrew

9/12

For Sale: Sherwood Tube Equipment/ parts/ Tubes:

--
Sherwood S-1000-III mono Integrated amp
-excellent working and cosmetic condition
-2 x 7868-good NOT included
-2 x 6eu7 / 1 x 6k11
-has 2 mic inputs AND 4/8/16 ohm taps and 70v
-with metal case

$40.00 + shipping

Sherwood S-3000-III FM-stereo capable Tuner
-excellent working condition; in good alignment; very sensitive;
accurate tracking
-no MPX-operating mono/ proprietary jack easily modded into universal
MPX out
-original Sherwood branded tubes
-the tuner sounds wonderfull!!
-with metal case

$80.00 + shipping

both Sherwood Pieces $100.00 + shipping

--
NOS Oil Caps

11 Westcap 1uf 400v
8 Sangamo 1uf 300v

$60.00 for all + shipping
-that's $3.15 ea!
--

TUBES

2 x 7868 Used (Bogen) test and work well

both for $40.00 + shipping

Metal 6L6 used

6 RCA
1 TungSol

$50.00 + shipping for all 7

Metal 6V6 used

3 RCA

$15.00 + shipping for all 3

807

4 RCA brown base- clear logo/markings-used
1 NOS-KenRad 6bg6 (octal 807) in box

$20.00 + shipping for all 5

6SN7WGT all NOS in box

2 Sylvania Gold Brand
brown base/ gold-black box

$15.00 ea or $25.00 for pair + shipping

2 Sylvania regular
brown base/ yellow-black box

$10.00 ea or $15.00 for pair + shipping

6SN7GTB all NOS in box

1 Amperex black base "Buggle Boy" logo
made in Canada on top of envelope

$10.00 + shipping

1 RCA black base

$5.00 + shipping

1 GE black base

$5.00 + shipping

**Or all of the ABOVE tubes for $150.00
--

Will not separate for the FOLLOWING tubes:

NOS-

RCA- 6am4 / 3hm5(ha5)marked Holland / 6md8 /5u5 /6mk8 / 8ba11 / 6hb7 /
6mq8 / 6cg8a / 3dt6/ 6gm6 / 8bm11 / 6ja6 / 6bh8 / 5aq5 / 3au6 / 6mu8 /
6aq5a / 2cy5 / 3x-5cL8a/
12hg7 / 6n7a /6jc6a
Zalytron- 2as2 / 3ha5 / 2x 4bz6 6ea8 / 6ba11 / 6hg8 / 17jn6
Raytheon- 12cn5/ 2x-6ak5 / 2x 10gk6
GE- 3a3c(aw3/b2) / 13z10 / 6gm6
Westinghouse- 2x-6k6gt
Sylvania- 2cy5 / 10gk6

Realistic- 6bn6
Clarostat -60-92-a
Zenith - 13z10
Hytron -1269
Tung Sol 6eu8
Mullard- 15cw5/PL84

Used-

RCA- 2x-6fq7(cg7) / 6hq5 / 4x 6bq6gtb / 6cu6 / 6gm6 / 12d4 / 17jn6 /
8am8 / 12L6gt / 6ea8 / 6dr7 / 6cj3(ch3)
GE- 6cj3 / 6dw4b / 6bk4 / 6eL4a
Tung Sol- 6bj6 / 6bq6gtb(cu6)
Sylvania- 6le8 / 6ea3
Connectron 5u8 / 6gy6
Raytheon- 2x-22bw3
Magnavox 6hq5 / 6dt6a
Zalytron- 17jn6

$60.00 for all + shippping

All prices + shipping

Please reply to:

rl1856@ix.netcom.com

Thank you,

Ross Lipman
--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

# 2560. Re: RC Car Modulation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: mac@cis.ksu.edu
Message-ID: <mac.874085350@zaurak.cis.ksu.edu.cis.ksu.edu>
Source record: 91032

Nuno Sucena Almeida <slug@pc1.local.aeminium.pt> writes:
>Robert W. Brewer <rbrewer+usenet@op.net> sabiamente escreveu:
>> modulation used by a standard radio control car transmitter?
>Well, you can check about PPM and multi-tone control.

I think several recent issues of "Nuts 'n Volts" magazine have contained
circuits for modulating such servos. Maybe in the "Robot" articles?

--Myron.
--
# Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
# PhD EE (Prof. Emeritus) CDL(PTX) W0PBV (913) 532-7353 fax 539-4448 home
# NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

## 2561. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: rl1856@ix.netcom.com
Message-ID: <3419A313.2734@ix.netcom.com>
Source record: 91033
Cross-posted to: rec.radio.amateur.homebrew,no.audio,alt.radio.pirate

```
test
```

# 2562. ADMS2 Software for Yaesu FT8000R

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: (unknown)
Message-ID: <341e9c2c.4303019@news.telepac.pt>
Source record: 91034

Does anyone have the ADMS2 Software for Yaesu FT8000R?
I really need it!!!
Thanks in advance...

sns@mail.telepac.pt

# 2563. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: kjhales@aol.com
Message-ID: <19970912211601.RAA10685@ladder01.news.aol.com>
Source record: 91035

-Sean Dyer wrote:
->
-> Why would or wouldn't this work?
-> (snip...)
-
-Close, but not quite. If you want to process the RF, you must
-sample at a rate determined by the frequency of the *RF*, and
-not by the frequency of the modulation. Still a fairly tall
-order unless you're rich.

BZZZZZT!!

Sean Dyer's idea is valid (at least in theory). It is only necessary to sample at twice the bandwidth of the signal of interest (assuming real samples). This technique is known as subsampling and is often used. RF folks can view the sampler as a (frequency) mixing operation.

Of course, there is a catch.

The A/D converter only needs to handle the 10KHz signal, but the sample-and-hold
that preceeds the A/D must be fast enough to grab the RF signal.

Fast A/D converters are fairly easy to come by today; often the problem is moving
and processing the data. Get a converter with built-in S/H function that is fast enough to sample the RF, but clock it at 25 to 30 KHz (for the 10KHz example).

Also, the sampling freq needs to be chosen so that the passband of interest is not inverted or rotated.

K. Hales
KF4REA

# 2564. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5vcfpv$gd2@hpcvsnz.cv.hp.com>
Source record: 91036

Sean Dyer (sean@wubios.wustl.edu) wrote:
: Why would or wouldn't this work?

: 1. Take a bandpass filter of ~10khz centered somewhere in the HF spectrum.

: 2. Amplify this signal

: 3. Sample this signal at say 30khz. (16bits * 30K=480kbps) By the sampling
: theorem this should be more than sufficient to completely represent the
: information contained in the passband.

: 4. Put this data on a high speed bus (SCSI etc) to a desktop computer. At
: this point by transforming to the frequency domain the passband could be
: arbitrarily narrowed and other more sophisticated DSP algorithms applied.
: (I'm assuming a pretty powerful desktop computer here)

: 5. Output to a decoding/demodulation process on same computer and render as
: sound, text or whatever..

: For me the difficulty is in step 3, I think I have a vague idea of how the
: rest of the process could be implemented.

Yes, sampling accurately is a serious problem. Let's say the IF is 10MHz,
and you are sampling signals that are 1 volt peak. Then the slew rate
of the signals is nominally 62 volts per microsecond peak, and to sample
without distortion, you need to switch from "track" to "hold" with a
delay time that is independent of the signal amplitude. It can be done,
but...how do you do it to sufficient accuracy, at a price hams can afford?

My preference is to convert to a very low IF, say 15kHz, and do quadrature
conversions; then digitize in a stereo ADC and demodulate digitally. The
data rate and demod calcs are demanding enough that I'd just as soon do it
in a DSP external to the computer. You can get a DSP evaluation board
with stereo 16-bit ADC and DAC (CODEC) for around $100. If you get the
Motorola DSP56002 EVM, it would be relatively easy to upgrade it to a
24-bit ADC, and you wouldn't need any AGC then...the ADC would handle from
noise-floor to mixer compression point. By using delta-sigma ADCs, very
little in the way of filtering is required at the "IF". But by using an
IF in the high audio range, you get out of at least most of the 1/f noise
in the mixers.

I _hope_ to find time to play with these ideas seriously over the coming
months, but know that others have done similar things.

--
Cheers,
Tom

tomb@lsid.hp.com

## 2565. Eimac 8964

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@telis.org>
Message-ID: <3419BDB5.17DC@telis.org>
Source record: 91037

Can anybody identify a Eimac 8964?It looks exactly like a 3CX100 or
7289.
73 Ken W6GHV

## 2566. F.S. - Tubes, radios, books...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970912202700.QAA13191@ladder02.news.aol.com>
Source record: 91038

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #911-T.

# 2567. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: klocko@toad.net
Message-ID: <874113754.15055@dejanews.com>
Source record: 91039

In article <34184222.2D51@flash.net>,
billharr@flash.net wrote:
>
> klocko@toad.net wrote:
> >
> > In article <01bcbdfd$ccdad400$LocalHost@slirp.med.auth.gr>,
> > "koystravas dimitris" <sv2dsu@med.auth.gr> wrote:
> > >
> > > ...i need to make an 1:1 balun for my G5RV antenna
> > > for 3.5 to 30 Mhz.
> > > ....
> >
> > Hi Dimitris, One of the W2DU baluns should do the job. Get 7 or 8 ferrite
> > beads (the ones that are about one inch long) that will fit over your
> > coax. Make sure they are rated for 3.5 to 30 MHz. They should be fairly
> > cheap. Slip them over the coax at the point where the coax meets the
> > balanced line, and secure them with nylon ties. The beads should suppress
> > any currents on the outside of the coax feed line without interfering
> > with antenna operation. 73 and good luck. Bill N3WK
>
> That is technically not a balun, it is only an rf choke.
>

I really don't feel like getting into a nit-pick contest, but the ARRL
Antenna Book (at least the 17th edition, anyway) calls it a "balun", in
addition to calling it a "choke balun." If you have any words of wisdom
for Dimitris about using what is technically a balun on his G5RV, why not
pass them on.

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2568. Re: Any sources for a HF transceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3419b87b.8141532@news1.mnsinc.com>
Source record: 91040
Cross-posted to: rec.ham-radio,rec.radio.amateur.homebrew

On Wed, 10 Sep 1997 17:46:57 -0700, Ashok Srinivasan
<ashoks@engr.sgi.com> wrote:

>Since Heathkit's demise, is anyone still making these? Should I
>be looking in flea markets? I need to get a high quality kit
>that has all parts and reasonable techinical support.

There are a LARGE number of kit makers filling the gap these days,
including good old TEN TEC in Tennessee!

You can get a Free, HUGE list of KIT suppliers at:

http://www.mnsinc.com/bry/mega/megakits.htm

ENJOY!

(remove the word REMOVE from my e-mail address to respond!)

# 2569. Re: Doorknob HV Capasitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <3419bbb5.8967055@news1.mnsinc.com>
Source record: 91041

Also try:

http://www.mnsinc.com/bry/mega/partsupp.htm

DAN'S sMALL pARTS AND many OTHER SUPPLIERS LISTED THERE!

Oops!

On 5 Sep 1997 15:52:00 -0700, europa@primenet.com wrote:

>In article <01bcb83e$1e0294a0$13354382@permo.online.no>, "Fred Thiesen"
><permo@online.no> wrote:
>
>:Hello group,
>:Does anyone know where to buy high voltage door-knob
>:type capasitors? at reasonable prices?
>:Looking especially for 67pf - 7,5KVDC
>:Suppose they are made by HEC as these letters are
>:printed on the capasitors.
>:Tnx in advance.
>:
>:---
>:LA4UM Fred
>
>
>Peter Dahl, in El Paso, TX is the premier place to go for any high
>voltage/high power fixed caps, vacuum variables, transformers, diodes or
>whatever.
>
>
>Their phone # is (915)751-2300.
>
>They sell alot of used stuff that while its more expensive than hamfests,
>is much cheaper than new.
>
>Rob.

(remove the word REMOVE from my e-mail address to respond!)

# 2570. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <341A0D6B.1D9E@antispam.trader.com>
Source record: 91042

> Let's say the IF is 10MHz,
> and you are sampling signals that are 1 volt peak. Then the slew rate
> of the signals is nominally 62 volts per microsecond peak...

Can someone explain this?

> ...and to sample
> without distortion, you need to switch from "track" to "hold"

Track? Hold??
--
Elder - Westminster Presbyterian
TRA #2693
N9VEM
Remove antispam. to reply

# 2571. Re: RC Car Modulation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: "Robert W. Brewer" <rbrewer+usenet@op.net>
Message-ID: <m367s6dlpk.fsf@monet.op.net>
Source record: 91043

mac@cis.ksu.edu (Myron A. Calhoun) writes:
> I think several recent issues of "Nuts 'n Volts" magazine have contained
> circuits for modulating such servos. Maybe in the "Robot" articles?

Thanks for the reply. I know about the modulation the servo
itself uses from the comp.robotics.misc FAQ. It is PWM,
where a 1 ms pulse is full left rotation, and a 2 ms pulse
is full right rotation. Each pulse is separated by about
20 ms.

Most transmitters have at least 2 servo channels. Some use
AM, some FM, and some PCM. I'm guessing that an AM system
just multiplexes the pulses from each channel together in
time, and transmits them. Then the receiver demuxes them
and sends each pulse to the right servo.

If that hunch is correct, how does the receiver sync
with the pulses, so the correct pulse goes to the correct
servo? Does it just wait for the dead after all the pulses?

Do the different radio manufacturers use their own schemes
for this, or are they standardized? Thanks for any help.

-Rob
--
Robert W. Brewer PGP RSA 2048-bit Key ID: 03E0E635
Jesus rules! Fingerprint: 6327 8034 7BDA D144 B40C C5E2 F760 13BB

## 2572. mocom 70 radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Todd Fenstermacher <oma00024@mail.wvnet.edu>
Message-ID: <01bcbfeb$04022340$3b4c4781@oma00024>
Source record: 91044

anyone out there have experience using these radios for 6 meter fm use?
how about using the power amp from one to boost the signal of a ten-tec
transverter?

Todd
KB8OUU

# 2573. Re: kits for no code techs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: dwayne rich <drichff@worldnet.att.net>
Message-ID: <5vd23n$n85@bgtnsc03.worldnet.att.net>
Source record: 91045

> I would strongly suggest the Ten Tec 2 meter and 6 meter kits. Useful,
> and Ten Tec offers much better support than some other choices. I
> assume she's not interested in HF work, shame, but code does have
> its price.
> -art clemons-

I appreciate everyone's suggestions of kits. She hasn't ruled out CW
)I talked to her about it tonight). She made the comment that she
wanted to enjoy the hobby with me not compete with me. She is definitely
one of the greatest. I bought her the now you're talking book so she
can read some of the rules and operating priveleges. I don't think she
will have trouble with the electrical theory part as she helps build
computer chips for a living. She did mention that if she got into it
and really enjoyed the hobby and wanted to make long distance contacts
she would work on her code (i haven't given up on her learning the
code). It only took me 4 months to bring her around to an interest in
ham radio. I took the easy approcah not the hard sell. Worked like a
charm. At least that is what she has allowed me to think <grin>

Dwayne Rich
KC4ADW

# 2574. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34198d22.22526554@news.atl.bellsouth.net>
Source record: 91046
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

On Thu, 11 Sep 1997 12:05:08 -0500, Ray Dennis <Realtor@RayDennis.com> wrote:
>Chuck Smith wrote:
>> I was once told that the word "ham" was slang for amateur in the early days
>> of radio.
>
>It is more universal than that. "Ham actor" referred to an amateur
>actor and carried over into radio.

"Ham actor" doesn't necessarily, or even ordinarily, mean *amateur* actor.
It is more generally applied to actors who overact and chew on the scenery
or otherwise attempt to puff their part and grab the limelight from the other
actors. This is called "hamming it up" in the business, and there are a number
of notorious ham actors in the professional acting ranks.

There *is* a certain tendency among amateur radio operators to puff up
their part, IE their self-importance, so there may be the seed of truth here.
It seems unlikely that radio amateurs would want to label themselves in such
a way, but stranger things have happened.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2575. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: Bill Harris <billharr@flash.net>
Message-ID: <3419893C.2E78@flash.net>
Source record: 91047

K1BQT wrote:
>
> Hi Bill--
>
> >That is technically not a balun, it is only an rf choke.
>
> It's purpose is still the same--to break the low impedance path to the
> outside surface of the coax feedline, thereby blocking unwanted RF current
> flow. If it does the same job, why is it "only" a choke?
>
> Rick K1BQT

The rf beads, or forming a coil of the coax, will indeed block unwanted
RF currents on the feedline, however a balun does that and more. Coax
feedline is an unbalanced feedline, most antennas, such as a dipole, are
balanced antennas. So, you are feeding a balanced antenna with an
unbalanced
feedline. This means that one side of the antenna is connected to ground
through the outside shield of the coax which upsets the symmetry of the
antenna. A balun, which the word is derived from "balanced to
unbalanced",
accomplishes the job of coupling the balanced antenna to the unbalanced
feedline, maintaining the symmetry.

K5MIL
--
**********
* Bill Harris *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
**********

# 2576. Re: RC Car Modulation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-12 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <341A0511.3121@flash.net>
Source record: 91048

Myron A. Calhoun wrote:
>
> Nuno Sucena Almeida <slug@pc1.local.aeminium.pt> writes:
> >Robert W. Brewer <rbrewer+usenet@op.net> sabiamente escreveu:
> >> modulation used by a standard radio control car transmitter?
> >Well, you can check about PPM and multi-tone control.
>
> I think several recent issues of "Nuts 'n Volts" magazine have contained
> circuits for modulating such servos. Maybe in the "Robot" articles?
>
> --Myron.
> --
> # Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
> # PhD EE (Prof. Emeritus) CDL(PTX) W0PBV (913) 532-7353 fax 539-4448 home
> # NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

Take a look in the Jameco Catalog, just a year or so ago I saw both the
transmit and receive chip, a friend who had used them said you only need
to provide a carrier for tx and the detected audio from a receiver to
make it a work. The chips were about $6 ea.

Tim

# 2577. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <nPVqpPAF$jG0EwMI@ifwtech.demon.co.uk>
Source record: 90963

Bill Harris wrote:
>K1BQT wrote:
>>
>> Hi Bill--
>>
>> >That is technically not a balun, it is only an rf choke.
>>
>> It's purpose is still the same--to break the low impedance path to the
>> outside surface of the coax feedline, thereby blocking unwanted RF current
>> flow. If it does the same job, why is it "only" a choke?
>
>
>The rf beads, or forming a coil of the coax, will indeed block unwanted
>RF currents on the feedline, however a balun does that and more.

In many situations a coax feedline choke is just a choke, and it makes no balanced-to-unbalanced transformation. But in a different situation the same choke can be acting as a balun as well. It all depends what you're using it for.

When used at the feedpoint of a center-fed dipole, the feedline choke on the coax is acting as a balun. It's still a choke, but here it's behaving as a balun too. Roy Lewallen calls it a "current balun" and if you read his article in the 1st ARRL Antenna Compendium there is no doubt blocking the outer-surface current on the coax accomplishes the balanced-to-unbalanced transformation.

Bill seems to be reserving the term "balun" for a different kind of device, probably the one with multiple interconnected transformer windings (what Lewallen calls a "voltage balun"). This aims to do exactly the same, but it doesn't do anything more. It only does the same thing with more complexity - and sometimes does it less well than a choke.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 2578. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <341AE991.3891@phoenix.net>
Source record: 90964

ka8ddz wrote:
>
> There is alot here I dont understand but Im trying. I have noticed in
> some of the simple receiver schematics that there is generally not any
> filtering between the VFO and the first mixer.
>
> I would think that a simple LC VFO would have some healthy harmonics
> comming out of it. My question is, if these harmonics are reaching the
> mixer are you not loosing some gain due to the amplification of these
> unwanted signals? Even though they get filtered out when you convert to
> the first IF, they are still present in the 1st mixer.
>
> Would it improve things at all to have a bandpass filter prior to the
> VFO input to the mixer or am I worried about something that doesnt
> exist.
>
> 73, Tim, ka8ddz
Haven't seen this in "well designed" circuits as there is a buffer
between the osc and the mixer stage. even with the old tube tupes that
used a 6U8 triode/pentode the circuit contained a choke to limit the
harmonic output of the osc stage..
But this filtering, even in well designed circuits is minimal to say the
least. Because of the tuned RF amp stage(s) and the tuned IF any benefit
gained by filtering out harmonics at the osc or mixer stage would not be
cost effective.
NO 73 necessary joe NO call necessary

# 2579. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <341AEACD.242F@ix.netcom.com>
Source record: 90965

K0PW wrote:
>
> Seth Taylor wrote:
> >
> > The correct URL is:
> >
> > http://www.pwdahl.com/
> >
> > Seth KC2WE
> Does anyone get a response from this url? I get "no DNS entry"
>
> K0PW
---
Yep Works fine here in San Diego
73
Rod
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 2580. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: cjX@hth.com
Message-ID: <341acf14.5263980@news.buller.se>
Source record: 90966
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
=============================================================================
- L.O.S.A Contribution Form -
=============================================================================
New Contribution [ ] Update [ ]
-----------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-----------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-----------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=============================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

# 2581. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <341AED8D.5B91@ix.netcom.com>
Source record: 90967

K0PW wrote:
>
> Seth Taylor wrote:
> >
> > The correct URL is:
> >
> > http://www.pwdahl.com/
> >
> > Seth KC2WE
> Does anyone get a response from this url? I get "no DNS entry"
>
> K0PW
------
Yep works fine here in San Diego

More Amplifier Links at URL:
http://pw2.netcom.com/~ac6v/pageax.html

73
Rod
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 2582. TX/RX? Please Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: John Dawson <JDDawson@classic.msn.com>
Message-ID: <01bcc08a$d2bdb880$6c532299@default>
Source record: 90968

Hi Folks,

I need to obtain a transmitter/reciever or schematics for a transmitter/reciever. I only need to send a signal about 50 feet. I must be able to tune a transmission to a certain frequency and then bandpass that signal at my reciever. I need to send two or three different frequency signals at different times. Where could I buy such a transmitter/reciever unit or obtain schematics. Please Help.

Also, what would be the best frequency to transmit over this short range to avoid interference from outside signals?

## 2583. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: shortckt@primenet.COM
Message-ID: <3.0.3.32.19970913205058.006ba4d4@mailhost.primenet.com>
Source record: 90969

```
add ham-homebrew
```

## 2584. if you like camera?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: fionesco@aol.com
Message-ID: <19970913210901.RAA01551@ladder01.news.aol.com>
Source record: 90970

bonjour je posede 3 cameras evi 311 sony elles sont a la vente 2500 frs
a bientot fred

# 2585. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580001309971438580001@news.primenet.com>
Source record: 90971

In article <341AD055.7E3A@flash.net>, hynde@NOSPAM.flash.net wrote:

:There is alot here I dont understand but Im trying. I have noticed in
:some of the simple receiver schematics that there is generally not any
:filtering between the VFO and the first mixer.
:
:I would think that a simple LC VFO would have some healthy harmonics
:comming out of it. My question is, if these harmonics are reaching the
:mixer are you not loosing some gain due to the amplification of these
:unwanted signals? Even though they get filtered out when you convert to
:the first IF, they are still present in the 1st mixer.
:
:Would it improve things at all to have a bandpass filter prior to the
:VFO input to the mixer or am I worried about something that doesnt
:exist.
:
:73, Tim, ka8ddz

Generally low-pass filtering is added before balanced mixers, since
harmonic content (odd order, I believe) can throw the mixer off balance,
and cause excessive radiation of the LO out the rf and IF ports and
resultant IMD degradation.

Note that this really has nothing to do with harmonics per-se, because most
high level mixers are operated in a switching mode, and generate harmonics
themselves. Its all just about balance.

Rob.

## 2586. Fox hunts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: GZGQ49A@prodigy.com
Message-ID: <5vf348$1062$1@newssvr03-int.news.prodigy.com>
Source record: 90972

Hello everyone..... I was wondering if there is any groups on USENET
dealing with foxhunts and/or suggestions for the "hunt" of the "fox".
Our club has been doing this for about
two years now but we seem to be stuck in a rut! We do the same thing
every week and seems to be no energy or new ideas.
I am going to try a 19" parabolic dish
next week with an R/C network for attenuation. Thinking of a RDF
electronic switched but not sure of all the details.
Any suggestions would be super and
maybe we need a newsgroup here for the elusive fox!

73 Rod KB8DNS

# 2587. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970913224101.SAA13731@ladder02.news.aol.com>
Source record: 90973

Hi Bill--

>This means that one side of the antenna is connected to ground
>through the outside shield of the coax which upsets the symmetry of the
>antenna. A balun, which the word is derived from "balanced to
>unbalanced",

The DC path may be to ground, but not the RF path (review inductive reactance). Following your logic, chokes would be superfluous to RF design because they would simply allow RF current to pass unimpeded. Yet this isn't what happens.

73

Rick K1BQT

# 2588. 49 MHz. Comm Units

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: Sir Robin <nexus15@flash.net>
Message-ID: <341B19E7.6287@flash.net>
Source record: 90974

Has anyone ever used the 49 MHz. 2 way headset units that are sold by RS and others as a wireless microphone and headset interconnect for an amateur fixed station setup? How about infra-red 2 way?

I am interested in hearing about the particulars of such setups.

Any kits of this type of unit available anywhere?

Thanks...Rick...W5RH

# 2589. Re: Media Alert: Anti-Radio House Bills Before Congress/boo hoo

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <341b2487.12245418@news1.mnsinc.com>
Source record: 90975
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew

On 12 Sep 1997 07:07:25 +0200, nobody@REPLAY.COM (Anonymous) wrote:

>In article <3408B680.4496@iu.net>, wnewkirk@iu.net wrote:
>
>:William M. Pasternak wrote:
>:> Quite the contrary, we would simply obtain the needed radios from the
>:> authorities, as has already been done in many cities. Only you the
>:> scanner hobbyist would not be permitted to listen in.
>:> de WA6ITF
>:
>:very true...and with the advent of trunking types of systems, it's the
>:only easy way for the media to track the action...
>:
>:bill n.
>
>A hilarious take. Only ham-operators are so dumb as to not be able to
>defeat any kind of so-called secure communications. Only strong encryption
>is out of the reach of us hackers. We program our own cell phones. What
>makes you think we cannot program our own trunking HT's to any city in the
>nation?
>
>Tell the FCC they better start requiring real written exams for ham
>licenses. What a bunch of "multiple-choice" morons!
>
>Dr. EMF

Uh, I see Burt Fisher has crawled out for his annual trip to the
outside world, from under his rock again!

OK, Burt - we all read it. Now you can go back under there! BYE!

(remove the word REMOVE from my e-mail address to respond!)

## 2590. Re: Fox hunts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <341B3355.2944@ix.netcom.com>
Source record: 90976

Rodney Wallberg wrote:
>
> Hello everyone..... I was wondering if there is any groups on USENET
> dealing with foxhunts and/or suggestions for the "hunt" of the "fox".
> Our club has been doing this for about
> two years now but we seem to be stuck in a rut! We do the same thing
> every week and seems to be no energy or new ideas.
> I am going to try a 19" parabolic dish
> next week with an R/C network for attenuation. Thinking of a RDF
> electronic switched but not sure of all the details.
> Any suggestions would be super and
> maybe we need a newsgroup here for the elusive fox!
>
> 73 Rod KB8DNS
------
Yo Rod -- Rod here
For Fox Hunt WWW pages see URL:
http://pw2.netcom.com/~ac6v/pagew.html#TH
Five links there

For Reflectors see URL:
http://pw2.netcom.com/~ac6v/pageae.html
Two of them there.

Remember to always out-fox the fox!

73
Rod
--
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Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 2591. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: Mark J Sandford <sandford@tridsys.com>
Message-ID: <341B56B2.949A52E7@tridsys.com>
Source record: 90977

laura halliday wrote:

> Sean Dyer wrote:
> >
> > Why would or wouldn't this work?
> > (snip...)
>
> Close, but not quite. If you want to process the RF, you must
> sample at a rate determined by the frequency of the *RF*, and
> not by the frequency of the modulation. Still a fairly tall
> order unless you're rich.

I have trouble beleiving that it works but appentily it is possible to very tightily bandpass the frequencies of interest and they use sample ailiasing to your advantage. There is a paper on the subejct from MIT at

http://www.tns.lcs.mit.edu/publications/MCN-95/MCN-95.html

which uses a $30K work station to replace a $5 FM radio not necessarialy a great idea but they claim it works and is a major technological breakthru although I think the $5 radio would be easier to carry in my pocket.

# 2592. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970913123925.24582A-100000@Stratus.CAM.ORG>
Source record: 90978

You're right in that we often don't see filtering between the VFO
and mixer.

The resulting problem wouldn't be loss of gain, but that you'd
be receiving spurious signals because incoming signals (other than the one
you really wanted to hear) would beat against the harmonics of the
oscillator and the resulting product would land in the IF.

SOme oscillators are obviously better than others in cleanliness. I
can't help but think of some low end commercial receivers of days gone by
that were plagued by spurious signals, and imagine that the oscillator
was not a good design (probably due to cost cutting).

I would also think that feeding an oscillator fed directly into a mixer
without buffering might be a problem, if the coupling method put so much
of a load on the oscillator that the purity was distorted.

Without having given it a lot of thought in the past, I imagine one
reason that filtering is not common between the vfo and the mixer is
a desire to keep things simple. If the filter is variable, it has to
be made to track with the tuning of the vfo. If a bandpass filter is
added, it has to be aligned to cover a segment of the spectrum, and if
you are covering different ranges, a new filter has to be switched in
each time.

I do recall seeing low pass filters placed between VFO's and mixers
in some articles in the past, and the author would mention that it
was to eliminate harmonics from the oscillator which would beat with
the obviously strong local tv and broadcast stations. These broadcast
signals are so strong that even when passed through good front end
filtering (or directly to the mixer in a receiver without good shielding)
they can still be quite strong.

Whether it's a problem or not in a given case depends on results.
If you're plagued by spurious signals in given receiver design, it might
be something to look into.

Michael VE2BVW

On Sat, 13 Sep 1997, ka8ddz wrote:

> There is alot here I dont understand but Im trying. I have noticed in
> some of the simple receiver schematics that there is generally not any
> filtering between the VFO and the first mixer.
>
> I would think that a simple LC VFO would have some healthy harmonics
> comming out of it. My question is, if these harmonics are reaching the

> mixer are you not loosing some gain due to the amplification of these
> unwanted signals? Even though they get filtered out when you convert to
> the first IF, they are still present in the 1st mixer.
>
> Would it improve things at all to have a bandpass filter prior to the
> VFO input to the mixer or am I worried about something that doesnt
> exist.
>
> 73, Tim, ka8ddz
>
>

# 2593. Re: LOWFER Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: "Joh. Arlt" <jarlt@metronet.de>
Message-ID: <341A72A2.5F10@metronet.de>
Source record: 90979

Gary Herbst wrote:
> I'm looking for a CW Lowerfer Transmitter circuit. Anyone have a reference
> to one or an Mag. article.
>
> Thanks,
>
> Gary-

In Sprat, the Mag. of the G-QRP-Club Nr. 88 Autumn 1996 S. 3-11. The
G3TDZ 73kHz RIG, An LF TRX for Shack, /P, or Cave Use. John R. Hey
G3TDZ 8Armley Grange Crescent, Leeds. LS12 3QL. It's a HQ Phasing RX +
TX.

72 de Jan
---
Johannes Arlt
Berlin-Germany
<JArlt@RadioLink.net>
DL7UXA @ DB&#65533;GR.#BLN.DEU.EU

## 2594. FS Power Inverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: Nelson <5560@notso.net>
Message-ID: <341AE3E2.3BB6@notso.net>
Source record: 90980

BEST, 3000 Watt 32vdc to 120 vac power inverter, with load demand start has all manuals and complete set of documentation. $275 Plus shipping ( 90lbs from RI). Please respond to: shiso@ici.net Thanks,
Bruce.

## 2595. Re: kits for no code techs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970913000901.UAA23185@ladder01.news.aol.com>
Source record: 91049

In article <5vaduu$4gu@bgtnsc02.worldnet.att.net>, dwayne rich
<drichff@worldnet.att.net> writes:

>My fiancee has become interested in ham radio and wants to know if there
>are any kits that she could build to get on the air once she gets her no
>code tech ticket? SHe has a desire to build rather than buy a rig.

I would strongly suggest the Ten Tec 2 meter and 6 meter kits. Useful,
and Ten Tec offers much better support than some other choices. I
assume she's not interested in HF work, shame, but code does have
its price.
-art clemons-

# 2596. New Keyer I.C.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: k1el@aol.com
Message-ID: <19970913021300.WAA02769@ladder01.news.aol.com>
Source record: 91050

I have just finished my new keyer based on a Microchip PIC microcomputer I.C.

Check out my web page at:

http://members.aol.com/k1el/index.html

or e-mail me for a text only description.

Brief Description:

The K8 Keyer is a low cost automatic Morse keyer designed by Steve, K1EL
and implemented in an 8 pin Microchip PIC (TM) microprocessor. Only a few
external components are required to build a keyer using the K8 Keyer I.C.
The K8 provides directly adjustable sending speed, both callsign and
message memories, a built-in sidetone oscillator, straight key emulation,
and even a code practice mode

73 Steve, K1EL

## 2597. tools

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: dwayne rich <drichff@worldnet.att.net>
Message-ID: <5vd5ik$g7i@bgtnsc03.worldnet.att.net>
Source record: 91051

Can anyone recommend a good brand of soldering iron and DMM? I would like recommendations of brand names and models if possible. Thanks

Dwayne
KC4adw

# 2598. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <341a1520.953334@news.fastlink.com.au>
Source record: 91052
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Brian Grier <"reirgjb"@ac.rnb (reverse this for email)> wrote:

:Barry O'Grady wrote:
:>
:> "John in Roseville" <rtwod2@ns.net> wrote:
:>
:> :AC6V <ac6v@ix.netcom.com> wrote in article <34132358.48C4@ix.netcom.com>...
:> :> Doran Platt wrote:
:> :> >
:> :> > one of my bosses in the past (who hated hams for some reason) said the
:> :> > term ham is what they are... half a pigs *## (posterior)
:> :> ---
:> :> Sounds like your boss of the past had his head attached to the other end
:> :> of the pig!!
:> :>
:> :> If per chance you run in to your old boss -- tell em that several tens
:> :> of thousands of victims of earthquakes, floods, fires etc, UNEQUIVOCALLY
:> :> DISAGREE.
:>
:> Even though their lives were put at risk by amateurs playing two way radios
:> and getting in the way of rescue workers?
:>
:> Barry
:
:They're so cute when they put their foot in their mouth, all the way
:to their kneecap ;)
:
:Brian

How will you get them to admit it?

==========
To reply via email please remove the XX from my
return address.

# 2599. Next Weekend! Hamfest in W. Conn.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: KD1YV <jimkd1yv@ix.netcom.com>
Message-ID: <341A0C69.7EF7@ix.netcom.com>
Source record: 91053
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.digitia.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

THE WESTERN CONNECTICUT HAMFEST
Sponsored by the Candlewood Amateur Radio Association

Sunday, Sept. 21, 1997 9 AM - 2 PM (setup 7 AM)
Edmond Town Hall Route 6, Newtown, CT
Ham radio equipment Computers and software
Tables inside Tailgating outside
ARRL Sanctioned Handicapped Access
Workshops Training videos
Door Prizes Ample Parking
Gourmet Fare Rain or shine

General admission $5.00 at the door (what a deal!)

Only 15 minutes from Brewster NY, 20 minutes from Waterbury CT.

Talk-in 147.12/.72 PL 141.3

Tailgating $6.00, inside table reservations $10.00 each, (both
include 1 admission), mail to:
Candlewood Amateur Radio Association, PO BOX 3441, Danbury CT 06813

For more info, phone (203) 798 2831 or (203) 790 7041.

Hope to see you all there.
73 de KD1YV
Jim

# 2600. Re: kits for no code techs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19970913053601.BAA17668@ladder01.news.aol.com>
Source record: 91054

Hi Dwayne, I think one of the popular kit companies sell a kit for code practice oscillators, should be a great kit for your fiancee to build! Good luck....73 LOU

# 2601. BRAND NEW IN BOX 8877 F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19970913115701.HAA04627@ladder02.news.aol.com>
Source record: 91055

Hi, I have a brand new in the box 8877/3CX1500A7 for sale. Bought as spare and never used. Price is $450.00 and I will ship it to your door for that price CONUS. Price is firm and is first come first serve. Shipped after recieving M.O. only! If you want it Please call or e-mail me. 203-894-1705....Thanks LOU

# 2602. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <341A8ABA.5E61@crpl.cedar-rapids.lib.ia.us>
Source record: 91056

Bill Harris wrote:
>
> >
> > Hi Dimitris, One of the W2DU baluns should do the job. Get 7 or 8 ferrite
> > beads (the ones that are about one inch long) that will fit over your
> > coax.
>
> That is technically not a balun, it is only an rf choke.

It is technically a choke-type balun. It is a choke and a balun at the
same time. It is a choke for common mode voltages and currents. It is a
balun for differential voltages and currents.

Bill W0IYH

# 2603. Re: Radio E-mail discussion lists FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: syfr@mindspring.com
Message-ID: <341a89c9.3277555@news.mindspring.com>
Source record: 91057
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.swap

bry@REMOVE.mnsinc.com (Bry) wrote:

>Great new information on how to get on a REALLY GOOD E-mailing
>discussion list with hams who share your interests.

Absent from this list is the information for the original
Boatanchors list. A trial sub to that list may be obtained by
writing:
listown@jackatak.theporch.com
and asking for a trial subscription.

Wonder why you left this off, Brian?

# 2604. Re: Man Bites Old Brown Dog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: taquilla@erols.com
Message-ID: <taquilla.1224543981C@news.erols.com>
Source record: 91058
Cross-posted to: alt.beer,rec.food.drink.beer,rec.crafts.brewing,rec.radio.amateur.homebrew

In Article <340AC3D8.247C05A9@nh.ultranet.com>, Peter Egelston
<smutty@nh.ultranet.com> wrote:
>Man Bites Old Brown Dog!
>
>9/1/97
>
>Hi, there. My name is Peter Egelston. I am President and principal owner
>of Smuttynose Brewing Company, a small craft brewery located in
>Portsmouth, New Hampshire (for those of you who may not be familiar with
>us). We are a small company (fewer than ten full-time employees) whose
>products - Shoals Pale Ale, Old Brown Dog Ale, and Chuck Wheat Ale - are
>distributed throughout New England, with smaller spot markets along the
>eastern seaboard and the midwest. Our sales for 1997 will be
>approximately 6,800 barrels.

As a testimonial to those who haven't yet tried it, I must say that I have
had Smuttynose Old Brown Dog, and it is an exceptional ale. I do not say
this lightly, as I am highly critical and find that the vast majority of
micros and brewpubs produce swill. However, Old Brown Dog is excellent.

I assume you have consulted a competent attorney regarding this matter. Your
former employee should be held liable for his lies.
Tracy

## 2605. VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: ka8ddz <hynde@flash.net>
Message-ID: <341AD055.7E3A@flash.net>
Source record: 91059

There is alot here I dont understand but Im trying. I have noticed in some of the simple receiver schematics that there is generally not any filtering between the VFO and the first mixer.

I would think that a simple LC VFO would have some healthy harmonics comming out of it. My question is, if these harmonics are reaching the mixer are you not loosing some gain due to the amplification of these unwanted signals? Even though they get filtered out when you convert to the first IF, they are still present in the 1st mixer.

Would it improve things at all to have a bandpass filter prior to the VFO input to the mixer or am I worried about something that doesnt exist.

73, Tim, ka8ddz

## 2606. Re: Low-power xmitter plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: Harley + BarbE Tuck <gwydion@nmia.com>
Message-ID: <Pine.LNX.3.93.970913020628.32490A-100000@plato.nmia.com>
Source record: 91060

Hello all-

I'm looking for plans for a SIMPLE transmitter I can build with parts from old stereos and maybe $5 boughten parts. Hopefully it would work on AM or FM broadcast bands so I don't need to build a reciever, too. It needs to reach 2-3 miles and be legal without a license- I'm not the pirate ham type.

As an alternative, could I put a linear amplifier in a CB walkie talkie (I have a pair, ~ 1/2 mile range) to boost the range?

I realize I'm asking about non- ham bands, but this ng is the only one I can find re: home brew radio. I've spent 3 hrs searching the www and found only ham band radios.

TIA-
Harley Tuck

+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+
********TO RESPOND TO US, THE CORRECT ADDRESS IS gwydion@nmia.com *******
H: A little inaccuracy sometimes saves tons of explanations. - Saki
B: Courage--fear that has said its prayers. - Dorothy Bernard

# 2607. Re: Any sources for a HF transceiver kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <PPOT$DAsIlG0EwJm@pacsat.demon.co.uk>
Source record: 91061
Cross-posted to: rec.ham-radio,rec.radio.amateur.homebrew

In article <3419b87b.8141532@news1.mnsinc.com>, Bry
<bry@REMOVE.mnsinc.com> writes
>
>On Wed, 10 Sep 1997 17:46:57 -0700, Ashok Srinivasan
><ashoks@engr.sgi.com> wrote:
>
>>Since Heathkit's demise, is anyone still making these? Should I
>>be looking in flea markets? I need to get a high quality kit
>>that has all parts and reasonable techinical support.
>
>There are a LARGE number of kit makers filling the gap these days,
>including good old TEN TEC in Tennessee!
>
>You can get a Free, HUGE list of KIT suppliers at:
>
>http://www.mnsinc.com/bry/mega/megakits.htm
>
>ENJOY!
>
>(remove the word REMOVE from my e-mail address to respond!)

Try Hands Electronics from the link on my webpage, and also Ramsey
electronics (I found them by a doing a websearch)

Good Luck!

73 Simon GM4PLM
+-----------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+-----------------------------------------------------------------------+

# 2608. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-13 00:00:00 UTC
From: K0PW <pwentzel@minn.net>
Message-ID: <341AD65C.7E6A@minn.net>
Source record: 91062

Seth Taylor wrote:
>
> The correct URL is:
>
> http://www.pwdahl.com/
>
> Seth KC2WE
Does anyone get a response from this url? I get "no DNS entry"

K0PW

# 2609. FS Misc Radio Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: JS <***rfeng@worldnet.att.net***>
Message-ID: <5vfd6f$in9@bgtnsc02.worldnet.att.net>
Source record: 90981
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Here is a list of Equipment that I have for sale. Getting relocated by my company and clearing out the shack

TEST EQUIPMENT
Wavetek 3000B Service Monitor $2,000
Motorola mobile test set with micor/mocom/cables $75
B&K 1471B 10Mhz dual trace $125
Jackson Audio generator $50
Bird 6254 Termaline watt meter (low power) $100
Pace Portable desolder station 110vac & 12vdc $300
Fluke 8040A Bench/portable DVM $85
Eico 232 VTVM $15

RADIO EQUIP
Mastr II 36 inch cabinet exec. cond $150
Ritron 30-50 Mhz portable $40
MX 320 UHF 2 watt port $75
MX 340 UHF 5 watt/PL $50
MX rapid charger $50
MX speaker mic $20
GE MPX UHF port $50
Mastr II 40watt mob "E" case with CG & assories $150
Mastr II Duplex "E" case (great for making repeater)
Trielectric UHF repeater power amp. 10-20W in 100W out $250
TPL repeater power amp 5w in 80 - 100w out $125
Sinclair UHF duplexer 4 cav pass/rej $300
DB UHF duplexer 3 cav pass/rej $275
DB UHF duplexer 4 cav pass/rej (brand new) $550
DB UHF duplexer 6 cav rej only (brand new) $500
Bramco multi-function DTMF decoder 19" rack mt. $75
Kenwood 30amp DC power supply. $125
D104 mic with amp. $40
Turner +3 mic with amp $30
Misc GE & Mot Parts
HAM GEAR
Kantronics KAM TNC $100
HF low pass filter $25

# 2610. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: "Gregory T. Helding" <gth@execpc.com>
Message-ID: <01bcc0b0$60b234c0$342afacf@gth>
Source record: 90982
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

I read that the term was first used in a telegraph operator training guide.
A ham (not an acronym) was a bad or inexperienced operator. This was
before radio. When radio came about, there were not the regulations and
restrictions we have today, so people operated wherever and however they
wanted. The troublesome operators were called hams by military operators.
This name stuck and eventually the term came to mean all amateurs, not just
bad ones.

-Greg

# 2611. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <341ba88e.160639554@news.atl.bellsouth.net>
Source record: 90983

On Fri, 12 Sep 1997 11:26:04 -0700, Bill Harris <billharr@flash.net> wrote:
>The rf beads, or forming a coil of the coax, will indeed block unwanted
>RF currents on the feedline, however a balun does that and more. Coax
>feedline is an unbalanced feedline, most antennas, such as a dipole, are
>balanced antennas. So, you are feeding a balanced antenna with an
>unbalanced
>feedline. This means that one side of the antenna is connected to ground
>through the outside shield of the coax which upsets the symmetry of the
>antenna. A balun, which the word is derived from "balanced to
>unbalanced",
>accomplishes the job of coupling the balanced antenna to the unbalanced
>feedline, maintaining the symmetry.

Yep, that's what a choke, also called a current balun, does all right. A voltage (transformer) balun does the same thing, though not quite as well. The choke balun only supplies a 1:1 impedance transformationn while the voltage balun can support other integer ratios. But if you don't need that transformer action, the choke balun is better.

A choke balun forces equal (but opposite) currents into each leg of the antenna while a voltage balun only supplies equal (but opposite) voltages to the antenna feedpoint. If the antenna has equal impedances in its two legs, the net effect is the same. If it doesn't, the choke balun will be better because it is current which makes an antenna radiate, and a nominally balanced antenna should have equal currents in the two halves of the driven element.

Coax is actually a 3-wire feedline. The currents on the inner conductor and the *inside* of the outer conductor are equal and opposite. So in that sense, coax is a balanced line. It is the third conductor which unbalances it. That third conductor is the *outside* of the outer conductor of the coax. The choke balun breaks this RF path, which leaves us with a balanced feed to the antenna. So the choke is indeed a balun.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 2612. 6146B Tube information

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <341bcdbd.11127750@news1.mnsinc.com>
Source record: 90984
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

See:

http://www.mnsinc.com/bry/ham/6146b.txt

(remove the word REMOVE from my e-mail address to respond!)

## 2613. Making Quartz Crystals for radio...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <341bce66.11297083@news1.mnsinc.com>
Source record: 90985
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

See:

http://www.mnsinc.com/bry/ham/xtal_o.txt

I hope you enjoy this!

73 - Bry, AF4K

(remove the word REMOVE from my e-mail address to respond!)

## 2614. Hidden HF Antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <341bce3f.11258196@news1.mnsinc.com>
Source record: 90986
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

See:

http://www.mnsinc.com/bry/ham/hidden.htm

Enjoy!

73 de AF4K / G3XLQ, Bry

(remove the word REMOVE from my e-mail address to respond!)

## 2615. Converting ARC-5 Radios for amateur use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <341bce04.11198548@news1.mnsinc.com>
Source record: 90987
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

See:

http://www.mnsinc.com/bry/ham/arc5conv.txt

Enjoy!

73 de AF4K, Bry

(remove the word REMOVE from my e-mail address to respond!)

# 2616. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <341BE5B0.6166@crpl.cedar-rapids.lib.ia.us>
Source record: 90988

Gary Coffman wrote:

> It is the third conductor which unbalances it. That
> third conductor is the *outside* of the outer conductor of the coax.

This is not always true. In a two-wire line the unbalance can occur even if there is no stray pickup source. The forward current in one wire may not be equal to the return current in the other wire. For example the Zepp feeder. There are many other examples.

And this is also true for a coax. The common folklore that the return current in a coax braid is *always* equal to the forward current in the center wire is just that, folklore. It is very easy to divert some of the return current to the generator through an alternate path. It happens quite often, not only in antennas but in the many other areas of circuit design where baluns are used to correct this problem.

The idea keeps popping up on this forum that the unbalance (common mode) is due *only* to stray pickup from antenna radiation, etc. This is definitely not true. And the choke balun's mission is much more than to correct this one problem.

My article in July QEX deals with this topic in greater detail.

Bill W0IYH

## 2617. F.S. - NOS tubes and more...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970914144301.KAA24967@ladder01.news.aol.com>
Source record: 90989

FOR SALE: Tubes, books and radios including Hallicrafters, Hammarlund, and Philco. Schematics for many older radios and TV's - just $3 delivered. Tube manuals, Tube substitution books, Service manuals, Radio magazines, much more from the 30's to the 70's. Now over 1600 different tube types in stock - Contact Rog42@aol.com for an E-mail copy of my latest offerings on RADIO list - #911-T.

# 2618. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <341b812f.1841635@news.online.no>
Source record: 90990

On 11 Sep 1997 08:27:25 -0700, davem@cs.ubc.ca (Dave Martindale)
wrote:

>
>I post two kinds of articles on Usenet. One kind asks for help, and the
>other kind posts information - either in response to a question, or just
>to report experiences that I think are useful to other people.
>
>When I post a question, I will always include my real return address
>in the article so that people can answer my question by email. I don't
>expect them to figure out how to fix up a mangled "nospam" address.
>Conversely, when I answer someone else's question by email, and it
>bounces because their question has a bad address, I usually just trash
>the reply rather than figuring out how to fix the address - so the
>person asking the question just lost a potentially useful reply.
>
some later user programs have possibility to reject headers containing
WTB, "make 10000$" , win...., trade, HOLIDAY IN GREECE and all sort of
rubbish you are pleased to avoid seing
it will also work on email, so you need not collect the rubbish

the spam must choose the title more clever in the future, but I am
sure they find a solution...?

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 2619. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <5vh9ah$9ti@sjx-ixn8.ix.netcom.com>
Source record: 90991

In <341BE5B0.6166@crpl.cedar-rapids.lib.ia.us> "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> writes:
>
>...The common folklore that the return
>current in a coax braid is *always* equal to the forward current
>in the center wire is just that, folklore. It is very easy to
>divert some of the return current to the generator through an
>alternate path. It happens quite often, not only in antennas but
>in the many other areas of circuit design where baluns are used
>to correct this problem.
>

Bill,

How "easy" is it to divert this current?

If the current on a coax's 'inner' shield surface is 'forced' to equal
that of the center conductor (but opposite direction), doesn't this
mean that *all* of the return current returns via the shield inner
surface, and not through an alternate path?

Admittedly, there are frequency vs. coax length limits where these
currents may not be equal (a topic I need to bone up on!). Aside from
these limiting conditions, under what conditions is the current on the
inner shield not equal to the current on the center conductor (i.e.
some amount is diverted)?

- Jeff, WA6AHL

## 2620. Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: Joe Pillera <pillera@rust.net>
Message-ID: <341C4193.97BA4A52@rust.net>
Source record: 90992
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Hello,
I've heard mention of "micro-broadcasting" while listening to my
shortwave radio. Apparently, it has something to do with ordinary
people who legally use very low power to transmit some sort of voice
(narrow FM?) signal in their local area.

Do any of you have a list of common frequencies for this? Is it indeed
narrow FM - or is another modulation used?

Just curious. Thanks in advance.

Joe
--
Joe Pillera
ICQ (instant chat) ID = 2629013
http://www.rust.net/~pillera

# 2621. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: John Lentz <jlentz@execpc.com>
Message-ID: <341C6085.FF4@execpc.com>
Source record: 90993
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Joe Pillera wrote:
>
> Hello,
> I've heard mention of "micro-broadcasting" while listening to my
> shortwave radio. Apparently, it has something to do with ordinary
> people who legally use very low power to transmit some sort of voice
> (narrow FM?) signal in their local area.
>
> Do any of you have a list of common frequencies for this? Is it indeed
> narrow FM - or is another modulation used?
>
> Just curious. Thanks in advance.
>
> Joe
> --
> Joe Pillera
> ICQ (instant chat) ID = 2629013
> http://www.rust.net/~pillera

Joe... monitor the alt.radio.pirate newsgroup and I think you will find
your information regarding "micro-broadcasting".

# 2622. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <341C5D7B.3512@worldnet.att.net>
Source record: 90994
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Joe Pillera wrote:
>
> Hello,
> I've heard mention of "micro-broadcasting" while listening to my
> shortwave radio. Apparently, it has something to do with ordinary
> people who legally use very low power to transmit some sort of voice
> (narrow FM?) signal in their local area.
>
> Do any of you have a list of common frequencies for this? Is it indeed
> narrow FM - or is another modulation used?
>
> Just curious. Thanks in advance.
>
> Joe
> --
> Joe Pillera
> ICQ (instant chat) ID = 2629013
> http://www.rust.net/~pillera

Nope! thats not it! What they mean is transmitting on the AM/FM
broadcast band at low power levels. This is NOT legal. But its done
all the time by a good many people. Check out alt.radio.pirate for the
real information on the subject.

## 2623. FT-51R Help Needed, Plse.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: trex2000@txdirect.net
Message-ID: <341d70e7.1017414@news.txdirect.net>
Source record: 90995

After doing wide open mods and undoing them, my FT-51R is stuck in Euro mode. I know that I can get very wide band TX/RX if I unsodler (again) the pad and resetting. Problem is, my software won't load into the radio if I do that. Is there anyone out there that can tell me how to get my HT back to normal USA mode without sending it to Yaesu? VHF shows band 5, and I no longer have band choices. Can anyone help. Thanks, Scott (KB5YOK)

# 2624. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <341C986D.EA1@calweb.com>
Source record: 90996

Gary wrote:
> 
> wlfuqu00@pop.UKy.EDU (William L. Fuqua III) wrote:
> 
> :-{ Did anyone ever answer the question about the Oscilloscope
> :-{prescaler. All I have seen is talk about E-mail addresses.
> :-{You can't prescale the input to an oscilloscope like you can
> :-{to a frequency counter.
> :-{ 73
> :-{Bill wa4lav
> :-{
> :-{ William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
> :-{ Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
> :-{ University of Kentucky , Lexington, Ky 40506-0055
> :-{
> :-{
> :-{
> Weeding through the digressive BS.....I think the bandwidth in the
> Oscilloscope is determined by frequency response of the vertical
> amplifier components. By changing the components to those with a
> higher frequency response, logically it should increase the bandwidth.
> Maybe this is an oversimplification on my part, but its the best start
> so far.
> 
> "73" Gary KF9CM

There have been some successful attempts at down converting higher spectrum information to the limited B/W of the older scopes. For example the 3.5-4 Mhz spectrum could be selectively down converted to the 0-500 Khz spectrum of the old HP 130s and the like and be useful for looking at some stuff. Does not resolve the B/W limitation or make the scope respond any faster to a signal or pulse in a fast time domain, but in some limited cases a simple down converter would allow one to look at narrow band singles such as transmitted signals and some IF signals on a cheap or old machine. Perhaps some of the mates could point to a commercial extender or reference a home made project that would accomplish the task.

73
Bob, KE6F

# 2625. Kantronics, TimeWave-AEA, PacComm, JPS Mailing Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341CA19E.1D39@primenet.com>
Source record: 90997

```
Kantronics, TimeWave-AEA, PacComm, JPS Mailing Lists

Further Information: http://www.qth.net

--

>>>> info kantronics
Kantronics is a mailing list (reflector) devoted to the
discussion of products and services manufactured
or provided by Kantronics.

Kantronics/RF Concepts
1202 E 23rd St
Lawrence, KS 66046
Tel: 913-842-7745 (sales)
913-842-4476 (tech support)
Fax: 913-842-2031
Email: sales@kantronics.com
service@kantronics.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything Kantronics Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe kantronics

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe kantronics

To post information/questions to the list:

TO: kantronics@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

-----
>>>> info timewave-aea
TimeWave-AEA is a mailing list (reflector) devoted to the
discussion of products and services manufactured
```

or provided by TimeWave-AEA.

Timewave Technology Inc/AEA
2401 Pilot Knob Rd #134
St Paul, MN 55120
Tel: 612-452-5939
Fax: 612-452-4571
Email: dsp@timewave.com
techsupport@timewave.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything TimeWave-AEA Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe timewave-aea

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe timewave-aea

To post information/questions to the list:

TO: timewave-aea@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

---
>>>> info paccomm
PacComm is a mailing list (reflector) devoted to the
discussion of products and services manufactured
or provided by PacComm.

PacComm Packet Radio Systems, Inc.
4413 N Hesperides Street
Tampa, FL 33614-7618
Tel: 813-874-2980
Fax: 813-872-8696
Email: info@paccomm.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything PacComm Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe paccomm

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe paccomm

To post information/questions to the list:

TO: paccomm@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

-----
>>>> info jps
JPS is a mailing list (reflector) devoted to the
discussion of products and services manufactured
or provided by JPS.

JPS Communications Inc.
5720 M Capital Blvd
Raleigh, NC 27616
Tel: 919-790-1011
Fax: 919-790-1456
Email: jps@jps.com

* Products, Announcements, Upgrades
* Enhancements, Modifications, Repairs
* Revisions, Firmware Releases
* Buy/Sell
* Anything JPS Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe jps

To be removed from the mailing list:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe jps

To post information/questions to the list:

TO: jps@qth.net

This mailing list is sponsored by Al Waller (K3TKJ).

Please address any questions to: k7on@qth.net

-----
>>>>

# 2626. FS: Electron Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5vifhn$est$23@ha1.rdc1.occa.home.com>
Source record: 90998

If you are interested in purchasing ELECTRON TUBES ( antique to modern, new, NOS & used) or MICROWAVE COMPONENTS or ELECTRONIC TEST EQUIPMENT,
please request our current listing to be delivered via email:

sales@emodus.com

Thank you!

## 2627. Where can I go to buy Ham radio stuff???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: b068719c@bc.seflin.org
Message-ID: <5vfso2$pir@nntp.seflin.org>
Source record: 90999

I was just woundering where I could go to buy ham radio equipment around
my area of south florida?

--

Sage Sheppard
b068719c@bcfreenet.seflin.lib.fl.us

# 2628. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3429eab4.431474267@news.sci.fi>
Source record: 91000

ka8ddz <hynde@flash.net> wrote:

>There is alot here I dont understand but Im trying. I have noticed in
>some of the simple receiver schematics that there is generally not any
>filtering between the VFO and the first mixer.
>
>I would think that a simple LC VFO would have some healthy harmonics
>comming out of it. My question is, if these harmonics are reaching the
>mixer are you not loosing some gain due to the amplification of these
>unwanted signals? Even though they get filtered out when you convert to
>the first IF, they are still present in the 1st mixer.

Many diode ring DBM seems to work better when fed by a square wave
with steep edges containing a lot (odd) harmonics. Unfortunately,
these harmonics mix with the upper part of the input spectrum and some
mixing products will fall within the IF passband. Thus, general
coverage receivers usually have (sub)octave filters in the RF
amplifier to reduce the input spectrum that might mix with the
harmonics of the local oscillator.

>Would it improve things at all to have a bandpass filter prior to the
>VFO input to the mixer or am I worried about something that doesnt
>exist.

If you are building a simple receiver for a very narrow band, say the
CW segment of a single amateur band, a better place would be to put a
bandpass filter between the antenna and the mixer, limiting the input
spectrum to the part of interest, thus helping the perform a bit
better. This is important in particular with simple (unbalanced)
mixers.

The situation is quite different with general conversion receivers or
dual conversion receivers, in which the harmonics of the VFO can mix
with other oscillator frequencies (and their harmonics).

Paul OH3LWR

# 2629. FTV=WEFAX,FAX,SSTV,RTTY,CW with SoundBlaster

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-14 00:00:00 UTC
From: "Brian E. Cauchi" <briane@geocities.com>
Message-ID: <5vggo7$m2c@news.keyworld.net>
Source record: 91001
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

FTV (now in Version 1.0)can be used to receive images from Weather
Satellites and Terrestrial Facsimile Stations, text transmissions from radio
telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and CW
signals. It can also transmit Amateur Radio FAX and SSTV. No external
hardware, other than a radio, is required, as all the necessary signal
processing is implemented in software. The main features include:

WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
FAX operation supports APT signal recognition and scheduled reception.
No external decoder or converter box is required.
Signal analysis is provided on all modes.
Many parameters are adjustable while receiving.
Full recovery from wrong mode settings is possible.
Program works in real time (about 1 second 'DSP' time lag)

You may get more information or download a copy from my web site, on
http://www.geocities.com/SiliconValley/2504

# 2630. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <341D3447.8F33FA4F@arrl.org>
Source record: 90913

Mark J Sandford wrote:
>
> laura halliday wrote:
>
> > Sean Dyer wrote:
> > >
> > > Why would or wouldn't this work?
> > > (snip...)
> >
> > Close, but not quite. If you want to process the RF, you must
> > sample at a rate determined by the frequency of the *RF*, and
> > not by the frequency of the modulation. Still a fairly tall
> > order unless you're rich.
>
> I have trouble beleiving that it works but appentily it is possible to
> very tightily bandpass the frequencies of interest and they use sample
> ailiasing to your advantage.

Believe it. I used that technique to sample and demodulate the 100-kHz IF output of a TS-930 with a standard stereo codec. Worked just fine, although limitations of the S/H in the codec would have kept me from doing the same thing at say, HF.

Jon
--
Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League | Amateur Radio info:
225 Main St., Newington CT 06111 | http://www.arrl.org/

## 2631. Re: Fox hunts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: ed@gnc.net
Message-ID: <5vjfjv$61@niven.ksc.nasa.gov>
Source record: 90914

Remembered one more....

Build a psudorandom keyer set to bring the Tx up for a sec. or two spaced from seconds to min. apart.

# 2632. Re: Fox hunts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: ed@gnc.net
Message-ID: <5vjfd1$61@niven.ksc.nasa.gov>
Source record: 90915

Hi Rod,

I like to hide the fox in an area with lots of metal to bounce off.
Another trick is to use a directional antenna to bounce the signal off a large reflector/ re-radiator.
Ed

# 2633. FS: KW Matchbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Jim Johnson <km7hNOSPAM@gte.net>
Message-ID: <5vjhar$d5g$1@gte2.gte.net>
Source record: 90916

Johnson KW Matchbox. Have been listing at $225 shipped CONUS. No bites.
Make me an offer and we'll talk.

***REMOVE NOSPAM TO EMAIL***-
Jim Johnson, KM7H

# 2634. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: trier@odin.INS.CWRU.Edu
Message-ID: <5vjlj0$af5@alexander.INS.CWRU.Edu>
Source record: 90917

In article <341A0D6B.1D9E@antispam.trader.com>,
Dennis Erwin Thurlow <geosynq@antispam.trader.com> wrote:
>> Let's say the IF is 10MHz,
>> and you are sampling signals that are 1 volt peak. Then the slew rate
>> of the signals is nominally 62 volts per microsecond peak...
>
>Can someone explain this?

Essentially, you look at the steepest part of the sine wave, which is the zero-crossing. The slope there is 2 times pi times the frequency in Hertz times the peak-to-peak voltage.

Figuring this out takes a little calculus. The signal is (1V) * sin(2 * pi * 10^7 Hz * t). You can find the slope by taking the derivative and evaluating it at the point of steepest slope (conveniently, one such point is at 0). The derivative is (1V) * 2 * pi * 10^7 Hz * cos(2 * pi * 10^7 Hz * t), which at t=0 gives 6.28 * 10^7 V/sec, which is 62.8 volts per microsecond.

>Track? Hold??

A device that samples and analog signal at discrete times is called either a sample-and-hold or a track-and-hold. The device has two states: track and hold. In the track state, it passes through the signal to its output. Its output "tracks" the input. In the hold state, it holds the signal's level at whatever voltage it had at the time of the track-to-hold transition.

The distinction between a track-and-hold and a sample-and-hold is somewhat arbitrary and vague. The definition I like is that track and hold is designed with emphasis on tracking accuracy and short hold times, while a sample and hold is optimized for short track intervals and long hold intervals. The terms are somewhat interchangeable and the distinction vague, so you'll find people that prefer one term to the other for all circuits of this type.

Stephen

# 2635. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: John Wiseman <johnw@dmsl.hitachi.com>
Message-ID: <01bcc1f2$c4ff18b0$4ca192c0@tyrannosaurus>
Source record: 90918

Jon Bloom <jbloom@arrl.org> wrote in article
<341D3447.8F33FA4F@arrl.org>...
> Mark J Sandford wrote:
> >
> > laura halliday wrote:
> >
> > > Sean Dyer wrote:
> > > >
> > > > Why would or wouldn't this work?
> > > > (snip...)
> > >
> > > Close, but not quite. If you want to process the RF, you must
> > > sample at a rate determined by the frequency of the *RF*, and
> > > not by the frequency of the modulation. Still a fairly tall
> > > order unless you're rich.
> >
> > I have trouble beleiving that it works but appentily it is possible to
> > very tightily bandpass the frequencies of interest and they use sample
> > ailiasing to your advantage.
>
> Believe it. I used that technique to sample and demodulate the 100-kHz
> IF output of a TS-930 with a standard stereo codec. Worked just fine,
> although limitations of the S/H in the codec would have kept me from
> doing the same thing at say, HF.

There seems to be some confusion as to the difference between
sampling lowpass bandlimited analog signals, and bandpass-limited
analog signals, and that is no real surprise, as many DSP and
communications courses and textbooks seem to dwell on the point
of Nyquist sampling, without discussing the fact that it might actually
be DESIRABLE to alias a signal. Here's my brief attempt at something
beyond "believe it."

Notice that the original poster defined his problem so that he was
only interested in a 10 KHz. portion of an RF signal. If he had wanted
ANY frequency out of the original RF, then he would indeed have to
sample at least twice the frequency of the highest analog component
for full recovery. If what is really wanted is a narrow bandpass
component only, then one can use signal aliasing, AKA the Bandpass
Sampling Theorem, and this is what Jon is using as described above.

According to Communication Systems by Carlson, define the signal
of interest as bandpass, existing from fu-W to fu. In other words,
fu is the uppermost frequency (highest), and the signal has bandwidth
W, thus the lower frequency is fu-W. (The artwork is left as an

exercise to for the student - I stink at ASCII art...)

The required sampling rate is fs = 2fu/m, where m is an integer that satisfies - (fu/W)-1 < m <= (fu/W) (<= is less than or equal to).

Try a few examples. The most obvious place to start is the LOWPASS case. Here, W = fu, so the lowest frequency is fu-W = 0, DC. Substituting, (fu/fu)-1 < m <= (fu/fu) which is 0 < m <= 1, so of course m must be 1. But since fs = 2fu/m, fs = 2fu. This is in agreement with Nyquist, as it should be.

Now what happens for a bandpass signal? Try the equations for fu and W = fu/2. Now (fu/W)-1 < m <= (fu/W) becomes (2-1) < m <= (2), so m equals 2. Plugging this into the sampling frequency equation, fs = 2fu/m gives, fs = fu. We are now only required to sample at the highest frequency value, not TWICE it!

Try one more, this time W = fu/4 (a narrower bandpass by a factor of 2 from above...). Now (fu/W)-1 < m <= (fu/W) becomes (4-1) < m <= (4), so m equals 4. Now, the sampling rate is fs=2fu/4, so fs = fu/2, or HALF of the highest frequency!

As you can probably see, the sampling frequency for a bandpass signal is a function of the ratio of the highest frequency and the bandwidth of the signal. In the limit, as the frequency of the RF signal goes up (many MHz...), and the bandwidth goes down (only around 10 KHz. in this problem...), then the sampling rate will approach twice the BANDWIDTH of the signal, not twice the highest frequency.

Notice in the original posting that the author sort of arbitrarily said that he would sample at 3 times because it might be "better". This "oversampling" might be OK in lowpass Nyquist sampling, but one must be careful with bandpass signals, as the relationship is more complicated, and "oversampling" can create images and aliases just as easily as "undersampling".

As with all other things, this technique has its advantages and disadvantages. As Jon pointed out, IF processing using this technique is a really good idea, because low-price, high quality ADCs can be used. The disadvantage to designing a receiver front-end like this is that you obviously have to design a very good bandpass filter for the input, so general frequency coverage is pretty much out the window...

Hope all of this helps...

73s, J.W.
KE3QG

==========
John Wiseman

Senior Researcher
Hitachi America, Ltd., Digital Media Systems Laboratory
Princeton, NJ
Email: johnw@dmsl.hitachi.com
Voice: (609)-520-0071 ext. 18 Fax: (609)-520-8953
Amateur Radio: KE3QG
==========

# 2636. Re: LOWFER Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341D6E16.2450@primenet.com>
Source record: 90919

You should try the Lowfer Mailing List at QTH.Net

It is very active, now, Details: http://www.qth.net

Joh. Arlt wrote:
> =

> Gary Herbst wrote:
> > I'm looking for a CW Lowerfer Transmitter circuit. Anyone have a refe=
rence
> > to one or an Mag. article.
> >
> > Thanks,
> >
> > Gary-
> =

> In Sprat, the Mag. of the G-QRP-Club Nr. 88 Autumn 1996 S. 3-11. The
> G3TDZ 73kHz RIG, An LF TRX for Shack, /P, or Cave Use. John R. Hey
> G3TDZ 8Armley Grange Crescent, Leeds. LS12 3QL. It's a HQ Phasing RX +=

> TX.
> =

> 72 de Jan
> ---------------------------
> Johannes Arlt
> Berlin-Germany
> <JArlt@RadioLink.net>
> DL7UXA @ DB=D8GR.#BLN.DEU.EU

# 2637. Re: Why would/wouldn't this work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <341D6E48.7E92DD8E@direct.ca>
Source record: 90920

John Wiseman wrote:

> (a very nice but somewhat lengthy summation snipped...)

Neat. Thanks.

The bandwidth and dynamic range requirements of sampling the RF directly would still cause me to favour converting to an IF. At least, with technology I'm likely to be able to lay my hands on. This will undoubtedly change in the future...

...laura

# 2638. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970915183700.OAA01781@ladder02.news.aol.com>
Source record: 90921

>
>Many diode ring DBM seems to work better when fed by a square wave
>with steep edges containing a lot (odd) harmonics. Unfortunately,
>these harmonics mix with the upper part of the input spectrum and some
>mixing products will fall within the IF passband. Thus, general
>coverage receivers usually have (sub)octave filters in the RF
>amplifier to reduce the input spectrum that might mix with the
>harmonics of the local oscillator.
>
>>Would it improve things at all to have a bandpass filter prior to the
>>VFO input to the mixer or am I worried about something that doesnt
>>exist.

You can filter the heck out of the VFO feeding a DBM. It'll be clean as a whistle until you connect the DBM. The non-linear load of the diodes turning on and off generates harmonics all over again. (Assuming enough LO drive to turn on the diodes), but then, it isn't a mixer until you do.

W4ZCB

## 2639. 602 as oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Tim <Hynde@NOSPAM.flash.net>
Message-ID: <341D9707.56D6@NOSPAM.flash.net>
Source record: 90922

In the interest of saving space in a very small box, is there any difference between using an NE602 as an oscillator or building one using a dedicated transistor with all the appropriate caps etc.

It would seem to me (while more expensive) an easy solution when you need a simple xtal controlled or LC oscillator. Thoughts?

Tim

# 2640. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Rod <rodvan@cstone.net>
Message-ID: <341D93D1.5989ECF0@cstone.net>
Source record: 90923
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Gregory T. Helding wrote:
>
> I read that the term was first used in a telegraph operator training
> guide.
> A ham (not an acronym) was a bad or inexperienced operator. This was
> before radio. When radio came about, there were not the regulations
> and
> restrictions we have today, so people operated wherever and however
> they
> wanted. The troublesome operators were called hams by military
> operators.
> This name stuck and eventually the term came to mean all amateurs, not
> just
> bad ones.
>
> -Greg
Add to greg`s quote the fact that large hands were/are sometimes called
"hams" and that they were thought to belong to "heavy handed people"
which may result in a "poor fist" then we start to get a plausible
answer.

When I firsted hamming -(about 30 yrs ago - no longer active) I seem to
remember the Radio Amateur`s handbook had the facts about the term but
darned if I remember what they said/ 73s/rod
--
Keep smiling.
Rod
rodvan@cstone.net

# 2641. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Rod <rodvan@cstone.net>
Message-ID: <341D9111.ECFB75F8@cstone.net>
Source record: 90924
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Gregory T. Helding wrote:
>
> I read that the term was first used in a telegraph operator training
> guide.
> A ham (not an acronym) was a bad or inexperienced operator. This was
> before radio. When radio came about, there were not the regulations
> and
> restrictions we have today, so people operated wherever and however
> they
> wanted. The troublesome operators were called hams by military
> operators.
> This name stuck and eventually the term came to mean all amateurs, not
> just
> bad ones.
>
> -Greg
Add to greg`s quote the fact that large hands were/are sometimes called
"hams" and that they were thought to belong to "heavy handed people"
then we start to get a plausible answer.

When I firsted hamming -(about 30 yrs ago - no longer active) I seem to
remember the Radio Amateur`s handbook had the facts about the term but
darned if I remember what they said/ 73s/rod
--
Keep smiling.
Rod
rodvan@cstone.net

# 2642. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: bratcher@worldnet.att.net
Message-ID: <3428c99a.93266469@NETNEWS.WORLDNET.ATT.NET>
Source record: 90925
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

On Sun, 14 Sep 1997 17:56:11 -0400, N8XYN <jim.N8XYN@worldnet.att.net>
wrote:

>Joe Pillera wrote:
>>
>> Hello,
>> I've heard mention of "micro-broadcasting" while listening to my
>> shortwave radio. Apparently, it has something to do with ordinary
>> people who legally use very low power to transmit some sort of voice
>> (narrow FM?) signal in their local area.
>>
>> Do any of you have a list of common frequencies for this? Is it indeed
>> narrow FM - or is another modulation used?
>>
>> Just curious. Thanks in advance.
>>
>> Joe

Try 6955 khz plus or minus about 20 khz most evenings.
Seems weekends are best for catching pirates.
As for local FM look all over the dial during the evening or night.
Most FM pirates are low power and aren't heard as far as legal
broadcasters.

>Nope! thats not it! What they mean is transmitting on the AM/FM
>broadcast band at low power levels. This is NOT legal. But its done
>all the time by a good many people. Check out alt.radio.pirate for the
>real information on the subject.

Thata a good newwgroup for the pirate scene...

bratcher@worldnet.att.net
Record collector, 8mm, super 8, 16 and 35mm Film collector.
Looking for prerecorded reel to reel tape albums.
I like old radio's too.
Collins, Hallicrafters, National & Hammarlund are my Favorites!

# 2643. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Michael Tracy <mtracy@arrl.org>
Message-ID: <341D9DC2.A1A@arrl.org>
Source record: 90926

K0PW wrote:
>
> Does anyone get a response from this url? I get "no DNS entry"
>
> K0PW

If your name server doesn't list http://www.pwdahl.com, you can use:

http://209.12.189.22/

instead.

--
Best Regards, Michael Tracy, KC1SX, ARRL Laboratory Engineer
---
American Radio Relay League, Inc. Tel: 1-860-594-0200
225 Main Street Fax: 1-860-594-0259
Newington, CT 06111 Email: mtracy@arrl.org (internet)
---

# 2644. Wanted: TK-810 Programming Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Stanley Koontz <stush@toolcity.net>
Message-ID: <5vl0o5$9kf@news.toolcity.net>
Source record: 90927
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Wanted TK-810 prgramming info.

Cables and software for sale.

Info websites welcomne !!!

Thanks

Stanley Koontz
stush@toolcity.net

## 2645. Sportster Voice modem as Phone patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Clinton Peebles <cpeebles_NOSPAM@nel.auracom.com>
Message-ID: <01bcc1d1$4c25c2c0$5455aecc@default>
Source record: 90928

Has anyone ever used a USR Sportster Voice modem as a phone patch? Is
there software around to do this?
---
Remove _NOSPAM to E-mail reply.

# 2646. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: !turtle@wwa.com
Message-ID: <341c80d7.2321845@news.wwa.com>
Source record: 91002

wlfuqu00@pop.UKy.EDU (William L. Fuqua III) wrote:

:-{ Did anyone ever answer the question about the Oscilloscope
:-{prescaler. All I have seen is talk about E-mail addresses.
:-{You can't prescale the input to an oscilloscope like you can
:-{to a frequency counter.
:-{ 73
:-{Bill wa4lav
:-{
:-{ William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
:-{ Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
:-{ University of Kentucky , Lexington, Ky 40506-0055
:-{
:-{
:-{
Weeding through the digressive BS.....I think the bandwidth in the
Oscilloscope is determined by frequency responce of the vertical
amplifier components. By changing the components to those with a
higher frequency responce, logicaly it should increase the bandwidth.
Maybe this is an oversimplification on my part, but its the best start
so far.

"73" Gary KF9CM

# 2647. Re: Search schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: !turtle@wwa.com
Message-ID: <341c844d.3208256@news.wwa.com>
Source record: 91003

"Joss Navarro" <jocelyn.navarro@hol.fr> wrote:

:-{I want to build a 100mW to 10W 145MHz amplifier (ro replace an old
:-{hybrid) with transistors. Has anybody a diagram with values, as I do
:-{not want to run experimentations for days.
:-{73's fm F6IQA.
:-{
Joss ,
try the 1975 or so Radio Amateur Handbook. There are a few 2 meter amp
circuits in there that might help.

P.S. Are you any relation to Barney Navarro of Navarro Engineering
co.?

"73" Gary KF9CM

# 2648. mc68ch11 based morse code/pc interfacing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: lonnig@vnet.net
Message-ID: <5vi78v$9v5$1@ralph.vnet.net>
Source record: 91004
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hi,

I would like to build a mc68hc11 based morse code generator and decoder. My plans are to start with a dumb terminal or pc (in terminal mode) as the input to the microcontroller.

As the user types, morse code is sent to a speaker and or to a suitable output to be interfaced with a radio. Also, I would like to be able to use the hc11 to decode incoming morse code and display it on a pc or built in lcd display.

I know this probably been done to death, but I am having a tough time locating c, c++ or assembly code and algorithms. I would also like to see any hardware info if it is available.

I have been out of ham radio for some time, so I thought this would be a good project to start with.

I can use the information even if it is not directly for the hc11, any related information will be helpful. I am using linux and win95 and am not particularly interested in doing this via sound card, though the software may be of some help.

Thanks,

KD9GN@vnet.net

p.s. feel free to cc my email on any responses.

# 2649. www.potg.com = Free comedy radio, Unique and Award Winning

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970915053900.BAA27963@ladder01.news.aol.com>
Source record: 91005

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 2650. FS: 5CX1500 Eimac NEW tube !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcc1b0$627e9900$9404d9cf@radiodan.earthlink.net>
Source record: 91006
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a BRAND NEW in the box 5CX1500 Eimac tube that I bought a few years ago for when my Henry 4K needed a new tube. I sold the amp (working just fine) with the old tube in it and never needed the NEW tube.
It runs over $1300 new from Eimac.
This tube has been and is still in the possession of Ted Henry of Henry Radio. I kept it there because I thought I would put it on consignment. Well they no longer do Ham Radio as a retail business, so I offer it here. You can call Ted and he will vouch for this tube!

I ask $475 plus shipping.

If you're tired of duds or other junk tubes, you will be pleased to solve your tube problems with this NEW tube. Probably last as long as you do!

73, Dan

radiodan@earthlink.net (310) 478-4987

--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/
Ramsey Kits "closeout" see my web page ! **

# 2651. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: shoppa@alph02.triumf.ca
Message-ID: <5vibeg$orm$1@nntp.ucs.ubc.ca>
Source record: 91007
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

In article <341C4193.97BA4A52@rust.net>, Joe Pillera <pillera@rust.net> wrote:
>I've heard mention of "micro-broadcasting" while listening to my
>shortwave radio. Apparently, it has something to do with ordinary
>people who legally use very low power to transmit some sort of voice
>(narrow FM?) signal in their local area.

Yes, this is exceedingly common. Folks who want to become
"micro-broadcasters" buy baby monitors, cordless phones, and cellphones.
Each such broadcaster typically has a half-dozen or so listeners
who are kept entertained in their neighborhood.

Among the most popular broadcasts are local politicians, government
and school employees who regularly make their entire personal lives
available to whoever may want to listen. You may have read about
how Newt Gingrich recently opened his own station.

Tim. (shoppa@triumf.ca)

# 2652. Vintage Radio Kit Co.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <341d14ae.4771938@news1.mnsinc.com>
Source record: 91008
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Vintage Radio Kit Co. announces the hot new CAKEPANION regenerative receiver kit to go with their popular CAKE PAN CW-5 transmitter kit!

More to come soon, including the BREAD PAN antenna tuner kit!

Enjoy ham radio like in the old days!

For a complete description of these affordable CAKE PAN KITS(!) take a look at:

http://www.mnsinc.com/bry/vintage.htm

ENJOY!

## 2653. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: rickch19@sgi.netxx
Message-ID: <5vj446$m4r$1@taurus.bv.sgi.net>
Source record: 91009
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

N8XYN <jim.N8XYN@worldnet.att.net> wrote:

>Joe Pillera wrote:
>>
>> Hello,
>> shortwave radio. Apparently, it has something to do with ordinary
>> people who legally use very low power to transmit some sort of voice
>> (narrow FM?) signal in their local area.
>>
>> Do any of you have a list of common frequencies for this? Is it indeed
>> narrow FM - or is another modulation used?

>Nope! thats not it! What they mean is transmitting on the AM/FM
>broadcast band at low power levels. This is NOT legal. But its done
>all the time by a good many people. Check out alt.radio.pirate for the
>real information on the subject.

Using Ramsey FM-10 under Part 15 is LEGAL to transmit on the FM band.
Those using MODIFIED FM-10's, amplifiers etc. then would exceed the
power levels allowed under Part 15 and would then be ILLEGAL to use
MODFIED/AMPLIFIED/EXTERNAL ANTENNAS etc. to transmit on FM with out am
FM broadcast license under Part 73.

Don't classify all FM-10 & similar devices as illegal. Many such
devices are on the market to relay portable CD audio your car stereo
etc.. These devices when used PROPERLY are LEGAL.

---
I am Geek Spice, and you're not! So, who do you wanna be? ?
---
** Remove xx in email address to email me! **
Western Pennsylvania Scanner Frequency Page
http://www.geocities.com/CapeCanaveral/Lab/1060/
Radio Scanner Web Ring - Find a scanner web site quickly!
http://www.geocities.com/CapeCanaveral/Lab/1060/scnrng.htm
Spice Girls ! ! http://channel3.vmg.co.uk/spicegirls
---
"Through the gateway, off the repeater,
over the backbone, nothing but net!"
---
Pursuant to US Code, Title 47, Chapter 5, Subchapter II, '227,
any and all nonsolicited commercial E-mail sent to this address
is subject to a download and archival fee in the amount of $500
US. E-mailing denotes acceptance of these terms.

# 2654. ** FLEA at MIT ** Sunday Sept. 21st Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <5vimji$nph@senator-bedfellow.MIT.EDU>
Source record: 91010
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday..

*** !!!! WE ARE BACK IN THE GARAGE !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sept. 21st, 1997
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >1000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Seperate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)

Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

SELLERS ADVANCED DISCOUNT REGISTRATION if Mailed by the 5th

Name..... Call.....

Address..... Phone.....

City..... State..... Zip.....

E-Mail .....

Spaces Required ___ Season @ $50 / space = $ ..... CK # .....

___ April ____ May ___ June ____ July

___ Aug ____ Sept ___ Oct

Total Monthy spaces @ $9/ Space = $ ..... CK # .....

Make checks payable to The MIT Radio Society

Mail to PO Box 397082 MIT Branch Cambridge MA 02139-7082

rcvd by..... Stamp

.....

RECEIPT fill in only your name..

Received $ from .....

By ..... Stamp

**********

Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754

**********

## 2655. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <341D29F4.78C@worldnet.att.net>
Source record: 91011
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

(Remove xx to email) wrote:
>
> N8XYN <jim.N8XYN@worldnet.att.net> wrote:
>
> >Joe Pillera wrote:
> >>
> >> Hello,
> >> shortwave radio. Apparently, it has something to do with ordinary
> >> people who legally use very low power to transmit some sort of voice
> >> (narrow FM?) signal in their local area.
> >>
> >> Do any of you have a list of common frequencies for this? Is it indeed
> >> narrow FM - or is another modulation used?
>
> >Nope! thats not it! What they mean is transmitting on the AM/FM
> >broadcast band at low power levels. This is NOT legal. But its done
> >all the time by a good many people. Check out alt.radio.pirate for the
> >real information on the subject.
>
> Using Ramsey FM-10 under Part 15 is LEGAL to transmit on the FM band.
> Those using MODIFIED FM-10's, amplifiers etc. then would exceed the
> power levels allowed under Part 15 and would then be ILLEGAL to use
> MODFIED/AMPLIFIED/EXTERNAL ANTENNAS etc. to transmit on FM with out am
> FM broadcast license under Part 73.
>
> Don't classify all FM-10 & similar devices as illegal. Many such
> devices are on the market to relay portable CD audio your car stereo
> etc.. These devices when used PROPERLY are LEGAL.
>
> ---
> I am Geek Spice, and you're not! So, who do you wanna be? ?
> ---
> ** Remove xx in email address to email me! **
> Western Pennsylvania Scanner Frequency Page
> http://www.geocities.com/CapeCanaveral/Lab/1060/
> Radio Scanner Web Ring - Find a scanner web site quickly!
> http://www.geocities.com/CapeCanaveral/Lab/1060/scnrng.htm
> Spice Girls ! ! http://channel3.vmg.co.uk/spicegirls
> ---
> "Through the gateway, off the repeater,
> over the backbone, nothing but net!"
> ---
> Pursuant to US Code, Title 47, Chapter 5, Subchapter II, '227,

> any and all nonsolicited commercial E-mail sent to this address
> is subject to a download and archival fee in the amount of $500
> US. E-mailing denotes acceptance of these terms.

Not if you exceed the "field strength" requirments. And with a tunned dipole you will. You can run 1Kw on the FM broadcast band as long as its into a good dummy load. Hook an FM 10 to a beam with a nice 8 Dbd gain. You'll hear it for a mile. The FCC wouldnt like that....73

# 2656. Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-15 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-970915130331Z-32496@whpost.wh.lucent.com>
Source record: 91012

>Seth Taylor wrote:
>
> The correct URL is:
>
> http://www.pwdahl.com/
>
> Seth KC2WE
Does anyone get a response from this url? I get "no DNS entry"

K0PW

---

Date: Sat, 13 Sep 1997 12:46:21 -0700
From: AC6V <ac6v@ix.netcom.com>
Subject: Peter Dahl WEB site

K0PW wrote:
>
> Seth Taylor wrote:
> >
> > The correct URL is:
> >
> > http://www.pwdahl.com/
> >
> > Seth KC2WE
> Does anyone get a response from this url? I get "no DNS entry"
>
> K0PW
---
>Yep works fine here in San Diego

Sometimes here at work if the proxies are overloaded on the system, I
will get a similar response, " no DNS entry". Also, it is possible at
times that their server could be down.

Seth KC2WE

## 2657. warning: mentor@cin.net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: peter@sfu.ca
Message-ID: <5vkiqs$qld$1@morgoth.sfu.ca>
Source record: 90929

James A. Young (mentor@cin.net) recently made several high bids on
items up for auction on eBay: (http://cayman.ebay2.com/aw/index.html)

He now refuses to even acknowledge my emails that I have sent to
him trying to arrange payment. Apparently I'm not the only seller
he is doing this to, as a result his feedback rating on eBay has
now fallen to -4:

http://206.79.255.84/aw-cgi/UserISAPI.dll?ViewFeedback?userid=mentor@cin.net

One of the other sellers at eBay informed me that this person has
also posted to this newsgroup. As a public service I want you to
know that based on his recent behaviour it is apparent that this
person is UNTRUSTWORTHY and DOES NOT HONOR HIS COMMITMENTS.

Anybody entering into a transaction with him should be careful!

# 2658. Re: 602 as oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970916014601.VAA28063@ladder01.news.aol.com>
Source record: 90930

Hi Tim

>In the interest of saving space in a very small box, is there any
>difference between using an NE602 as an oscillator or building one using
>a dedicated transistor with all the appropriate caps etc.--

I think there are arguably at least two important advantages to using a single transistor in a seperate VFO over using the "on board" NE602 oscillator. One advantage is better level control between the oscillator and mixer. If the oscillator is external, you can easily control injection level (like most Gilbert Cells, the NE602 turns ugly when it is overdriven). If you use the chip's internal oscillator, the only way to control injection level is by carefully limiting feedback in the oscillator tank's capacitive divider. Also, when you use the internal oscillator, there's no way to filter out the oscillator harmonics. In receiver mixing applications, these can be troublesome--causing spurious responses.

Having said that, I've found that if I monitor what I'm doing with a spectrum analyzer, I can achieve useful results using the internal oscillator in even the simplest NE602 oscillator circuits.

73

Rick K1BQT

# 2659. Re: 602 as oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: Gordon Couger <gcouger@ionet.net>
Message-ID: <5vl5b0$ph5$1@ionews.ionet.net>
Source record: 90931

It works great Tim. I built one up 10 meteres and put an antenna
on it and could hear it about 700 yards. The only real problem is
the output impeadence it 2,000 ohms so you have to do some
matching to get it down to usable levels.

Gordon

Gordon Couger W5RED
624 Cheyenne
Stillwater, OK 74075 1411
405.624.2855 after noon
gcouger@ionet.net
www.cecils.com/gcouger

Tim wrote in article <341D9707.56D6@NOSPAM.flash.net>...

>In the interest of saving space in a very small box, is there any
>difference between using an NE602 as an oscillator or building one using
>a dedicated transistor with all the appropriate caps etc.
>
>It would seem to me (while more expensive) an easy solution when you
>need a simple xtal controlled or LC oscillator. Thoughts?
>
>Tim

# 2660. Re: mc68ch11 based morse code/pc interfacing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: Gordon Couger <gcouger@ionet.net>
Message-ID: <5vl606$pml$1@ionews.ionet.net>
Source record: 90932
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

lonnig wrote in article <5vi78v$9v5$1@ralph.vnet.net>...

>
>Hi,
>
>I would like to build a mc68hc11 based morse code generator and
>decoder. My plans are to start with a dumb terminal or pc (in
>terminal mode) as the input to the microcontroller.
>
>I know this probably been done to death, but I am having a tough time
>locating c, c++ or assembly code and algorithms. I would also like to
>see any hardware info if it is available.
>
>
Writing code to send Morse is not difficult I'll be glad to send you some.
It is the decoding it that presents the problem. This is referred to as a
difficult problem. As far as I know there are no algorithms that approach
what a person can do on non synchronized CW.

The only way I can think of to do it is to save the high and low states
until
you decide you have a letter and then process the states into dots and
dashes
and look up the letter in a look up table. The trick is when do you have a
complete
letter. Not real difficult if a computer is sending code but near
impossible when
a human is running his letters together a little bit.

Good Luck
Gordon

Gordon Couger W5RED
624 Cheyenne
Stillwater, OK 74075 1411
405.624.2855 after noon
gcouger@ionet.net
www.cecils.com/gcouger
>

## 2661. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: balaji@u.washington.edu
Message-ID: <341E3AD0.5695@u.washington.edu>
Source record: 90933
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Maybe that's why we got the term "ham-fisted"!

Balaji KK7HE

## 2662. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: balaji@u.washington.edu
Message-ID: <341E3AA2.150B@u.washington.edu>
Source record: 90934
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Maybe that's why we got the term "ham-fisted"!

Balaji KK7HE

## 2663. Wanted: link coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970916015100.VAA28507@ladder01.news.aol.com>
Source record: 90935

Looking for B&W or Johnson link coils for 160, 80, and 40 meters. Must be high power models and in excellent condition, junkers might be of interest for spare parts.

Evan
K9SQG@AOL.com

# 2664. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: rickch19@sgi.netxx
Message-ID: <5vlmrg$gva$1@taurus.bv.sgi.net>
Source record: 90936
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

N8XYN <jim.N8XYN@worldnet.att.net> wrote:

>Not if you exceed the "field strength" requirments. And with a tunned
>dipole you will. You can run 1Kw on the FM broadcast band as long as
>its into a good dummy load. Hook an FM 10 to a beam with a nice 8 Dbd
>gain. You'll hear it for a mile. The FCC wouldnt like that....73

Again as I stated UNMODIFIED, UNAMPLIFIED, STOCK FM-10 is 47 CFR 15
LEGAL. A MODIFIED/AMPLIFIED/EXTERNAL ANTENNA is **NOT LEGAL**.

I would consider "micro broadcasting" to be the use of a LEGAL FM-10
or similar product. As the power is definately in the micro power
level.

---
I am Geek Spice, and you're not! So, who do you wanna be? ?
---
** Remove xx in email address to email me! **
Western Pennsylvania Scanner Frequency Page
http://www.geocities.com/CapeCanaveral/Lab/1060/
Radio Scanner Web Ring - Find a scanner web site quickly!
http://www.geocities.com/CapeCanaveral/Lab/1060/scnrng.htm
Spice Girls ! ! http://channel3.vmg.co.uk/spicegirls
---
"Through the gateway, off the repeater,
over the backbone, nothing but net!"
---
Pursuant to US Code, Title 47, Chapter 5, Subchapter II, '227,
any and all nonsolicited commercial E-mail sent to this address
is subject to a download and archival fee in the amount of $500
US. E-mailing denotes acceptance of these terms.

# 2665. DIODE REPLACEMENT HSU277

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: "Norman M. Boles" <bolesn@nwlink.com>
Message-ID: <01bcc290$83243a80$368a14d1@fic-2200>
Source record: 90937

1. Does anyone have a spec sheet listing the HSU277 diode? I am looking to upgrade the 1st IF section of a general converage DX-394 receiver and can't find the original manufacture of this diode. Its a new rig and I wanted to find the best switching diodes available. The radio is manufactured by Radio Shack and the shop manual does not list a generic replacement part. Any reply's would be appreciated

--
Norman Boles
3116A Dogwood St SW
Tacoma WA
98439
Email: bolesn@nwlink.com

# 2666. Re: Help wanted to identify/source components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <341E7370.3243@hp.com>
Source record: 90938

Simon Lewis wrote:
>
> Hi All
>
> Need a little help identifying some parts used in a past radcom project
> by GM4DJS, for a magneto-resistive magnetometer.
>
> Sensor, possibly hall effect(?) part no. KMZ10A (4 pin square device)
>

You might want to contact Wallace, GM0GNT QTHR, he showed me one of
these a few months ago. It's a magneto-resistive sensor, not
Hall-effect, of course :-)

I always intended to build a good fluxgate sensor.....

Cheers
David GM4ZNX

# 2667. Re: Low Noise HF Pre-amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <341E758D.4057@hp.com>
Source record: 90939

William E. Sabin wrote:
>
> A quite common problem occurs in narrow CW modes, where the receiver
> noise figure degrades because of the wideband IF/AF noise that follows
> the narrow CW filter. I have seen this many times.
>

Also, a lot of designs did not have adequate screening, so stray coupling around a wonderful IF filter spoilt the ultimate rejection.

I began to suspect some years ago that the penetration of variable filter width and offset schemes into progressively lower in the market oriental transcievers was not an outbreak of creeping featurism, but was actually a way using frequency translation as a way of minimising the metalwork needed to screen the huge amount of gain in their IFs.

An IF with distributed gain and distributed selectivity still has a lot going for it...

Cheers
David GM4ZNX

# 2668. Re: Low Noise HF Pre-amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <341E7E1A.70F2@crpl.cedar-rapids.lib.ia.us>
Source record: 90940

David Stockton wrote:
>
> Also, a lot of designs did not have adequate screening, so stray
> coupling around a wonderful IF filter spoilt the ultimate rejection.
>

The Collins 75S3-B receiver, when it first appeared, had this problem. The culprit was a plastic shaft on the mechanical filter rotary switch. I replaced the shaft with a grounded metal shaft and the ultimate attenuation improved by better than 20 dB. We quickly put this fix into production.

Bill W0IYH

# 2669. Hmafest: 09/20/97, Mt Holly NJ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: bob@waterw.com
Message-ID: <5vm3pu$der@sea.waterw.com>
Source record: 90941
Cross-posted to: rec.ham-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The South Jersey Radio Association's (SJRA) hamfest is Saturday, September 20th at the Armory on Rt 38 in Mt Holly, NJ (Burlington County, between NJ Turnpike exits 4 and 5). There are indoor tables with power as well as tailgating. VE testing, prizes, etc.

Talk-in is on the K2AA repeater, 145.29, -600.

More info is at the SJRA page: www.sjra.org or via email from either pehayden@aol.com or bob@waterw.com.

# 2670. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19970916153801.LAA11555@ladder02.news.aol.com>
Source record: 90942

I've run 3200 volts on a pair. Just kept cranking up my power supply and readjusting bias. Tom is right, tubes aren't what they used to be.

# 2671. Re: Fast O'scope for tiny Homebrewer budget

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: "Tom C. Brown, Jr." <mmc@netdoor.com>
Message-ID: <01bcc2bc$2d087360$468489d0@hp-pentium-166>
Source record: 90943

You're right, Jim!

The 465 and 465B are incredibly good instruments. And I think you're right about parts being available for a while to come. I hope so! There were tons of those things sold to the government and big companies, and I think that as they surplus them they'll just keep getting cheaper and parts will indeed not be a problem for a long time. That's basically how the story ran on the 500 series Tektronix instruments.

And when it comes to oscilloscopes, there's Tektronix, and then there's everything else..... :-)

Good advice!

73, Tom AE5I

Melissa & Jim <mgkepner@facstaff.wisc.edu> wrote in article <33fa6491.3120487@news.doit.wisc.edu>...
> af389@lafn.ORG (David Shalita) wrote:
>
> >I am desperate for a replacement usable used or new scope, TINY BUDGET,
> >for checking QRP RF ckts and for checking 100 mhz ECL and TTL logic.
> >This is for my home shop shack.
> >
> >What scope are you folks using that are small, light weight for checking

> >RF and for checking high speed digital logic?
>
> I believe the most popular series of scopes that Tek ever made was the
> 465, 475, 485 series, along with the later 465B. The 465s and 465Bs
> are 100MHz, plentyful, becoming cheaper every day, and there should be
> parts available, for those willing to scrounge, for decades.
>
> I love my 465B.
>

# 2672. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <341ED478.4619@ruraltel.net>
Source record: 90944
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Hello,
before this thread I had heard of three explanations for the term
HAM. This thread has had all kinds of variations on those three. What
gets me is the willingness no focus on the negative definitions, I don't
deny there are poor operators in the amateur ranks.

there is no absolute definitions of the term HAM, why worry about it?
If a none amateur asks for a definition, what's wrong with replying.
There is no verifiable answer, it's only a nick-name. IE; roughneck,
swamper and so on?

--
73, Doug Younker, N0LKK
near Plainville, KS
dougy@ruraltel.net
==========
Rod wrote:
>
> Gregory T. Helding wrote:
> >
> > I read that the term was first used in a telegraph operator training
> > guide.
> > A ham (not an acronym) was a bad or inexperienced operator. This was
> > before radio. When radio came about, there were not the regulations
> > and
> > restrictions we have today, so people operated wherever and however
> > they
> > wanted. The troublesome operators were called hams by military
> > operators.
> > This name stuck and eventually the term came to mean all amateurs, not
> > just
> > bad ones.
> >
> > -Greg
> Add to greg`s quote the fact that large hands were/are sometimes called
> "hams" and that they were thought to belong to "heavy handed people"
> then we start to get a plausible answer.
>
> When I firsted hamming -(about 30 yrs ago - no longer active) I seem to
> remember the Radio Amateur`s handbook had the facts about the term but
> darned if I remember what they said/ 73s/rod
> --
> Keep smiling.

> Rod
> rodvan@cstone.net

# 2673. Wated...ADMS Software for the FT50R

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: raymond@gm0otb.demon.co.uk
Message-ID: <3421c3cf.890441@news.demon.co.uk>
Source record: 90945

Please has anybody a copy of the ADMS software for the FT50r

I can supply software for any of the following;

FT10
FT11
FT40
FT41
FT51

Please E-Mail software direct

73's Ray ( GM0OTB )

E-Mail: raymond@gm0otb.demon.co.uk

## 2674. I need your help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: b068719c@bc.seflin.org
Message-ID: <5vmji6$h2d@nntp.seflin.org>
Source record: 90946

I was wondering if anyone knows how to make a cordless phone have longer range. If so pleae e-mail me back. thank you

--

Sage Sheppard
b068719c@bcfreenet.seflin.lib.fl.us

# 2675. How do you Mod. low band Mitrek for 6-meters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: Scott Sidener <sidener@umr.edu>
Message-ID: <5vm9gm$qbb$2@news.cc.umr.edu>
Source record: 90947

Hi, I was wondering if anyone can tell me what caps. etc. need to be changed in a motorola Mitrek low band radio in order for it to tune to the 6-meter band.

I know some people have done it and I need to get the specifics.

Thanks very much!

Scott Sidener N0WFL

# 2676. Re: Low Noise HF Pre-amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: PGILI <PGILI@mailgw.sanders.lockheed.com>
Message-ID: <341EFA47.125A@mailgw.sanders.lockheed.com>
Source record: 90948

David Stockton wrote:
>
> William E. Sabin wrote:
> >
> > A quite common problem occurs in narrow CW modes, where the receiver
> > noise figure degrades because of the wideband IF/AF noise that follows
> > the narrow CW filter. I have seen this many times.
> >
>

Also, local oscillator (any one of a multi-conversion rx) and BFO phase noise close to carrier will degrade snr at narrow bandwidths and low tones.

73, AA1LL, Paul Gili, Greenville, NH

# 2677. 80m QRP DSB rig schematics!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: Johan Bodin <sm6lkm.jbeab@swipnet.se>
Message-ID: <01bcc2f6$7b439020$4199f482@win95.swipnet.se>
Source record: 90949

Complete building instructions for an 80 meter, 1 watt P.E.P. DSB transceiver are available for download from my web site. PCB layout is also included. Use your soldering iron and have fun.

Web page: http://home4.swipnet.se/~w-41522/

Email: sm6lkm.zzzjbeab@swipnet.se

The email address above will work if you remove the three z's.

72/73 de Johan

# 2678. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: Chuck Smith <wa7rai@raibeam.com>
Message-ID: <01bcc2cd$a25e3b20$3b9d62cf@default>
Source record: 90950
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Gary Coffman <ke4zv@bellsouth.net> wrote in article
<34198d22.22526554@news.atl.bellsouth.net>...
>
(snip)
> "Ham actor" doesn't necessarily, or even ordinarily, mean *amateur*
actor.
> It is more generally applied to actors who overact and chew on the
scenery
> or otherwise attempt to puff their part and grab the limelight from the
other
> actors. This is called "hamming it up" in the business, and there are a
number
> of notorious ham actors in the professional acting ranks.
>
> There *is* a certain tendency among amateur radio operators to puff up
> their part, IE their self-importance, so there may be the seed of truth
here.
> It seems unlikely that radio amateurs would want to label themselves in
such
> a way, but stranger things have happened.
>
> Gary

Is it possible that "Ham" was a nick name for Hiram? (as in Maxim).

Chuck, WA7RAI

## 2679. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: jacques.choquette@takeone.com
Message-ID: <341f04d1.2066650@206.191.0.200>
Source record: 90951
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

In the past I have several times seen the following explanation of where "ham" is derived. In short, 3 early 1910's technicians has set up a transmitter. When the new rulings came in they asked to keep the system on the air and their initials (H.A.M.) was used to name that the users of those allocated frequencies.

# 2680. FS: Special Low Prices on Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <5vnola$s46$23@ha1.rdc1.occa.home.com>
Source record: 90952

NOS Tubes
6AZ8 Philips, 1 to 99 @ $2.75 ea, 100 or more @ $2.50ea
5829WA, 1 to 99 @ $3.25 ea, 100 or more @ $3.00ea
6186W (6AG5WA) 1 to 99 @ $0.12ea, 100 or more @ $0.11ea
6922 Sylvania, 1 to 99 @ $2.75 ea, 100 or more @ $2.50ea
7062/180cc Amperex, 1 to 99 @ $3.75 ea, 100 or more @ $4.00ea

Test Equipment
Hewlett Packard 8640B/323, Signal Generator, (Military AN/USM 323)
5 to 512 MHz, good working condition, but not recently calibrated,
may need minor repairs, $395.00

Microwave Components, Used, not checked, sold "as is"
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00ea
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00ea
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $45.00ea
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $45.00ea

Free Shipping in the USA on all of the above, on orders of $10.00 or over.
Orders under $10.00 add $4.00 for shipping. Sale prices valid until 9-30-97
or while supply lasts.

# 2681. All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-16 00:00:00 UTC
From: Mackey the Idiot <mackey@idiots.org>
Message-ID: <341ED3C8.5AA5@idiots.org>
Source record: 90953
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Behold brothers and sisters, I bring you the profound story of how King Mackey the Great became so. It is an exciting tale filled with wonder, awe, and heroic deeds. Come closer, as I relate this grand history.

In the land of Scannerdom, the county of Power Supply was plagued with a terrible injustice. The evil mercenary force from Capacitor held the people of Smoke prisoner. Repeater, the ruler in exile of Power Supply, offered a rare and unused Radio Shack battery card to anyone who could free the people of Smoke from their Capacitor prison. A young and fearless warrior stepped forward to take up the gauntlet. Repeater told him of the dangers but the young man was undaunted and resolutely set off to free them.

When he arrived at the gate, Mackey was challenged by the fearsome guardians, Positive and Negative. So terrible were these mighty sentinels that even the renowned guardian Cerebus trembled when faced with Positive and Negative. Armed with his trusty screwdriver he didst battle with them. In the hands of a true warrior the screwdriver is no common weapon. Our hero, battle tested and proven in the labs and urinals of Technical School, was much more than a professional. He was a Grand Master of the Number Two Phillips Blade.

The guards fired spinning hex nuts and sliced with the dreaded razor sharp quartertwenty threads. Again and again, using every feint, lunge, and parry the guardians had learned in centuries of defending the cabinet, but to no avail. Mackey maneuvered himself and with one swift strike, he ended it. He had touched both guardians in the only way to kill them. He bridged the gap between them in a move only a Master Bladesman could execute, the Short.

The Capacitor force exploded from the cataclysm releasing the Smoke from their electrolytic bondage. Afterward, the Smoke rewarded Mackey with their highest honor, the Diddler of the Spark.

Mackey, hoisted by his own petard, began the journey home. In the land of Recdotradiodotscanner, he was attacked by the Legions of Ennui. These were no ordinary warriors, but elite shock troops. Armed with the latest in Apathy, Disdain, and

Contempt, they lay seige to our hero.

For months, a battle of attrition was waged. One after another, mighty warriors all, they fell. Even I, your humble scribe was a soldier in the Legion of Ennui. Alas, I too, fell before the great Mackey. No one could understand how a single man could withstand such an onslaught as we heaped upon him. Then we learned the source of his great strength. He was the most favored disciple of the malevolent gods, Fraud and Liar. They had taught him the secret fighting languages of Turpitude, Innuendo, and the most deadly of them all, Obscenity. Under their smutty tutelage, he repeatedly repeled the attacks with adroit displays of oratorical onanism.

There was a point in the war when we thought we were going to prevail. We had Mackey surrounded, he was in everybodys kill file, and his ISPs were terminating his accounts as fast as he could login. He had been beaten back to where he stood alone, armed only with a 300 baud modem and a Commodore 64.

Sadly, we all were victim to his great strategy and now he sprang his most devastating weapon. Surrounding him with our keyboards poised for the final death blow, he hoisted his hands above him. Like Moses bestowing the Ten Commandments to the chosen people, in his hands his mail-order diploma proclaming him Master of Communication Technology smote us down.

Cowered by the supreme Divinity before us, a hush fell upon the surrounding army. The only sound was a muffled cough from one of the younger soldiers. We lay prostrate on the ground before him, fearful of his wrath. Who were we to show the temerity to challenge his divine turgescence. We waited. Slowly, he walked through the defeated masses, and went home.

Upon returning to Scannerdom, he found word of his great deeds had preceded him. He was declared Supreme Grand Master Fool of the Universe and the people clamored for his ordination as King. In response, the Church of Scanner Mods proclaimed him King and the great sage and visionary Pope Bcheek presided over the coronation. As he placed the Discone Crown upon his head, he spoke the sacred papal blessing, "This boy reeks."

So there you have it, brothers and sisters. Behold the saga of his fetidness, King Mackey the Great, Ruler of Torpor, Supreme Grand Master Fool of the Universe, Grand Master of the Number Two Phillips Blade, holder of the Diddler of the Spark, Divine Master of Communication Technology, High Priest of the sect of Fraud and Liar, and Orational Master of Turpitude, Innuendo, and Obscenity.

All hail King Mackey the Great.

## 2682. Angela Instruments number

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: schmitz@fnald.fnal.gov
Message-ID: <1997Sep17.130436@fnald.fnal.gov>
Source record: 90863

Does anyone know the number of an electronics supply house
by the name Angela Instruments?

Thanks,
Mark Schmitz
KB9KT
schmitz@fnal.gov

# 2683. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34201e01.20870874@news.atl.bellsouth.net>
Source record: 90864
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

On 16 Sep 1997 18:20:20 GMT, "Chuck Smith" <wa7rai@raibeam.com> wrote:
>Is it possible that "Ham" was a nick name for Hiram? (as in Maxim).

I've heard that put forward a few times, but as far as I know there is
absolutely no evidence that it is true.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 2684. Sony Minidisc MZ1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: DLeCates@usainc.com
Message-ID: <874520346.26497@dejanews.com>
Source record: 90865

Looking for Sony Minidisc Model Mz1. An old verson but it will fit my needs.

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2685. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <342023DE.3341@kfa-juelich.de>
Source record: 90866
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Erv wrote:
>
> Hi Gang!
>
> Well, our elected officials are trying again! And this time, they are
> out to do some serious Damage to the Amateur Radio Hobby!!!
>
> Bill HR2369 is a vicious pack of poison, which, if passed, will end
> Amateur Radio as we know it....making the buying and selling of scanners
> and wide-banded ham gear ILLEGAL!
>
> For more information, visit the information page, which is located at:
> http://www.kb8uyz.com/kb8tnq/scan.htm Tell your friends about this and
> let them know we have included a link to find your
> representatives.....and email them. Let's stop this thing before it
> gets any farther!!!
>
> 7-3,
> Erv KB8TNQ
>
> ----------------------------------------------------------------
>
> Name: vcard.vcf
> Part 1.2 Type: text/x-vcard
> Encoding: 7bit
> Description: Card for KB8TNQ

I am confused- what do scanners have to do with classical amateur radio-
which got along just fine before this relatively recently introduced
device came on the market.
I am not sure what is meant by wide-banded ham gear, but if this is
just the stuff well suited to transmission OUTSIDE the legally assigned
ham-bands, I can't see why a real ham cares. This is stuff for the CB
"free-banders", pirates operating in the short-wave bands and the like.
It is also the stuff which makes enemies for the ham community.
I would object if reception is limited to only ham frequencies.

Bob

PS I have trouble with terms like "serious Damage" and "vicious pack of
poison" if the above interpretations are correct.

# 2686. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <34202A98.32AC@ccm.intel.com>
Source record: 90867
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Bob Mueller wrote:
> I am confused- what do scanners have to do with classical amateur radio-
> which got along just fine before this relatively recently introduced
> device came on the market.

Hi Bob, maybe a specific question will shed some light. Will this bill
make my general coverage IC-706 illegal? Out of the box, it will
legally receive portable phones around 47MHz if I remember correctly.

73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 2687. Re: Modulation transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <34202DA4.5CD8@calweb.com>
Source record: 90868

Seth Taylor wrote:
>
> Anyone have source ideas for 300 watt (+/-) modulation transformer
> besides Peter Dahl ?
>
> Seth KC2WE

# 2688. Call For Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Steve Ford <sford@arrl.org>
Message-ID: <34202FFC.53F5@arrl.org>
Source record: 90869
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

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QST magazine is looking for good material to publish,
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To submit an article for consideration, send it to:

ARRL
Attn: Paul Pagel, N1FB
225 Main St
Newington, CT 06111

or e-mail a copy of article *idea* to:

ppagel@arrl.org

If you need an Authors' Guide, you'll find one at:

http://www.arrl.org/qst/aguide/#QST

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http://www/arrl.org/qst/cover_photo.html

73,

Paul Pagel, N1FB
Associate Technical Editor

# 2689. Re: Crystal osc question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19970917200600.QAA17193@ladder02.news.aol.com>
Source record: 90870

>am repairing my HAM Shack's DSI Frequency Counter that uses an
>MM5639 Color Burst to 60 HZ IC for the timebase. The crystal is
>held at a hot constant temperature by means of a pair of resistors and a
>Temperature Controller IC.
>
>The Color Burst crystal is not oscillating.
>The crystal circuit is:
>One side of crstal has a 22 pf COG and a ( est 3-10 pf)
>parallel trimmer cap to ground. The other side has another 22 pf COG
>to ground. A 5.6 meg resistor shunts crystal terminals.
>
>Only way I could make circuit osc at correct Color Burst Frequency
>was to remove the 22 pf cap in parallel with trimmer.
>Now timebase is on correct freq but has small cap (only trimmer) on one
>side
>to ground and larger 22pf on other side to ground.
>
>Now smaller trimmer cap changes make huge frequency difference,
>lost easy setability feel.
>
>Should this crystal be operated with nearly balanced capacity
>to ground on each side? Should I reduce the 22 pf COG on side
>without trimmer and increase cap in parallel with trimmer?
>
>Any idea what happen to cause this situation?
>Is crystal aging or defective?
>
Bingo Dave,
Put the cap back and get a new crystal. Radio Shack sells these.

# 2690. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <341FEFD2.1AF9@crpl.cedar-rapids.lib.ia.us>
Source record: 90871

Jeff Anderson wrote:
>
> In <341BE5B0.6166@crpl.cedar-rapids.lib.ia.us> "William E. Sabin"
> <sabinw@crpl.cedar-rapids.lib.ia.us> writes:
> >
> >...The common folklore that the return
> >current in a coax braid is *always* equal to the forward current
> >in the center wire is just that, folklore. It is very easy to
> >divert some of the return current to the generator through an
> >alternate path.
>
> How "easy" is it to divert this current?

My July QEX article (I know you have a copy) explains this very explicitly. It is very easy.

>
> If the current on a coax's 'inner' shield surface is 'forced' to equal
> that of the center conductor (but opposite direction),

It is not "forced to be equal". That is the folklore that I am objecting to.

If there is any kind of return path external to the coax that has a lower impedance than the return path through the coax then some of the current will not return through the coax. My QEX article gives a good example of this. It is a real-world example that I have seen many times and it is easy as pie to demonstrate. The balun is used to minimize this problem. That is one of its main functions.

Here is the way I am sure it is:

If the load at the far end is completely floating off of ground, and if the return path through the coax is complete (not open-circuited) then all of the forward curent will return through the coax. Otherwise, all bets are off.

Bill W0IYH

# 2691. Please.....Help!....FT50R

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: raymond@gm0otb.demon.co.uk
Message-ID: <34233fa9.1654593@news.demon.co.uk>
Source record: 90872

HI !

I'am looking for another copy of the ADMS 1C software for my FT50r. I have the dongle but my software is corrupted!

Please if you have a copy E-mail it direct.

I still have the software for the following:

FT10
FT11
FT40
FT41
FT51

If you need them drop me a E-mail.

73's in advance Ray ( GM0OTB )

raymond@gm0otb.demon.co.uk

# 2692. Re: FTV=WEFAX,FAX,SSTV,RTTY,CW with SoundBlaster

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <pqoKWGAMvAI0EwOR@pacsat.demon.co.uk>
Source record: 90873
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

In article <5vggo7$m2c@news.keyworld.net>, "Brian E. Cauchi"
<briane@geocities.com> writes
> FTV (now in Version 1.0)can be used to receive images from Weather
>Satellites and Terrestrial Facsimile Stations, text transmissions from radio
>telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and CW
>signals. It can also transmit Amateur Radio FAX and SSTV. No external
>hardware, other than a radio, is required, as all the necessary signal
>processing is implemented in software. The main features include:
>
>WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
> Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
> FAX operation supports APT signal recognition and scheduled reception.
> No external decoder or converter box is required.
> Signal analysis is provided on all modes.
> Many parameters are adjustable while receiving.
> Full recovery from wrong mode settings is possible.
> Program works in real time (about 1 second 'DSP' time lag)
>
>
> You may get more information or download a copy from my web site, on
>http://www.geocities.com/SiliconValley/2504

Hello Brian

Long time no hear! Glad to see FTV is coming along.

Good luck with the project.

73 Simon GM4PLM
+-----------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+-----------------------------------------------------------------+

## 2693. [?] Low-noise analog adder design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34203C27.7C2C@pop.removethistomailme.net>
Source record: 90874
Cross-posted to: sci.electronics.design;,sci.electronics.misc;,alt.engineering.electrical;,rec.radio.amateur.homebrew

Wondering if anyone can offer any suggestions on the following problem.

I'm experimenting with a very simple homebrew PLL circuit based around a VCO running between 770 and 1290 MHz, using a 3-5 MHz DDS as a reference clock with a fixed division modulus of 256. This will ultimately serve as the first LO for a general-coverage VHF/UHF receiver project.

One of my design goals for this PLL is extremely fast settling time, on the order of 1 ms or less for any frequency step in its range. Currently, I'm able to achieve this goal by "pretuning" the VCO with a DAC0801/LF356 combination which generates any of 256 desired voltage levels between 2 and 10 volts in response to a command from my PC parallel port interface. The LF356 serves as a current-to-voltage converter to turn the DAC output into a positive pretune voltage. The resulting pretune voltage is summed with the (scaled) output of the 74HC4046 PFD's passive-lag loop filter, and fed to the VCO tuning line.

Briefly, in the normal positive-output circuit from the DAC0801's data sheet, the op-amp (LF356 in my case) is configured with its + input tied to ground (along with one of the DAC0801 output pins), with the other DAC0801 output pin tied to the LF356's - input. This node is connected to the op-amp's output via a 10K resistor, across which the DAC0801 develops its output current. To perform the summing/scaling operation, I modified the data-sheet circuit by inserting a 5K potentiometer between the LF356's + input and ground, with the output of the VCO loop filter feeding the top of the potentiometer via a separate unity-gain voltage follower (another LF356). The potentiometer then acts as a convenient node from which to control the overall PLL loop gain -- essentially, it attenuates the control signal from the loop filter and forces the DAC's current-to-voltage converter to add the result to the VCO pretune voltage. By using the DAC to pretune the VCO to within a few MHz of the desired target frequency, the loop has no trouble locking within a few hundred microseconds. Loop stability is excellent because the potentiometer can be used to reduce the loop gain to the minimum necessary -- of the 0-5 volt signal from the loop filter, only 100 mV or so of control range is actually needed at the + input to the op-amp that drives the VCO.

This all seemed to work very well, until one day I got around to repairing my old HP8551 spectrum analyzer's narrowest IF bandwidth setting and looked at the output of my synthesizer on it. In a nutshell, the DAC/LF356 combination appears to be contributing an unreasonable amount of broad-spectrum noise (definitely not oscillation) to the VCO tuning line. Since this happens after the loop filter and

before the VCO, the loop can't compensate for this noise in any way. A 0.1uF capacitor across the LF356's 10K feedback resistor helps a great deal, but the noise is still excessive ("grass skirts" from -40 dB on down.) This noise is also plainly audible as phase noise when listening for the synthesizer output signal on a UHF receiver.

Now, I have seen oblique references to DAC-based pretuning in the Rohde and Best books, but the only actual circuit diagram I've run across assumes a multiple-varactor VCO -- one diode for pretuning and another for loop control. I'm using a prepackaged single-control VCO module and would prefer not to have to homebrew a dual-control one, although I can do so if it turns out this is really the best way to go. I'm wondering if anyone out there has done this type of thing before or seen it done in practice, and if so, what guidelines you can offer me in terms of summing the two voltages together, irrespective of impedance, with the absolute minimum-possible noise contribution. My next experiment will be to use yet another LF356 as a separate, dedicated summing stage, with a heavy filter on the output of the DAC, but I don't really expect that to work much better than what I'm already doing with a single op-amp (above). Not having much experience with op-amp noise performance, it seems that op-amps (I've tried several) just tend to get noisy when you run them near unity gain. Is there a "right" way to do this, one that I just haven't thought of yet?

Please reply via the NG, so that the next fool who tries this can find your valuable advice in DejaNews... :-)

-- tnx de KE5FX

---
Note: My E-mail address has been altered to avoid spam
---

# 2694. Re: 602 as oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970917223700.SAA28892@ladder02.news.aol.com>
Source record: 90875

Hi Tim--

You are right, I believe--there would be no point in using the NE602 for its oscillator alone. If you are building a mixed oscillator (such as a heterodyne VFO), then it has value. If you want to vary one LO input level and make a heterodyne oscillator with linear attenuation, then it might have value. But, to use the LO buffer in the Gilbert cell as a oscillator by itself makes no sense to me at all.

73--

Rick K1BQT

## 2695. doppler RDF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: lassie <arvid@plea.se>
Message-ID: <34204712.2A8A@plea.se>
Source record: 90876

Hello!
I'm trying to find a describtion for a
home-brew doppler RDF for VHF.
The reciever is, as I understand just an ordinary one.
The antennas I've figured out too, but I havn't found any
complete schematic for the actual direction finding part.

I live by the coast, and I'd like to see in wich direction
the ships are. (174 MHz)

best 73s //Lars [SM4RZW]

# 2696. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: dedhamap@dedhamappliance.com
Message-ID: <MPG.e8a344e3916c41998969c@news.tiac.net>
Source record: 90877
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

In article <342023DE.3341@kfa-juelich.de>, r.mueller@kfa-juelich.de
says...
> I am not sure what is meant by wide-banded ham gear, but if this is
> just the stuff well suited to transmission OUTSIDE the legally assigned
> ham-bands, I can't see why a real ham cares. This is stuff for the CB
> "free-banders", pirates operating in the short-wave bands and the like.
> It is also the stuff which makes enemies for the ham community.
> I would object if reception is limited to only ham frequencies.
>
> Bob
>
> PS I have trouble with terms like "serious Damage" and "vicious pack of
> poison" if the above interpretations are correct.
>
>
The VHF/UHF gear that has wide band RECEIVE capability may be
outlawed under this proposed legislation. Most current amateur gear for
2M and 440 have the ability to receive outside the ham bands, which is
frequently a big plus, especially for any ham involved with Civil
Defense/Emergency Management.
I recently used my ability to receive out of band to track a signal
which was interfering with my fire departments emergency communications.
I don't want this legislation to pass.
I would also like to mention that many police officers and
firefighters, myself included, rely on scanners in emergencies because
our departments cannot afford radios for everyone. You might consider
working against this legislation as a means of supporting your local
police and fire departments, unless your municipality is extremely
wealthy and can afford radios for every emergency worker.

John N1OTY

## 2697. Modulation transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-970917185511Z-36307@whpost.wh.lucent.com>
Source record: 90878

Anyone have source ideas for 300 watt (+/-) modulation transformer
besides Peter Dahl ?

Seth KC2WE

# 2698. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Phoenix Radio Man <Phx_radio_man@juno.com>
Message-ID: <34204209.1606@juno.com>
Source record: 90879
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Erv wrote:
> Hi Gang!
> Well, our elected officials are trying again! And this time, they are
> out to do some serious Damage to the Amateur Radio Hobby!!!
>
> Bill HR2369 is a vicious pack of poison, which, if passed, will end
> Amateur Radio as we know it....making the buying and selling of scanners
> and wide-banded ham gear ILLEGAL!
>
> For more information, visit the information page, which is located at:
> http://www.kb8uyz.com/kb8tnq/scan.htm Tell your friends about this and
> let them know we have included a link to find your
> representatives.....and email them. Let's stop this thing before it
> gets any farther!!!
>
> 7-3,
> Erv KB8TNQ
>
>
> Name: vcard.vcf
> Part 1.2 Type: text/x-vcard
> Encoding: 7bit
> Description: Card for KB8TNQ
Erv,
one of the best things to do is this:
Fax a copy of the bill to every news agency in your city. Fax to every TV station, Radio Station and newspaper. this bill in its current form would also limit said news agencies from gathering information "LIVE" or using said information gathered as part of a breaking news story. This goes a lot further than just amateur radio.

I also suggest that any of the rest of you that have fax machines (or faxmodems and software) do the same. the more people KNOW about this, the less likely that the bill will pass.

# 2699. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcc3c4$b85c6300$0100005a@wa6vse>
Source record: 90880
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,re

Bob Mueller <r.mueller@kfa-juelich.de> wrote in article
<342023DE.3341@kfa-juelich.de>...
> I would object if reception is limited to only ham frequencies.
That is EXACTLY what the previous writer was complaining about ...
they want to eliminate all reception of "commercial mobile radio
services" ... and outlaw radios capable of receiving them ...

Try checking out the proposed bill ... it really IS quite onerous ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

## 2700. Re: Mars amp chips?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Shawn <stayler@MAPSON.powernet.net>
Message-ID: <3420AE7C.274B@MAPSON.powernet.net>
Source record: 90881

bobn9lvu wrote:
>
> I am looking for some mars-1 - mars-8 chips, or the ceramic ram-1 -
> ram-8 chips any one know of a source, other than direct?

Look at http://www.downeastmicrowave.com

## 2701. F.S. - NOS tubes $2 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970917040200.AAA29945@ladder01.news.aol.com>
Source record: 90954

I have 10 each of the following NOS tubes for sale at $2 per tube. All are common domestic brands in their original cartons and have been tested. Reserve you order today. E-mail Rog42@aol.com.

0B2, 1B3, 1V2, 2GU5, 3A3, 3AT2, 3DG4, 3JC6, 4BZ6, 4EJ7, 5AM8, 5CG8, 5GJ7, 5U8, 6AC7, 6AF4, 6AK5, 6AL5, 6AQ6, 6AS8, 6AV6, 6AX4, 6BC5, 6BE6, 6BL8, 6BQ7, 6BY11, 6CB6, 6CM7, 6CU8, 6DT6, 6EH7, 6GH8, 6HZ6, 6J6, 6JU8, 6KA8, 6KM8, 6S4, 6SA7, 6SQ7, 6U8, 6X4, 8GJ7, 8LT8, 10DE7, 12AF3, 12B4, 12EK6, 12SL7, 17BE3, 21GY5, 25BQ6, 5726, 5814.

This sale is limited to just the stock on hand and will be sold on a first come, first served basis. These prices are effective beginning September 16, 1997 until this stock is sold. Thanks.

# 2702. Re: BRAND NEW IN BOX 8877 F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <5vnl9m$rr0@basement.replay.com>
Source record: 90955

In article <19970913115701.HAA04627@ladder02.news.aol.com>, qroking@aol.com (QRO KING) wrote:

:Hi, I have a brand new in the box 8877/3CX1500A7 for sale. Bought as
:spare and never used. Price is $450.00 and I will ship it to your door for
:that price CONUS. Price is firm and is first come first serve. Shipped
:after recieving M.O. only! If you want it Please call or e-mail me.
:203-894-1705....Thanks LOU

I believe Surplus Sales of Nebraska has new boxed units at comparable price, if you are wary of sending M.O. or cash first to an unknown. I think they take credit cards, etc.

I would pay less to a private party since the risk is so much greater.

Ed

ps. also Mike Foreman (sp?) in Oakland, Ca has sold used 8877's for $250 or less. Bought mine there and its worked well for years. was broadcast pull.

# 2703. Re: 602 as oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970917024610.10837A-100000@Ocean.CAM.ORG>
Source record: 90956

I thought the original question was about using the NE602 when an
oscillator was needed, at times when a mixer was not needed.

If that's the question, it rests on how much that you are saving by
using the NE602. I just gave a quick check, and I don't happen to
have an internal diagram of the IC handy. I thought the internal
oscillator was nothing more than a transistor that had been properly
biased. I don't believe it is anything in the way of a fancy oscillator.
The design is not such that you simply need to add a coil and turning
capacitor; you do still need to add some feedback capacitors.

If my memory is correct, then all that you are gaining by using the
oscillator of the NE602 is doing away with 3 or 4 resistors and a
transistor. Is that worth the higher price? If you gather together
some resistors and a transistor, it will cost virtually nothing, and
you have greater control over the design of the oscillator.

It may be significant that a lot of designs that use the NE602
do use an external oscillator, presumably for the reasons Rick mentions
below. If peoplw bother with an external oscillator when using the IC
as a mixer, surely it is an answer about whether to use the "oscillator"
part of the NE602 without the mixer.

Michael VE2BVW

On 16 Sep 1997, K1BQT wrote:

> Hi Tim
>
> >In the interest of saving space in a very small box, is there any
> >difference between using an NE602 as an oscillator or building one using
> >a dedicated transistor with all the appropriate caps etc.--
>
> I think there are arguably at least two important advantages to using a
> single transistor in a seperate VFO over using the "on board" NE602
> oscillator. One advantage is better level control between the oscillator
> and mixer. If the oscillator is external, you can easily control injection
> level (like most Gilbert Cells, the NE602 turns ugly when it is
> overdriven). If you use the chip's internal oscillator, the only way to
> control injection level is by carefully limiting feedback in the oscillator
> tank's capacitive divider. Also, when you use the internal oscillator,
> there's no way to filter out the oscillator harmonics. In receiver mixing
> applications, these can be troublesome--causing spurious responses.
>
> Having said that, I've found that if I monitor what I'm doing with a
> spectrum analyzer, I can achieve useful results using the internal

> oscillator in even the simplest NE602 oscillator circuits.
>
> 73
>
> Rick K1BQT
>
>

# 2704. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <341F96DE.8AE@crpl.cedar-rapids.lib.ia.us>
Source record: 90957

Jsender104 wrote:
>
> I've run 3200 volts on a pair. Just kept cranking up my power supply and
> readjusting bias. Tom is right, tubes aren't what they used to be.

The important thing is to run a two-tone intermodulation test, if you
plan to use SSB. As you increase grid bias you move farther into class C
and harmonic levels get worse.

Bill W0IYH

## 2705. Homebrew Shareware Collection Online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <341F97BD.1BE2@primenet.com>
Source record: 90958

I once collected and cataloged shareware available on the
Internet and came up with a compressed (zip) collection of
programs and information in about 25 or so categories.

Below are listed directories in which this material was divided,
each containing about 1Mb (compressed) of materials.

Being compressed (zip) this is a substantial collection and it
is now available all in one place.

You should be able to access this through your web browser and
I have included a link on my home page (near the bottom):
http://www.qsl.net/k7on/index.htm

Hopefully, there is something of use to about everyone in there.

---
Listing of Sub-Directories

ICOM Radio Control Programs For Icom Gear
CONTEST Contest Logging Programs and Information
DXSTUFF DX Programs and Information
LOGGING Logging Programs
EQPTMISC Collection of Equipment Related Information
ANTSTUFF Collection of Antenna Related Materials
KNWDCAT Kenwood Radio Control Programs
MODS_DAT Radio and Equipment Modifications
INTERNET Guide To Amateur Radio Resources on Internet
CW Morse Code Programs
EXAMS Amateur Radio Examination Programs
FCC FCC Rules and Regulations
LICENSIN Amateur Radio Licensing Information
MULTIMOD Collection of Programs for Digital Communications
PACKMISC Packet Radio Software and Information
TERMPROG Terminal Programs for Packet Radio
ANTENNA Analyzing and Designing Antennas
PROPAGAT Propagation Prediction Programs
VHFUHF VHF/UHF Programs and Information
PACSAT Packet Satellite Programs and Information
SATSTUFF Programs and Information for Satellite Enthusiasts
TELEMETR Processing and Analyzing Satellite Telemetry
TRACKING Satellite Tracking Programs
SCANNING Programs and Frequencies for Scanner Enthusiasts
SSHUTTLE Tracking and Working the Space Shuttle
SWL Shortwave Listening Programs, Frequencies, and Information
TVRO TVRO Satellite Information

ARCHIVE Collection of Archive Compression Utilities (DOS)
IMAGUTIL Collection of Image Viewing and Compression Utilities (DOS)
AWARDS Awards Tracking Information and Programs
LOG405 N6TR Log 4.05 Contest Program
YAESU Yaesu CAT Programs (Various Radios)

---

Brian Short k7on@qsl.net http://www.qsl.net/k7on
1994 E Laguna Dr Tempe, Az 85282 (602)839-3484

# 2706. Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Erv <kb8tnq@voyager.net>
Message-ID: <341F901C.A418BABF@voyager.net>
Source record: 90959
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

```
This is a multi-part message in MIME format.
--------------D87FF665AED464269524E2D1
Content-Type: text/plain; charset=us-ascii
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi Gang!

Well, our elected officials are trying again! And this time, they are
out to do some serious Damage to the Amateur Radio Hobby!!!

Bill HR2369 is a vicious pack of poison, which, if passed, will end
Amateur Radio as we know it....making the buying and selling of scanners
and wide-banded ham gear ILLEGAL!

For more information, visit the information page, which is located at:
http://www.kb8uyz.com/kb8tnq/scan.htm Tell your friends about this and
let them know we have included a link to find your
representatives.....and email them. Let's stop this thing before it
gets any farther!!!

7-3,
Erv KB8TNQ

--------------D87FF665AED464269524E2D1
Content-Type: text/x-vcard; charset=us-ascii; name="vcard.vcf"
Content-Transfer-Encoding: 7bit
Content-Description: Card for KB8TNQ
Content-Disposition: attachment; filename="vcard.vcf"

begin: vcard
fn: KB8TNQ
n: ;KB8TNQ
email;internet: kb8tnq@voyager.net
title: Amateur Radio Operator
note: Please visit our Site, at: http://www.kb8uyz.com/kb8tnq
x-mozilla-cpt: ;0
x-mozilla-html: FALSE
end: vcard

--------------D87FF665AED464269524E2D1--
```

## 2707. Cordless Telephones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: Ted Kester <tk1932ga@atl.bellsouth.net>
Message-ID: <341FF51C.1376@atl.bellsouth.net>
Source record: 90960

Does anyone know of a cordless telephone disucssion group or an information source ?

TNX

Ted in Atlanta

# 2708. Crystal osc question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <341FE9A7.6C4F@lafn.org>
Source record: 90961

I am repairing my HAM Shack's DSI Frequency Counter that uses an
MM5639 Color Burst to 60 HZ IC for the timebase. The crystal is
held at a hot constant temperature by means of a pair of resistors and a
Temperature Controller IC.

The Color Burst crystal is not oscillating.
The crystal circuit is:
One side of crstal has a 22 pf COG and a ( est 3-10 pf)
parallel trimmer cap to ground. The other side has another 22 pf COG
to ground. A 5.6 meg resistor shunts crystal terminals.

Only way I could make circuit osc at correct Color Burst Frequency
was to remove the 22 pf cap in parallel with trimmer.
Now timebase is on correct freq but has small cap (only trimmer) on one
side
to ground and larger 22pf on other side to ground.

Now smaller trimmer cap changes make huge frequency difference,
lost easy setability feel.

Should this crystal be operated with nearly balanced capacity
to ground on each side? Should I reduce the 22 pf COG on side
without trimmer and increase cap in parallel with trimmer?

Any idea what happen to cause this situation?
Is crystal aging or defective?

Thanka for your thoughts.

--

_____
Dave Shalita,
af389@lafn.org
Van Nuys, CA

# 2709. Constant amplitude circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-17 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <341FE324.3110@lafn.org>
Source record: 90962

Hi,

I am thinking of building a sweep generator for HAM Shack test gear
using a DDS Analog Devices AD9850 (1-50mhz) or MAXIM 038 (1-20mhz).

I believe the AD9850 output amplitude is not constant with frequency
and drops fast as the frequency out approaches 1/2 clock frequency (125
mhz).

What circuits are available to make the sweeper output amplitude
constant voltage when loaded with a 50 ohm or constant impedance load
from 1 - 50 mhz as a start?

Has anyone used the MAXIM 038 IC as a signal generator in
the sweep mode? Is it's output voltage constant amplitude?
While the 038 has smaller frequency range than the 9850, it
also does not need a dedicated controller to program.

Thanks for any help and pointers.

73, W6MIK
--

_____________________________________
Dave Shalita,
af389@lafn.org
Van Nuys, CA

# 2710. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: nick@cs.unc.edu
Message-ID: <5vrka1$b6d@altair.cs.unc.edu>
Source record: 90813
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Removing "boatanchors" from followup. Off-topic thread.
--
Nick England KD4CPL nick@cs.unc.edu Univ. Of North Carolina
http://www.cs.unc.edu/~nick Chapel Hill NC

# 2711. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Greg Anders <anders@autopsy.corp>
Message-ID: <3421A018.15FB@autopsy.corp>
Source record: 90814
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Mustang Maniac! wrote:
>
> King Mackey, you truly are an Idiot. MY KIND of Idiot!
> Great story!
>
> 73 de K5DH

--
>>>>>>>>You are absolutely right. Scuse me while I go find a
dictionary...

Greg Anders

"If at first you don't succeed......then skydiving is not for you"

anders@autopsy.sgi.com
KG6YV

## 2712. FS: 4E27

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: w1ksz@tiac.net
Message-ID: <5vpo5b$222@news-central.tiac.net>
Source record: 90882

Found one in junque box, looks unused, filament checks OK.
Anyone need it?

73, Dick, W1KSZ

## 2713. WTB: 20 db Attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: w1ksz@tiac.net
Message-ID: <5vpnur$222@news-central.tiac.net>
Source record: 90883

Looking for one to hang on output of Signal Generator, prefer BNC connectors, will be used in HF/VHF region. Anyone have one ??

Tnx es 73, Dick, W1KSZ

# 2714. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <5vpsph$mqq@dfw-ixnews6.ix.netcom.com>
Source record: 90884

In <341FEFD2.1AF9@crpl.cedar-rapids.lib.ia.us> "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> writes:
>
>Jeff Anderson wrote:
>>
>> In <341BE5B0.6166@crpl.cedar-rapids.lib.ia.us> "William E. Sabin"
>> <sabinw@crpl.cedar-rapids.lib.ia.us> writes:
>> >
>> >...The common folklore that the return
>> >current in a coax braid is *always* equal to the forward current
>> >in the center wire is just that, folklore. It is very easy to
>> >divert some of the return current to the generator through an
>> >alternate path.
>>
>> How "easy" is it to divert this current?
>
>My July QEX article (I know you have a copy) explains this very
>explicitly. It is very easy.
>

Thanks, Bill. I'll go back and reread it.

- Jeff

## 2715. de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: chrisl@netdoor.com
Message-ID: <5vq2uq$mtp$1@axe.netdoor.com>
Source record: 90885

I once saw how de Forrest used a flame in his lab as a rectifier. Does anyone have any info on this? I would be interested in the laws that govern this phenomena.
Chris

# 2716. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Greg Dean <n9nwo@gte.net>
Message-ID: <5vqatn$kgd$1@gte2.gte.net>
Source record: 90886
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Herr Mueller:

The US Congress has two bills in front that would ban the manufacturing and use and scanning receivers to include amateur equipment. Law enforcement, news media, everyone, no one would be exempt. Because of the pressure from large businesses such as Motorola, this hints of fascism. Things are not going well here. I wish that I was back in Kaiserslautern.

Tsch&#65533;s....N9NWO/DA4NWO

Bob Mueller wrote:
>
> Erv wrote:
> >
> > Hi Gang!
> >
> > Well, our elected officials are trying again! And this time, they are
> > out to do some serious Damage to the Amateur Radio Hobby!!!
> >
> > Bill HR2369 is a vicious pack of poison, which, if passed, will end
> > Amateur Radio as we know it....making the buying and selling of scanners
> > and wide-banded ham gear ILLEGAL!
> >
> > For more information, visit the information page, which is located at:
> > http://www.kb8uyz.com/kb8tnq/scan.htm Tell your friends about this and
> > let them know we have included a link to find your
> > representatives.....and email them. Let's stop this thing before it
> > gets any farther!!!
> >
> > 7-3,
> > Erv KB8TNQ
> >
> > ----------
> >----------
>
> I am confused- what do scanners have to do with classical amateur radio-
> which got along just fine before this relatively recently introduced
> device came on the market.
> I am not sure what is meant by wide-banded ham gear, but if this is
> just the stuff well suited to transmission OUTSIDE the legally assigned
> ham-bands, I can't see why a real ham cares. This is stuff for the CB
> "free-banders", pirates operating in the short-wave bands and the like.

> It is also the stuff which makes enemies for the ham community.
> I would object if reception is limited to only ham frequencies.
>
> Bob
>
> PS I have trouble with terms like "serious Damage" and "vicious pack of
> poison" if the above interpretations are correct.

# 2717. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3422b66e.3707551@eskinews.eskimo.com>
Source record: 90887

K0PW <pwentzel@minn.net> wrote:

>Seth Taylor wrote:
>>
>> The correct URL is:
>>
>> http://www.pwdahl.com/
>>
>> Seth KC2WE
>Does anyone get a response from this url? I get "no DNS entry"
>
>K0PW

---

It works, try again.

73, Bill W7TI

# 2718. Two Triodes on one HV power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: carsten.esch@olympus-software.com
Message-ID: <874588115.21248@dejanews.com>
Source record: 90888

Hi,
I am planning to build a new HF amp with the 8877. I do have a 2m amp with this tube.
My question is: Can I connect the plate voltage from my HV power supply on both tubes, so that I only have to switch the other voltages? That would mean that in one amp only high voltage would be on the plate (without heating etc). Any problem for a Triode to only have anode voltage applied?
Thank you for your help,

Carsten, DL6LAU

Please reply also to my e-mail adress, I am not checking this newsgroup too regulary.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 2719. B & W Coil Forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Mike - WB0IKT <crucis@sky.net>
Message-ID: <342135C2.3A92A87A@sky.net>
Source record: 90889

Anyone know of a parts dealer where I can get some coil forms? I need a 1 inch form and my junk box is empty! I'd prefer not to have to make one.

--
==========
Mike Watson, WB0IKT QCWA Mbr# 28651, Mid-Continent Chapter #35
Raymore, Missouri, USA Grid: EM28st
http://www.sky.net/~crucis E-mail: crucis@sky.net or WB0IKT@juno.com
==========

# 2720. Re: B & W Coil Forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: dbossel529@aol.com
Message-ID: <19970918152201.LAA15355@ladder01.news.aol.com>
Source record: 90890

I've seen them thru Nebraska Surplus Sales, they advertise in the ham mags. They also hv a web page I believe.

73.....Dwight.....KB9JAI

# 2721. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <342109EB.357A@kfa-juelich.de>
Source record: 90891

Michael Black wrote:
> 
> You're right in that we often don't see filtering between the VFO
> and mixer.
> 
> The resulting problem wouldn't be loss of gain, but that you'd
> be receiving spurious signals because incoming signals (other than the one
> you really wanted to hear) would beat against the harmonics of the
> oscillator and the resulting product would land in the IF.
> 
> SOme oscillators are obviously better than others in cleanliness. I
> can't help but think of some low end commercial receivers of days gone by
> that were plagued by spurious signals, and imagine that the oscillator
> was not a good design (probably due to cost cutting).
> 
> I would also think that feeding an oscillator fed directly into a mixer
> without buffering might be a problem, if the coupling method put so much
> of a load on the oscillator that the purity was distorted.
> 
> Without having given it a lot of thought in the past, I imagine one
> reason that filtering is not common between the vfo and the mixer is
> a desire to keep things simple. If the filter is variable, it has to
> be made to track with the tuning of the vfo. If a bandpass filter is
> added, it has to be aligned to cover a segment of the spectrum, and if
> you are covering different ranges, a new filter has to be switched in
> each time.
> 
> I do recall seeing low pass filters placed between VFO's and mixers
> in some articles in the past, and the author would mention that it
> was to eliminate harmonics from the oscillator which would beat with
> the obviously strong local tv and broadcast stations. These broadcast
> signals are so strong that even when passed through good front end
> filtering (or directly to the mixer in a receiver without good shielding)
> they can still be quite strong.
> 
> Whether it's a problem or not in a given case depends on results.
> If you're plagued by spurious signals in given receiver design, it might
> be something to look into.
> 
> Michael VE2BVW
> 
> On Sat, 13 Sep 1997, ka8ddz wrote:
> 
> > There is alot here I dont understand but Im trying. I have noticed in

> > some of the simple receiver schematics that there is generally not any
> > filtering between the VFO and the first mixer.
> >
> > I would think that a simple LC VFO would have some healthy harmonics
> > comming out of it. My question is, if these harmonics are reaching the
> > mixer are you not loosing some gain due to the amplification of these
> > unwanted signals? Even though they get filtered out when you convert to
> > the first IF, they are still present in the 1st mixer.
> >
> > Would it improve things at all to have a bandpass filter prior to the
> > VFO input to the mixer or am I worried about something that doesnt
> > exist.
> >
> > 73, Tim, ka8ddz
> >
> >
I wonder how often this is a real problem. Many mixers are driven hard
enough to replace the harmonics even if they were filtered off. A good
diode doubly balanced mixer is a good example. Are there any high
performance mixers now in use which don't have this property? The
Gilbert cell is driven from saturation to saturation also.

Bob

# 2722. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: K0PW <pwentzel@minn.net>
Message-ID: <3421253B.D9C@minn.net>
Source record: 90892
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Mackey the Idiot wrote:
>
> Behold brothers and sisters, I bring you the profound story
> of how King Mackey the Great became so. It is an exciting
> tale filled with wonder, awe, and heroic deeds. Come closer,
> as I relate this grand history.
>
> Snip>>>>>>

I don't know who Mackey is -- But I appreciate good writing.
Darn Fine Job.

# 2723. Re: Constant amplitude circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: GEOTEK@FLEX.NET
Message-ID: <34211faf.40650129@NEWS.ZIPPO.COM>
Source record: 90893

af389@lafn.ORG (David Shalita) wrote:

>Hi,
>
>I am thinking of building a sweep generator for HAM Shack test gear
>using a DDS Analog Devices AD9850 (1-50mhz) or MAXIM 038 (1-20mhz).
>
>I believe the AD9850 output amplitude is not constant with frequency
>and drops fast as the frequency out approaches 1/2 clock frequency (125
>mhz).
>
.............
I don't see any reason for the output of the 9850 to drop as you
approach 50MHz except for the response of the low pass filter required
to suppress images. A simple AGC amp can be made using a MiniCkts MAR
and controlling the gain with a transistor attached through a choke to
the input of the MAR. When the transistor turns on it lowers the bias
and hence, the gain of the MAR. This also makes a pretty good pulse
modulator for very high frequencies.
George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

## 2724. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <5vrhv2$32d@news2.tds.net>
Source record: 90894

Dave is absolutely correct! We need laws and Congressional Intervention to outlaw or atleast limit spam.

If a user wishes to be on the no-spam list, then they should be able to register at a central database, which spammers and mass mailers should be required to check BEFORE mailing spam.

Any UNSOLICITED COMM'L email is SPAM. FUK the spammers and the mass spamming domains.

I've heard of a European group who is going on the offensive against spam, using active hacking techniques and attacking the spammers computers via the network. If that doesn't work, they attack the spammers ISP and so on and so on, till the spammer is forced to change domain names and find another ISP in order to continue.

This sounds GREAT to me!!! An anti-spam terrorist network!

Perhaps someone could write some code that could run in the background when we are connected to the internet-this app would attack spamers via the network-distribute anti-spamming attack software with EVERY MAILER AND EVERY INTERNET softeware packeage, and the spam would stop in short order!

The good thing about attacking spammaers computer systems via the network is that the attacker can send a few bytes, which ties up the computer under attack for several seconds (UDP type). The computer under attack might not respond, but it will attempt to process the input, which slows down the spammers computer. IF EVERYONE was attacking the spammers computer, round the clock from all over the world, it would have little time to mail spam! Again, if attacks dont shut the spammer down, then we attack the spammers internet access computer, and then that isp's computer and so on and so on! Soon, we will be attacking NSF and Gov't computers (maybe).

Surely, once the interent was brought to a standstill with anti-spam tactics, then there would be some legislative action and spam relief from big brother!

GL everyone, and may the professional spammers ROT IN HELL.

Dangerous? You bet I am. But, I live in the country and do not have a local ISP, so I pay long distance rates to download spam. Perhaps you can understand WHY I am so dedicated to getting the spam OUT of the internet.

Please suport antispam legislation and use your real email address.
The answer is NOT for us to hide, we arent the ones who are doing
wrong!

de K.

On 11 Sep 1997 08:27:25 -0700, you wrote:

>I post two kinds of articles on Usenet. One kind asks for help, and the
>other kind posts information - either in response to a question, or just
>to report experiences that I think are useful to other people.

>When I post a question, I will always include my real return address
>in the article so that people can answer my question by email. I don't
>expect them to figure out how to fix up a mangled "nospam" address.
>Conversely, when I answer someone else's question by email, and it
>bounces because their question has a bad address, I usually just trash
>the reply rather than figuring out how to fix the address - so the
>person asking the question just lost a potentially useful reply.

>Thus, I think that requests for help should always have a real address
>in them.

>On the other hand, most of what I post is information, not questions.
>I don't expect a reply. So far, I use my real address in these too,
>so people can send me unsolicited comments anyway. But I may change
>to using a mangled address in these. I get far more spam than I get
>real mail, particularly if you count bytes and transmission time.
>All of the 24 kb long chain letters take a while to receive before
>they are junked, even if they are junked automatically. I could
>really do without the time spent receiving and junking these things.

>Thus, I don't think it's unreasonable to use a bogus address in
>postings that I expect no reply to. I have not begun doing
>this yet, but I understand those who do.

>What I don't understand is people who ask others to help them,
>but don't provide a valid mail address. If it's significantly harder
>to help you than other people, many people just won't bother.

> Dave

# 2725. Re: Cordless Telephones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <YEBZMjAkqUI0Ewrq@two-way.demon.co.uk>
Source record: 90895

In article <341FF51C.1376@atl.bellsouth.net>, Ted Kester
<tk1932ga@atl.bellsouth.net> writes
>Does anyone know of a cordless telephone disucssion group or an
>information source ?
>
>TNX
>
>Ted in Atlanta
Only on the Compuserve 'Consumer Electronics' ng.

Phil G4ZOW.

# 2726. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <teljAvAx0NI0Ew9G@lfheller.demon.co.uk>
Source record: 90896

In article <5vq2uq$mtp$1@axe.netdoor.com>, Chris Lamousin
<chrisl@netdoor.com> writes
>I once saw how de Forrest used a flame in his lab as a rectifier. Does
>anyone have any info on this? I would be interested in the laws that
>govern this phenomena.
>Chris
>

Flames produce lots of ions and electrons. I think it was these that
were responsible for the rectification.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 2727. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5vroep$428@hpscit.sc.hp.com>
Source record: 90897

In article <19970915183700.OAA01781@ladder02.news.aol.com>,
JohnsonHE <johnsonhe@aol.com> wrote:
>
>>
>>Many diode ring DBM seems to work better when fed by a square wave
>>with steep edges containing a lot (odd) harmonics. Unfortunately,
>>these harmonics mix with the upper part of the input spectrum and some
>>mixing products will fall within the IF passband. Thus, general
>>coverage receivers usually have (sub)octave filters in the RF
>>amplifier to reduce the input spectrum that might mix with the
>>harmonics of the local oscillator.
>>
>>>Would it improve things at all to have a bandpass filter prior to the
>>>VFO input to the mixer or am I worried about something that doesnt
>>>exist.
>
>You can filter the heck out of the VFO feeding a DBM. It'll be clean as a
>whistle until you connect the DBM. The non-linear load of the diodes
>turning on and off generates harmonics all over again. (Assuming enough LO
>drive to turn on the diodes), but then, it isn't a mixer until you do.
>
>W4ZCB

Yes, but the transformers in the DBM only have to pass sine waves
if you use sine wave drive. It is difficult getting a square wave
through a transformer in one piece. Also, your square wave must
have exactly 50% duty cycle, to avoid intermod degradation. How
do you assure that? With a sine wave, it is trivial to get
exactly 50% duty cycle (just filter out all harmonics).

Rick Karlquist N6RK
rkarlqu@scd.hp.com or rick@area.com

# 2728. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: "Ray W." <rww@bellatlantic.net>
Message-ID: <3421837C.2C2B@bellatlantic.net>
Source record: 90898
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

JJ wrote:
>
> Greg Dean <n9nwo@gte.net> wrote:
>
> >Herr Mueller:
>
> >The US Congress has two bills in front that would ban the manufacturing and use
> >and scanning receivers to include amateur equipment. Law enforcement, news media,
> >everyone, no one would be exempt. Because of the pressure from large businesses
> >such as Motorola, this hints of fascism. Things are not going well here. I wish
> >that I was back in Kaiserslautern.
>
> >Tsch&#65533;s....N9NWO/DA4NWO
>
> I wish I was back in Vogelweh myself..... :)
>
> Cheers!
>
> ==========
> 73 de Jim, WK1V
> Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
> http://www1.shore.net/~jjmartin/jjm2.htm
> ==========

Things were not too bad at Hahn !

Ray

## 2729. Before I try it...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <3421989D.5F66@flash.net>
Source record: 90899

Before I go to the effort I'd like a sanity check. I was thinking of noise cancelling circuit that goes something like this:

Take the 1st IF and split it in to two circuits, one goes on to the bfo and is detected as usual, the other goes to a bfo with a 10KHz spread and is also detected. The audio from both are fed to a comparitor and then amplified.

The idea being with 10Khz you could move away from the received to and 'empty' freq. but be close enough to pick up the same atmospheric noise and static crashes. Does this idea have any merit or do the commercial rigs already implement a similar technique?

Tim, ka8ddz

# 2730. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5vrtjm$mq2@sf18.dseg.ti.com>
Source record: 90900
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

King Mackey, you truly are an Idiot. MY KIND of Idiot!
Great story!

73 de K5DH

# 2731. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <34218911.3ACA@HP.com>
Source record: 90901

Chris Lamousin wrote:
>
> I once saw how de Forrest used a flame in his lab as a rectifier. Does
> anyone have any info on this? I would be interested in the laws that
> govern this phenomena.
> Chris

Hi Chris,

Can't help with the flame detector, although I have read about it
somewhere.
Try libaries, for a good biography. Incidentally, Dr. Lee DeForest's
name is
as spelled here, not "de Forrest".

73 and GL,
Don, W6JL

## 2732. Does anyone know?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: b068719c@bc.seflin.org
Message-ID: <5vs3be$i5b@nntp.seflin.org>
Source record: 90902

I would like to find a cheap way of communicating with my friends and
loved one
not like cell phone becaues of the high prices. I don't know that much
about CB
radios. So I am asking all of you becaues you would most likely know what
to do
a way that is free to use and know one eles can hear my conversation. I
did hea
about a year ago it was called a super phone. You plug it into your phone
outle
you can talk on a cellphone looking thing for upto 20 miles, But I was
not able
If anyone knows where I can buy that or something else that can help me
out ple
mail me back. thanks

P.S. I don't care if it is not fully legal.

Please help me out here!

--

Sage Sheppard
b068719c@bcfreenet.seflin.lib.fl.us

# 2733. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970918211101.RAA06004@ladder01.news.aol.com>
Source record: 90903

>
>Yes, but the transformers in the DBM only have to pass sine waves
>if you use sine wave drive. It is difficult getting a square wave
>through a transformer in one piece. Also, your square wave must
>have exactly 50% duty cycle, to avoid intermod degradation. How
>do you assure that? With a sine wave, it is trivial to get
>exactly 50% duty cycle (just filter out all harmonics).
>
Gee! I don't think so, the square wave is just the fundamental and a bunch of odd harmonics. Those little tiny transformers have more trouble passing low frequencies than high. My square waves do right well through them but then I don't operate above 432 MHz either.

For 50-50 duty cycle, I like to use 2x frequency driving a J-K flip flop. That's gorgeous. When you can't afford the 2x frequency, I just bias the inputs to a 74AC540 to 1/2 Vcc with a pot, and drive all sections in parallel. It'll make +23 dBM, pretty square, with 5 volts without a whimper. You just listen to the Intermod of 2 test signals and adjust the pot for minimum. Quite sharp, easily defined and it stays put. If you're not into tri-state, a 74AC04 all paralleled up does the same thing.

For the DMOS mixers, same as above except for biasing the square wave with a little DC and adjusting the DC bias for minimum feedthru at the IF of the input signal. Coincides with best Ip3 and stays put too.

W4ZCB

## 2734. RF choke for mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <34219B8C.62C3@flash.net>
Source record: 90904

I have a handfull coils from TV's, these are the ones on a plastic form with an iron slug down the center. One has #18 or #20 gauge wire. Would this make a good RF choke for mobile applications? It appears to have 40 to 60 windings around a 1/4" slug.

Tim

# 2735. WTB: FM Stereo Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Alexm <alexm@nyct.net>
Message-ID: <EGpxo8.8Iu@nonexistent.com>
Source record: 90905

We're setting up a small FM stereo station (20-100 watts)in the mountains of rural Colorado. We're starting from scratch, so we'll need everything from transmitter to mixer to antenna.

We're electronics neophytes, and though we're willing to learn and study, we'd like to purchase a system that's as close to plug-and-play as possible. Can anyone recommend a plug-and-play FM stereo transmitter system, or can we purchase an already assembled kit from you or someone you know? (We've checked out a Ramsey system which allegedly includes everything. But at 1 watt, it seems a bit underpowered. We've also looked at 12 and 45-100 watt systems sold by R. Scott Communications in Canada. Any experience with their stuff?)

Any help would be appreciated!

Alexm@nyct.net

# 2736. Re: Modulation transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970918182419.20981B-100000@oso.slonet.org>
Source record: 90906

Find some surplus 400 hertz power transformers with the proper turns ratio. They will work find for communications audio. Cliff K7RR

On Wed, 17 Sep 1997, Bob Miller wrote:

> Seth Taylor wrote:
> >
> > Anyone have source ideas for 300 watt (+/-) modulation transformer
> > besides Peter Dahl ?
> >
> > Seth KC2WE
>
>

# 2737. Re: [?] Low-noise analog adder design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: blombard@bogusity.iu.net
Message-ID: <5vs7od$i2t$1@news1.atlantic.net>
Source record: 90907
Cross-posted to: sci.electronics.design;,sci.electronics.misc;,alt.engineering.electrical;,rec.radio.amateur.homebrew

I'm not sure I understand the exact topology you're talking about (which
is always hard without schematics and a while to study them) but let me
throw out an idea or two.

In article <34203C27.7C2C@pop.removethistomailme.net>,
jmiles@pop.removethistomailme.net says...
>
>
>Wondering if anyone can offer any suggestions on the following problem.
>
>I'm experimenting with a very simple homebrew PLL circuit based around a
>VCO running between 770 and 1290 MHz, using a 3-5 MHz DDS as a reference
>clock with a fixed division modulus of 256. This will ultimately serve
>as the first LO for a general-coverage VHF/UHF receiver project.
>
>One of my design goals for this PLL is extremely fast settling time, on
>the order of 1 ms or less for any frequency step in its range.
>Currently, I'm able to achieve this goal by "pretuning" the VCO with a

stuff deleted....

Interesting that you'd want a sub-millisecond step. This is rather
fast. I've done some pretty sophisticated systems that didn't need to
step anywhere near this fast. This is a home project?

>

Even more deleted....

>This all seemed to work very well, until one day I got around to
>repairing my old HP8551 spectrum analyzer's narrowest IF bandwidth
>setting and looked at the output of my synthesizer on it. In a
>nutshell, the DAC/LF356 combination appears to be contributing an
>unreasonable amount of broad-spectrum noise (definitely not oscillation)
>to the VCO tuning line. Since this happens after the loop filter and
>before the VCO, the loop can't compensate for this noise in any way. A
>0.1uF capacitor across the LF356's 10K feedback resistor helps a great
>deal, but the noise is still excessive ("grass skirts" from -40 dB on
>down.) This noise is also plainly audible as phase noise when listening
>for the synthesizer output signal on a UHF receiver.

Is the noise inside the loop bandwidth? If so, I'm guessing it might be
the DDS itself. One of the more obscure laws of nature is "Thou shalt
not multiply a DDS". When you do so, you get multiplication of the
approximation errors, both amplitude and phase truncation. This turns

into spurs, but they can be so dense that they appear to be broad band noise. Using the DDS as a reference is multiplying it by the loop multiplication factor, N.

The amplitude truncation spurs come from the DAC errors, and the phase truncation spurs come from the sine generation itself. Whether you use look up table or algorithm, the approximation of the number to the real value results in these spurs. AM spurs are multiplied by 10 log N, and PM spurs by 20 log N. This is 24 and 48 dB respectively. If your DDS has a noise floor of -70 dBc (I recall this as a reasonable figure of merit), that would put the apparent broadband noise at -22 dBc, which is pretty horrible. Even if the floor was -90 dBc, that's still an output noise floor of -42 dBc, and that's still pretty bad.

>
>Now, I have seen oblique references to DAC-based pretuning in the Rohde
>and Best books, but the only actual circuit diagram I've run across
>assumes a multiple-varactor VCO -- one diode for pretuning and another
>for loop control. I'm using a prepackaged single-control VCO module and
and more deleted....

>
>-- tnx de KE5FX
>
>----------
>Note: My E-mail address has been altered to avoid spam
>----------

Count me among the "Great unwashed masses" who have never pre-steered a VCO with a DAC. So I can't help much here. But the loop topology scares me, I'm afraid.

Hope this helps/offers some insight....

73,
Bob

Bob Lombardi W4ATM in Melbourne, FL (ex-WB4EHS) \---\---\
blombard@iu.net or blombard@freenet.fsu.edu __@ |
Bicycling, telescope making, optics, astronomy, _`\<_ |
Radio Design, piano, SW and ham radio (*)/ (*) |
Visit the ATM Resource List at http://www.freenet.tlh.fl.us/~blombard

## 2738. Hacking an antenna onto a Sony Boom Box

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Casey@At.Bat
Message-ID: <MPG.e8bb46286a15384989680@news.cyberzone.net>
Source record: 90908
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hey,
I've got a Sony CD player AM/FM radio and I get rotten FM reception.
There are no external FM (or AM) screws for me to hook in an external
antenna. I was going to put the cable from the cable TV into the antenna
jacks...but there aren't any means of connecting it to the radio.
Can I solder leads onto the telescoping antenna then attach the Cable TV
/FM reception cable to those wires?
Is the telescoping antenna for FM . . .or AM??

Thanks
OggaBooga with the green teeth

# 2739. Re: Does anyone know?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: Neutrino <neutrino@large.net>
Message-ID: <34221893.4216@large.net>
Source record: 90909

Sage Sheppard wrote:
>
> I would like to find a cheap way of communicating with my friends and
> loved one
> not like cell phone becaues of the high prices. I don't know that much
> about CB
> radios. So I am asking all of you becaues you would most likely know what
> to do
> a way that is free to use and know one eles can hear my conversation. I
> did hea
> about a year ago it was called a super phone. You plug it into your phone
> outle
> you can talk on a cellphone looking thing for upto 20 miles, But I was
> not able
> If anyone knows where I can buy that or something else that can help me
> out ple
> mail me back. thanks
>
> P.S. I don't care if it is not fully legal.
>
> Please help me out here!
>
> --
>
> Sage Sheppard
> b068719c@bcfreenet.seflin.lib.fl.us

**********

Better stick with the telephone, Sage. Any conversation transmitted by
radio can and will be listened to. And any illegal operation of a radio
transmitter will, eventually, get you in trouble.

~ neutrino ~

## 2740. DCS for ham radio.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: glry2jesus@aol.com
Message-ID: <19970918222401.SAA17088@ladder02.news.aol.com>
Source record: 90910

Is there any type of chip or project that could be built into, or
out-board, that could be built to enable a radio to have a dcs type of
capability?

If anyone knows of any good sources or web sites or chip numbers/companies
it would be appreciated.

Thanks,
Jeff

## 2741. Antenna for Soney

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: EyeDont@think.so.org
Message-ID: <MPG.e8bb4d07f230a11989681@news.cyberzone.net>
Source record: 90911
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hey,
I've got a Sony CD player AM/FM radio and I get rotten FM reception.
There are no external FM (or AM) screws for me to hook in an external
antenna. I was going to put the cable from the cable TV into the antenna
jacks...but there aren't any means of connecting it to the radio.
Can I solder leads onto the telescoping antenna then attach the Cable TV
/FM reception cable to those wires?
Is the telescoping antenna for FM . . .or AM??

Thanks
OggaBooga with the green teeth

# 2742. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-18 00:00:00 UTC
From: nick@cs.unc.edu
Message-ID: <5vrk4g$b5b@altair.cs.unc.edu>
Source record: 90912
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Removing "boatanchors" newsgroup from followup list. Off-topic thread.

--
Nick England KD4CPL nick@cs.unc.edu Univ. Of North Carolina
http://www.cs.unc.edu/~nick Chapel Hill NC

# 2743. RE:ALINCO DR-130 SETUP FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Larry <lpen@mail1.nai.net>
Message-ID: <01bcc4c0$382efe20$92a485d0@default>
Source record: 90815

ALINCO 2M DR-130 MOBILE RADIO,
CUSHCRAFT 124 2M BEAM ANTENNA AND POLES,
ANTENNA ROTOR AND ACESSORIES,
12VDC 20AMP POWER SUPPLY WITH METER ,
50 FT RG-259
USA SALE ONLY!!!!
*** ALL FOR $400.00**203-743-7170

# 2744. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: spam_me_not@shore.net
Message-ID: <5vslg8$36o@fridge-nf0.shore.net>
Source record: 90816
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

"Ray W." <rww@bellatlantic.net> wrote:

>Things were not too bad at Hahn !

Nor were they at Wiesbaden before Operation Creekswap in '75 when we
had to move to Sembach/Kaiserslautern.

==========
73 de Jim, WK1V
Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
http://www1.shore.net/~jjmartin/jjm2.htm
==========

# 2745. Searching :schematic for repeater controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Marco Baaij <mbaay@casema.net>
Message-ID: <3421A68A.3A10@casema.net>
Source record: 90817

Hi, there

My name is Marco and i live in Holland.
I'am searching for a schematic of a repeater controller.
It must be a simple controller with 1750 HZ. detection.
When the 1750 Hz. is detected, a CW-ID must be started.
The conroller be must have also a hang-timer. And you must not activate
the repeater again with 1750 for about 20 sec., then you activate him
with te carrier. I hope you understanding me, hi!!
When you can help me with a schematic, please email me!!
Many thanks !!
Greetings&73's!! Marco PE1PNA

# 2746. WTB: Manual for GE Master Pro

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bigred@earth.execpc.com
Message-ID: <5vtac5$58d$1@earth.execpc.com>
Source record: 90818

I am looking for a manual for a GE Master Pro VHF Radio. Mainly, I am
interested in the pinout for the control head.
Thanks
-John
N9UUO
bigred@execpc.com

## 2747. Digital Audio on 1.2 GHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bigred@earth.execpc.com
Message-ID: <5vtah6$5e6$1@earth.execpc.com>
Source record: 90819

Is it possible to run Digital Audio on 1.2 GHz???
Data transfer rates are like 56k on 1.2, so why couldn't I use a simple
D/A converter and send voice that way???
Any suggestions would be appreciated!
-John
N9UUO
bigred@execpc.com

# 2748. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <34225A44.74D3@tir.com>
Source record: 90820

>We need laws and Congressional Intervention
>to outlaw or atleast limit spam.

We don't need any more government regulation at all. It is not possible to legislate civilized behavior.

>The good thing about attacking spammaers computer systems...

There is nothing good about attacking anybody's computer system. There are already laws against this. Who is going to decide how you may use your computer and when you should be attacked? Me? Spammers? Big brother?

Economics should drive the spammer away. Eventually all of the dimwits in the world will discover that it really doesn't work and is not worth the hassles that spammers already run into. The spam servers will not be connected to the net (economic reasons again).

Do all you can to make spammers miserable. Do not damage their property in the process.

The quotes above are very brief, but I do not see that they out of context nor misleading.

Bill

## 2749. Stancor RT-204 xfmrs.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: The Thomas Family <k6kc@lightspeed.net>
Message-ID: <34224A68.6541@lightspeed.net>
Source record: 90821

FS: NIB Stancor RT-204 universal rectifier transformers. 11.6-29.2 volt sec., 4 / 8 amps. (multiple primary taps) $5.00 each plus shipping.

# 2750. Re: Hacking an antenna onto a Sony Boom Box

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <3422A2FB.B58@flash.net>
Source record: 90822
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tim Jenkins wrote:
>
> Hey,
> I've got a Sony CD player AM/FM radio and I get rotten FM reception.
> There are no external FM (or AM) screws for me to hook in an external
> antenna. I was going to put the cable from the cable TV into the antenna
> jacks...but there aren't any means of connecting it to the radio.
> Can I solder leads onto the telescoping antenna then attach the Cable TV
> /FM reception cable to those wires?
> Is the telescoping antenna for FM . . .or AM??
>
> Thanks
> OggaBooga with the green teeth

Dont bother with the cable from cable TV, there are thousands of
frequencys on that line and will more than likely provide you with more
noise and interferance. Get a test clip and connect 50ft or so of wire.
That should improve things. If you want a more elaborate FM antenna,
email me. Put the wire outside if you can for enhanced J. Geils
reception.

Tim

# 2751. Re: Fox hunts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <34228AFE.1FC9@umich.edu>
Source record: 90823

Rodney Wallberg wrote:
>
> Hello everyone..... I was wondering if there is any groups on USENET
> dealing with foxhunts and/or suggestions for the "hunt" of the "fox".
> Our club has been doing this for about
> two years now but we seem to be stuck in a rut! We do the same thing
> every week and seems to be no energy or new ideas.
> I am going to try a 19" parabolic dish
> next week with an R/C network for attenuation. Thinking of a RDF
> electronic switched but not sure of all the details.
> Any suggestions would be super and
> maybe we need a newsgroup here for the elusive fox!
>
> 73 Rod KB8DNS

I'm not a fox hunter, but I play one on ... awww, never mind. Anyway,
I've seen a web site with quite a few interesting ideas for the fox
and for the hunters. Try http://www.swcp.com/~ab5p/foxhunt.html,
the Albuquerque Transmitter Hunters club.

73 de Bob, KI8AB

# 2752. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <342249d7.0@newshost.pcug.org.au>
Source record: 90824

wmeara@erols.com (Bill Meara ) wrote:

>
>QRP literature over here warns that efforts to get additional
>frequency deviation in VXO circuits often results in the VXO turning
>into a VFO - with all the instability problems associated with those
>circuits. I hope you and your colleagues have gotten around this
>difficulty with your "two crystals in parallel" circuit. It would
>certainly be a great step forward for those of us who are "rock
>bound".
>

Interesting. I found that when using 3.58 MHz ceramic resonator VXOs,
there is sometimes a discontinuity in the tuning range. I read an
article saying that this could be overcome by having two ceramic
resonators in parallel, with no effect on the pulling range. Ordering
two crystals is a bit costly, but two ceramic resonators are cheap :)

--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.


_____________________________________________________

# 2753. Various modes from I & Q

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Joseph M Zawodny <J.M.nospam.Zawodny@LaRC.NASA.gov>
Message-ID: <3422A4AF.7FA5@LaRC.NASA.gov>
Source record: 90825

Hi,

Does someone have a decent, obtainable reference on the
subject of gennerating the various modes (USB, LSB, FM) from
the I & Q inputs(outputs) to a quadrature (de)modulator? Or
better yet, can some one post it? Like I=Q is USB, I=-Q is LSB
or whatever is really correct. I do not feel like doing the math
myself - I have a hamfest to go to this weekend :-).

Thanks in advance,

KO4LW

--
------ To Reply, Please remove the .nospam from addresses below ------
Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
NASA Langley Research Center KO4LW.nospam@amsat.org
E-mail: J.M.nospam.Zawodny@LaRC.NASA.gov zawodny.nospam@exis.net
(757) 864-2681 (757) 864-2671 FAX http://wwwp.exis.net/~zawodny

# 2754. Re: Antenna for Soney

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34228c45.7816664@news.atl.bellsouth.net>
Source record: 90826
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 18 Sep 1997 23:00:19 -0400, EyeDont@think.so.org (Christopher Riley) wrote:
>Hey,
> I've got a Sony CD player AM/FM radio and I get rotten FM reception.
>There are no external FM (or AM) screws for me to hook in an external
>antenna. I was going to put the cable from the cable TV into the antenna
>jacks...but there aren't any means of connecting it to the radio.
> Can I solder leads onto the telescoping antenna then attach the Cable TV
>/FM reception cable to those wires?
> Is the telescoping antenna for FM . . .or AM??

The telescoping antenna is for FM. There are a couple of ways to couple to this. The simplest way is to loosely wrap a few turns of insulated wire around the rod and solder the ends of the wire to the inner and outer conductors of the cable. A more sophisticated method is to use a L network between the cable and the rod/chassis. The easy method will probably suffice, however.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2755. Need Schematic for Pyramid PS-14K

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: shelton@mis.net
Message-ID: <874690070.19771@dejanews.com>
Source record: 90827
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am having trouble with high ripple current (10%) from a Pyramid PS-14k.
I would like a copy of the schematic for this power supply. Thoughts or
suggestions appreciated.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2756. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: n1ddzrjc@aol.com
Message-ID: <19970919165000.MAA14618@ladder02.news.aol.com>
Source record: 90828

Gee, I think it's off the air and if you are getting it to come up it is probably already in your system. I'll bet if you reload you'll see the DNS flag.

We've tried quite a few times here.

Bob

>Subject: Re: Peter Dahl WEB site
>From: wrt@eskimo.com (Bill Turner)
>Date: Thu, 18 Sep 1997 05:05:00 GMT
>Message-id: <3422b66e.3707551@eskinews.eskimo.com>
>
>K0PW <pwentzel@minn.net> wrote:
>
>>Seth Taylor wrote:
>>>
>>> The correct URL is:
>>>
>>> http://www.pwdahl.com/
>>>
>>> Seth KC2WE
>>Does anyone get a response from this url? I get "no DNS entry"
>>
>>K0PW
>_____________________________________________________________
>It works, try again.
>
>73, Bill W7TI
>
>
>
>
>
>
>
>

# 2757. Re: Before I try it...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3422add5.16410450@news.atl.bellsouth.net>
Source record: 90829

On Thu, 18 Sep 1997 14:09:49 -0700, Tim <Hynde@flash.net> wrote:
>Before I go to the effort I'd like a sanity check. I was thinking of
>noise cancelling circuit that goes something like this:
>
>Take the 1st IF and split it in to two circuits, one goes on to the bfo
>and is detected as usual, the other goes to a bfo with a 10KHz spread
>and is also detected. The audio from both are fed to a comparitor and
>then amplified.
>
>The idea being with 10Khz you could move away from the received to and
>'empty' freq. but be close enough to pick up the same atmospheric noise
>and static crashes. Does this idea have any merit or do the commercial
>rigs already implement a similar technique?
>
>Tim, ka8ddz

The two signals won't be phase coherent, so they won't cancel. You can
use the second channel to derive a switching signal for a noise blanker
in the main channel, however. That may be what you mean with the
comparator reference, but you really want the blanker much earlier
in the radio, before the narrow IF filtering, and not down at audio.

This is an old technique, and has been used in many radios, though the
spacing is usually much greater. The problem with such a small separation
is that you're still in-band, and likely to have a signal active on the other
channel. That's not good. You want the noise channel to be in a fairly
inactive part of the spectrum.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2758. Re: Digital Audio on 1.2 GHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3422affc.16960801@news.atl.bellsouth.net>
Source record: 90830

On 19 Sep 1997 02:44:38 -0500, bigred@earth.execpc.com (John S. Putra) wrote:
>Is it possible to run Digital Audio on 1.2 GHz???
>Data transfer rates are like 56k on 1.2, so why couldn't I use a simple
>D/A converter and send voice that way???
>Any suggestions would be appreciated!

You could just do that, John, but the better method is to use a codec like the phone company does. These are available as single chips, and aren't expensive. A codec does more than just A/D. It usually has some type of compression and conditioning, and serializes the data according to a supplied clock signal. This works well with the 56 kb RF modem because it supplies clock and expects synchronous input. The codec also reverses the process on the other end. Since 56 kb is a standard telco rate, this makes a perfect fit.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2759. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3422bc56.117341715@news.erols.com>
Source record: 90831

On 19 Sep 97 09:45:59 GMT, Peter Parker <parkerp@pcug.org.au> wrote:

>
>wmeara@erols.com (Bill Meara ) wrote:
>
>>
>>QRP literature over here warns that efforts to get additional
>>frequency deviation in VXO circuits often results in the VXO turning
>>into a VFO - with all the instability problems associated with those
>>circuits. I hope you and your colleagues have gotten around this
>>difficulty with your "two crystals in parallel" circuit. It would
>>certainly be a great step forward for those of us who are "rock
>>bound".
>>
>
>Interesting. I found that when using 3.58 MHz ceramic resonator VXOs,
>there is sometimes a discontinuity in the tuning range. I read an
>article saying that this could be overcome by having two ceramic
>resonators in parallel, with no effect on the pulling range. Ordering
>two crystals is a bit costly, but two ceramic resonators are cheap :)
>
>--
>_____________________________________________________
>Peter Parker
>
>E-mail: parkerp@pcug.org.au
>Phone: (02) 6285 1004 (ah)
>Amateur Radio: VK1PK
>
>Home Page: http://www.pcug.org.au/~parkerp/
>The home of Novice Notes Online and the VK QRP Web Page.
>_____________________________________________________
>
Peter: Thanks for the info. These guys are talking about 50 Khz
frequency shifts! I'd gladly buy another crystal to go that far!

I'm surprised by how little reaction my posting caused. I can only
hope that experimenters around the world are hard at work over hot
soldering irons, trying out this new technique from the east! I
really kind of expected a lot of "Oh we've been doing that for years"
messages!

This would be a very useful development for the QRP/Homebrew
community.

73 Bill N2CQR >

# 2760. Re: FS: Special Low Prices on Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Surplus Al <surplsal@tl.infi.net>
Message-ID: <34225780.1733@tl.infi.net>
Source record: 90832

Hi, I am Surplus Al W3UGD. I would like to ask a favor. How do I place ads on the newsgroups. Procedure. I have 100K Crystals and want to let folks I have them. Thank you Al Yascavage
http://www.qsl.net/w3ugd 73,s

## 2761. Pulse width modulator plans wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: n1ddzrjc@aol.com
Message-ID: <19970919165800.MAA15010@ladder02.news.aol.com>
Source record: 90833

Looking to build a PWM for a Valiant or other 100-200 watt rig.

Any tips or leads to the design info I need?

Thanks

Bob

# 2762. Re: FS: Special Low Prices on Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <3422BA4C.4FD@ccm.intel.com>
Source record: 90834

Surplus Al wrote:
> How do I place ads on the newsgroups.

Hi Al, although some people do it anyway, for sale ads are against the charter of the rec.radio.amateur.* newsgroups. rec.radio.swap was created for the express purpose of for sale/want to buy postings.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 2763. WANTED: UTC LS 6L4 transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <01bcc530$78b71de0$95457392@default>
Source record: 90835

Anyone have this transformer and willing to sell it?

Thanks!

73,
Chuck...K1KW

# 2764. NE-602/Ceramic Resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Barry Williams <tticon@swbell.net>
Message-ID: <3422D5E6.2927@swbell.net>
Source record: 90836

I have a stack of Ne-602s, and several ceramic resonators (two pin for 455khz. oscillator) along with some Collins SSB filters. Has anyone tried using these for generation of a 455 khz. SSB signal? Also has anyone tried varying the frequency of these ceramic devices with either external inductance or capacitance.

tnx es 73
KD5VC
Barry

# 2765. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>
Message-ID: <3422D720.AA44C07B@uiuc.edu>
Source record: 90837

N1DDZ RJC wrote:

> Gee, I think it's off the air and if you are getting it to come up it
> is
> probably already in your system. I'll bet if you reload you'll see
> the
> DNS flag.
>
> We've tried quite a few times here.
>
> Bob
>
> >Subject: Re: Peter Dahl WEB site
> >From: wrt@eskimo.com (Bill Turner)
> >Date: Thu, 18 Sep 1997 05:05:00 GMT
> >Message-id: <3422b66e.3707551@eskinews.eskimo.com>
> >
> >K0PW <pwentzel@minn.net> wrote:
> >
> >>Seth Taylor wrote:
> >>>
> >>> The correct URL is:
> >>>
> >>> http://www.pwdahl.com/
> >>>
> >>> Seth KC2WE
> >>Does anyone get a response from this url? I get "no DNS entry"
> >>
> >>K0PW
> >>_____________________________________________________________
> >It works, try again.
> >
> >73, Bill W7TI

Use http://209.12.189.22/

Chuck.

--
Charles (Jack) Hawley
Chuck....Ham Radio KE9UW
AKA "Jack" BMW Motorcycles, MOA #224 K100RS
Wife rides...Viki, MOA #18120 K100RS
President IBMWR
c-hawley@uiuc.edu

Sr. Research Engineer Emeritus
University of Illinois, Urbana-Champaign

# 2766. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bb099@cleveland.Freenet.Edu
Message-ID: <5vumkm$4dg@alexander.INS.CWRU.Edu>
Source record: 90838
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

In a previous article, rollo@trib.com (Roll-o) says:

>
>Doran Platt <jeepp@erols.com> wrote:
>
>>one of my bosses in the past (who hated hams for some reason) said the
>>term ham is what they are... half a pigs *## (posterior)
>>AMDX@worldnet.att.net wrote:
>
>>> Where did the term HAM come from? When did it come to popular use?
>>>
>>> Thanks for the
>>> input.
>>> Mike Knowlton
>
>
>
>Hatdly Any Money
>my source of schematic diagrams: http://w3.trib.com/~rollo/bomcat.htm
>
>

I have also heard that back in the "Good 'ol Days", old lane line
telegraph operators refered to the code skill of hearly Hams by saying they
where "Ham fisted" / sloppy. It was ment as an insult, like the song
"Yankee Doodle Dandy" was.
--
Member of the Signal Surfer DX Club, check out our web site at:
http://www2.awinc.com/users/djabs

bb099@cleveland.freenet.edu 73 de A. Trent Phillips

## 2767. Low power AM transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: amradio@aol.com
Message-ID: <19970919210301.RAA29575@ladder02.news.aol.com>
Source record: 90839

I'm looking for the schematics of a low power tube tupe transmitter on broadcast band. I got one a few weeks ago with 2X 50C5 and a 12AV6 but I cannot find it again ! The name was : 515 transmitter.
Thanks

# 2768. Australian QRP Home Page Updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3422e556.0@newshost.pcug.org.au>
Source record: 90840
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

A few updates have been made to the Australian QRP Home Page. These include a revised diary section, information on the latest Lo-Key, and the odd new link or two (will be of particular interest if you're into VXOs).

In addition to the new material, the page has information on building/buying equipment, explains the ten steps to QRP success and has many links to similar pages around the world.

You can get to the page by clicking on the URL below.

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

# 2769. Re: B & W Coil Forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3422fca1.5536220@news1.mnsinc.com>
Source record: 90841

TONS OF SOURCES for such coil forms may be found at:

http://www.mnsinc.com/bry/mega/partsupp.htm
http://www.mnsinc.com/bry/mega/boatanch.htm

AND AT:

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

Enjoy! 73 de AF4K - Bry

On Thu, 18 Sep 1997 09:08:02 -0500, Mike - WB0IKT <crucis@sky.net>
wrote:

>Anyone know of a parts dealer where I can get some coil forms? I need a
>1 inch form and my junk box is empty! I'd prefer not to have to make
>one.
>
>
>--
>=========================================================================
>Mike Watson, WB0IKT QCWA Mbr# 28651, Mid-Continent Chapter
>#35
>Raymore, Missouri, USA Grid: EM28st
>http://www.sky.net/~crucis E-mail: crucis@sky.net or WB0IKT@juno.com
>=========================================================================

(remove the word REMOVE from my e-mail address to respond!)

# 2770. Re: kits for no code techs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <342300a7.6565569@news1.mnsinc.com>
Source record: 90842

On Thu, 11 Sep 1997 23:47:29 -0400, dwayne rich
<drichff@worldnet.att.net> wrote:

>My fiancee has become interested in ham radio and wants to know if there
>are any kits that she could build to get on the air once she gets her no
>code tech ticket? SHe has a desire to build rather than buy a rig.
>Building things shouldn't be a problem for her as she has a masters in
>electrical engineering. My only concern with her getting her license is
>that I will have to share radio time <grin>. Can anyone point me in the
>direction of kits to build?
>
>Dwayne
>KC4ADW

SURE Dwayne! You came to the right place!

Take a look at the MANY sources of kits listed at:

http://www.mnsinc.com/bry/mega/megakits.htm

I hope that you and your fiancee will consider upgrading too, so that
you can enjoy more privileges and more versatile kits!

All the best - Bry

(remove the word REMOVE from my e-mail address to respond!)

# 2771. Re: Modulation transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3422fe8a.6024503@news1.mnsinc.com>
Source record: 90843

On 17 Sep 97 18:55:11 GMT, staylor@whpost.wh.lucent.COM (Seth Taylor) wrote:

>Anyone have source ideas for 300 watt (+/-) modulation transformer
>besides Peter Dahl ?
>
>Seth KC2WE

Your best shot is among old boatanchor enthusiasts. You can get a xfmr that is removed from old ha or military gear perhaps.

Try these sources:

http://www.mnsinc.com/bry/mega/boatanch.htm

Enjoy!

(remove the word REMOVE from my e-mail address to respond!)

# 2772. Re: Modulation transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3422feca.6088985@news1.mnsinc.com>
Source record: 90844

On Wed, 17 Sep 1997 12:21:08 -0700, Bob Miller <bmiller@calweb.com>
wrote:

>Seth Taylor wrote:
>>
>> Anyone have source ideas for 300 watt (+/-) modulation transformer
>> besides Peter Dahl ?
>>
>> Seth KC2WE

He did indeed. Did you wish to add a comment?

(remove the word REMOVE from my e-mail address to respond!)

# 2773. Re: Two Triodes on one HV power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3422fd15.5651507@news1.mnsinc.com>
Source record: 90845

On Thu, 18 Sep 1997 08:11:39 -0600, carsten.esch@olympus-software.com
wrote:

>Hi,
>I am planning to build a new HF amp with the 8877. I do have a 2m amp with
>this tube.
>My question is: Can I connect the plate voltage from my HV power supply on
>both tubes, so that I only have to switch the other voltages? That would
>mean that in one amp only high voltage would be on the plate (without
>heating etc). Any problem for a Triode to only have anode voltage applied?
>Thank you for your help,
>
>Carsten, DL6LAU

Better be CAREFUL that you also connect a GROUND RETURN HT- lead to
both amps!!! Otherwise your amp chassis could be sitting at HT+
(that's B+ for the Yanks) and give you a nasty shock!

(remove the word REMOVE from my e-mail address to respond!)

# 2774. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3422ff55.6227341@news1.mnsinc.com>
Source record: 90846
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

On Sun, 14 Sep 1997 17:56:11 -0400, N8XYN <jim.N8XYN@worldnet.att.net>
wrote:

>Joe Pillera wrote:
>>
>> Hello,
>> I've heard mention of "micro-broadcasting" while listening to my
>> shortwave radio. Apparently, it has something to do with ordinary
>> people who legally use very low power to transmit some sort of voice
>> (narrow FM?) signal in their local area.
>>
>> Do any of you have a list of common frequencies for this? Is it indeed
>> narrow FM - or is another modulation used?
>>
>> Just curious. Thanks in advance.
>>
>> Joe
>> --
>> Joe Pillera
>
>Nope! thats not it! What they mean is transmitting on the AM/FM
>broadcast band at low power levels. This is NOT legal. But its done
>all the time by a good many people. Check out alt.radio.pirate for the
>real information on the subject.

Your answer is VERY misleading here!
Micro-broadcasting is done LEGALLY in many cases.

There is provision for folks to transmit at 100mW into a five foot
antenna legally - and in the broadcast bands. RAMSEY ELECTRONICS and
SEVERAL other manufacturers sell a variety of transmitters for this
purpose. Everyone knows Radio Shack and other toy companies sell
"wireless microphones" and "wireless intercoms" etc. etc. that all use
100 mW or so on the medium wave, as well as 49 MHz, VHF-FM broadcast
bands etc. etc. and they are NOT illegal to use!!

You can broadcast JUST LIKE a regular FM station if you want, and ON
the FM band with a 100 mW stereo quality station. You can spend
anything from $30-3000 on such a station.

For more details and FACTS (instead of opinions) see:

http://www.mnsinc.com/bry/piralynx.htm

Regards - Bry

(remove the word REMOVE from my e-mail address to respond!)

## 2775. Re: Where can I go to buy Ham radio stuff???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <34230281.7039627@news1.mnsinc.com>
Source record: 90847

On 14 Sep 1997 05:29:38 GMT, b068719c@bc.seflin.org (Sage Sheppard) wrote:

>
>I was just woundering where I could go to buy ham radio equipment around
>my area of south florida?
>
>Sage Sheppard
>b068719c@bcfreenet.seflin.lib.fl.us

See:
http://www.mnsinc.com/bry/mega/dealers.htm

Enjoy! - Bry, AF4K

(remove the word REMOVE from my e-mail address to respond!)

# 2776. Re: Radio E-mail discussion lists FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <342301dc.6874358@news1.mnsinc.com>
Source record: 90848
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.swap

On Sat, 13 Sep 1997 12:45:12 GMT, syfr@mindspring.com (syfr) wrote:

>bry@REMOVE.mnsinc.com (Bry) wrote:
>
>>Great new information on how to get on a REALLY GOOD E-mailing
>>discussion list with hams who share your interests.
>
> Absent from this list is the information for the original
>Boatanchors list. A trial sub to that list may be obtained by
>writing:
> listown@jackatak.theporch.com
>and asking for a trial subscription.
>
> Wonder why you left this off, Brian?

Found that list a bit overwhelming due to heavy volume PLUS they
charge $12 or $15 a year ... for WHAT?

All other lists are free, so I encourage folks to try them first!
However, I should include the JACKATTACK boatanchors group with a
caveat I suppose.

I have links to their ARCHIVES on my links section. I find THAT more
useful.

If I want to reply to the whole group I can get the list and do that
too!

Thanks for your helpful comment though, and I will add that list.

Bry, AF4K

(remove the word REMOVE from my e-mail address to respond!)

# 2777. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <34232D5E.A15@worldnet.att.net>
Source record: 90849
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Bry wrote:
>
> On Sun, 14 Sep 1997 17:56:11 -0400, N8XYN <jim.N8XYN@worldnet.att.net>
> wrote:
>
> >Joe Pillera wrote:
> >>
> >> Hello,
> >> I've heard mention of "micro-broadcasting" while listening to my
> >> shortwave radio. Apparently, it has something to do with ordinary
> >> people who legally use very low power to transmit some sort of voice
> >> (narrow FM?) signal in their local area.
> >>
> >> Do any of you have a list of common frequencies for this? Is it indeed
> >> narrow FM - or is another modulation used?
> >>
> >> Just curious. Thanks in advance.
> >>
> >> Joe
> >> --
> >> Joe Pillera
> >
> >Nope! thats not it! What they mean is transmitting on the AM/FM
> >broadcast band at low power levels. This is NOT legal. But its done
> >all the time by a good many people. Check out alt.radio.pirate for the
> >real information on the subject.
>
> Your answer is VERY misleading here!
> Micro-broadcasting is done LEGALLY in many cases.
>
> There is provision for folks to transmit at 100mW into a five foot
> antenna legally - and in the broadcast bands. RAMSEY ELECTRONICS and
> SEVERAL other manufacturers sell a variety of transmitters for this
> purpose. Everyone knows Radio Shack and other toy companies sell
> "wireless microphones" and "wireless intercoms" etc. etc. that all use
> 100 mW or so on the medium wave, as well as 49 MHz, VHF-FM broadcast
> bands etc. etc. and they are NOT illegal to use!!
>
> You can broadcast JUST LIKE a regular FM station if you want, and ON
> the FM band with a 100 mW stereo quality station. You can spend
> anything from $30-3000 on such a station.
>
> For more details and FACTS (instead of opinions) see:

> 
> http://www.mnsinc.com/bry/piralynx.htm
> 
> Regards - Bry
> 
> (remove the word REMOVE from my e-mail address to respond!)

I'll stick by my first statement (Its a matter of field strength). If you stay legal you'll be lucky to hear your own signal at the end of your house...not Mw but generated strength. I've played this game before and 100 Mw into a 5 foot antenna will be heard for at least 1 block. Play at your own risk...73

# 2778. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5vuj5e$e8v@apple.telalink.net>
Source record: 90850

Bill <wrc@tir.com> wrote:
>>We need laws and Congressional Intervention
> >to outlaw or atleast limit spam.
>We don't need any more government regulation at all. It is not possible
>to legislate civilized behavior.

While I don't always agree with that statement, in this case I do.
Mainly because if we outlaw spamming from U.S. sites, what's to keep
them from moving offshore? Further, many spammers are already
promoting products that are contrary to law; what makes one think
they'll obey anti-spam laws? I certainly wouldn't mind seeing the
Nashville Police haul a few spammers off to jail -- but I'd rather see
them haul off a few armed robbers/murderers/etc..

> >The good thing about attacking spammaers computer systems...

>There is nothing good about attacking anybody's computer system. There
>are already laws against this. Who is going to decide how you may use
>your computer and when you should be attacked? Me? Spammers? Big
>brother?

I'm of mixed mind on that. I have no sympathy for spammers or those
who harbor them (or their other customers) when they get shut down by
revenge attacks. But without an organized definition, we run the risk
of a million different people with their own definitions of
unacceptable behavior shutting down legitimate systems.

>Economics should drive the spammer away. Eventually all of the dimwits
>in the world will discover that it really doesn't work and is not worth
>the hassles that spammers already run into. The spam servers will not be
>connected to the net (economic reasons again).

Won't work. Spamming is so incredibly cheap that if they make only
one sale per thousand spams, they're going to be ahead financially.
Kinda like bulk postal mail. 99.9% of it gets thrown out, but if 0.1%
buy... This is especially true since most spam consists of products
of questionable legality that can't get advertising space in
legitimate media. (or items that are out-and-out illegal...)

IMHO the way to stop it is to make it economically impossible for ISPs
to harbor spammers. Allow them to deny service to domains that
transmit spam -- and allow them to refuse connections to other ISPs
that allow their clients to send spam. At the same time, the
government can help by ensuring ISPs won't face lawsuits or antitrust
problems by cutting spammers off.

>Do all you can to make spammers miserable. Do not damage their property
>in the process.

While I don't condone anti-spammers damaging other people's property,
it becomes awfully tempting when the spammers are *stealing* my
property (time, hard-drive space, connect time, long-distance time) to
transmit their material against my will. I won't sabotage them -- but
I won't feel sorry for them if someone else does.

73 Doug

# 2779. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <342350AF.5791@emily.net>
Source record: 90851
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Here are some excerpts from the FCC Part 15 rules on low-power communications devices. See the Longwave Home Page at http://members.aol.com/lwcanews/index.html and follow the links to "Part 15 Experimental Operation" for more information. There are no restrictions that prevent using such devices for "micro-broadcasting" in the 510 to 1705 kHz range as long as there is no interference to licensed radio services.

I want to emphasize, however, that 100 milliwatts is *not* legal in the FM band.

15.23 Home-built devices.

(a) Equipment authorization is not required for devices that are not marketed, are not constructed from a kit, and are built in quantities of five or less for personal use.

15.217 Operation in the band 160-190 kHz.

(a) The total input power to the final radio frequency stage (exclusive of filament or heater power) shall not exceed one watt.

(b) The total length of the transmission line, antenna, and ground lead (if used) shall not exceed 15 meters.

(c) All emissions below 160 kHz or above 190 kHz shall be attenuated at least 20 dB below the level of the unmodulated carrier. Determination of compliance with the 20 dB attenuation specification may be based on measurements at the intentional radiator's antenna output terminal unless the intentional radiator uses a permanently attached antenna, in which case compliance shall be demonstrated by measuring the radiated emissions.

15.218 Operation in the band 510-1705 kHz.

(a) The total input power to the final radio frequency stage (exclusive of filament or heater power) shall not exceed 100 milliwatts.

(b) The total length of the transmission line, antenna and ground lead (if used) shall not exceed 3 meters.

(c) All emissions below 510 kHz or above 1705 kHz shall be attenuated at least 20 dB below the level of the unmodulated carrier. Determination of compliance with the 20 dB attenuation specification may be based on measurements at the intentional radiator's antenna output terminal unless the intentional radiator uses a permanently attached antenna, in which case compliance shall be demonstrated by measuring the radiated

emissions.

Lyle, K0LR

## 2780. Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-19 00:00:00 UTC
From: Tony Giroux <agiroux@mail.cvn.net>
Message-ID: <34233145.7A970B85@mail.cvn.net>
Source record: 90852

Does anyone know of a good one beside ByteMark Amidon?

# 2781. Re: Two Triodes on one HV power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3428c9af.35662378@eskinews.eskimo.com>
Source record: 90763

bry@REMOVE.mnsinc.com (Bry) wrote:

>On Thu, 18 Sep 1997 08:11:39 -0600, carsten.esch@olympus-software.com
>wrote:
>
>>Hi,
>>I am planning to build a new HF amp with the 8877. I do have a 2m amp with
>>this tube.
>>My question is: Can I connect the plate voltage from my HV power supply on
>>both tubes, so that I only have to switch the other voltages? That would
>>mean that in one amp only high voltage would be on the plate (without
>>heating etc). Any problem for a Triode to only have anode voltage applied?
>>Thank you for your help,
>>
>>Carsten, DL6LAU
>
>Better be CAREFUL that you also connect a GROUND RETURN HT- lead to
>both amps!!! Otherwise your amp chassis could be sitting at HT+
>(that's B+ for the Yanks) and give you a nasty shock!
>

---

Also be sure you have the two chassis connected together and then
connected to your AC line ground. Most recent designs for high power
HF amplifiers have both the B- and B+ "floating" with respect to
chassis ground. This could pose a problem if there were an arc to the
chassis in either unit. Having both chassis connected together and
also to AC-line ground ensures that HV can not appear on the chassis.

73, Bill W7TI

## 2782. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3423EF11.7970@antispam.trader.com>
Source record: 90764
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

> I'll stick by my first statement (Its a matter of field strength). If
> you stay legal you'll be lucky to hear your own signal at the end of
> your house...not Mw but generated strength. I've played this game
> before and 100 Mw into a 5 foot antenna will be heard for at least 1
> block. Play at your own risk...73

N8XYN,
I don't understand what you're saying here, but Bry _is_ correct.
The old RS 12-in-1 kit had a 1 tube xmitr. The instructions for that
experiment included the CFR47 regs on the circuit (Probably required by law).

Ya' know...a 1/2 wave dipole for 100MHz(Commerial FM) is under 5' in length.
Ask a QRP guy the best way to feed 100mW to a dipole, but I'll bet the
range is in _kilometers_, not rooms or blocks. I've done 5 miles on 2m@500mW.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 2783. Re: Hacking an antenna onto a Sony Boom Box

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: davencinNO@SPAMtdl.com
Message-ID: <3423e066.3495646@news.tdl.com>
Source record: 90765
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 19 Sep 1997 09:06:19 -0700, Tim <Hynde@flash.net> wrote:

>Tim Jenkins wrote:
>>
>> Hey,
>> I've got a Sony CD player AM/FM radio and I get rotten FM reception.
>> There are no external FM (or AM) screws for me to hook in an external
>> antenna. I was going to put the cable from the cable TV into the antenna
>> jacks...but there aren't any means of connecting it to the radio.
>> Can I solder leads onto the telescoping antenna then attach the Cable TV
>> /FM reception cable to those wires?
>> Is the telescoping antenna for FM . . .or AM??
>>
>> Thanks
>> OggaBooga with the green teeth
>
>Dont bother with the cable from cable TV, there are thousands of
>frequencys on that line and will more than likely provide you with more
>noise and interferance. Get a test clip and connect 50ft or so of wire.
>That should improve things. If you want a more elaborate FM antenna,
>email me. Put the wire outside if you can for enhanced J. Geils
>reception.
>
>Tim
That may work fine and dandy, unless Tim lives in a deep valley.
Usually you can make the cable hook-up (or an external antenna hook-up
for that matter) work by splicing the center conductor of the coax (a
clip lead works well) to the antenna and connecting the shield to one
of the screws on the back of the box that connects to the chassis of
the radio. It's actually kind of close to 75 ohms usually! Good
luck.

Dave B.

# 2784. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Bis_Wichy@webtv.net
Message-ID: <600p5r$t6n$1@newsd-2.alma.webtv.net>
Source record: 90766

Hmmm very interesting... but how does it work? 2 xtal's can't be exactly the same... Does this circuit force both xtals to resonate together? Change the Q? What happens if you put a third, fourth, fifth xtal? Do you get a wider swing than with two? How about FT243 types? What if one xtal was 10.14 and the other was 10.15?

hmmm a small handful of parts and a RF freq counter could keep me busy for a few afternoons....

Bis Wichy - WD0HCO
Dallas Texas USA
CW Fists #1929 - QCWA
ARRL Life Member
bis_wichy@Webtv.net

## 2785. See the new and improved KI8CZ webpage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <3423F65C.7CD2@postoffice.worldnet.att.net>
Source record: 90767

Just added a number of new amateur radio links to my page come take a
look, its free. www.qsl.net/ki8cz
--
**********
**********

73 de
KI8CZ
Tom Isgro
OHIO

http://www.qsl.net/ki8cz

10-X #68364 SCI #1479 QRP-L #945 ARS #203
C.A.T.T #2115 FIST 2360 NORCAL ARRL

**********
**********

# 2786. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3423F62C.3702@kfa-juelich.de>
Source record: 90768

Bob Miller wrote:
>
> Gary wrote:
> >
> > wlfuqu00@pop.UKy.EDU (William L. Fuqua III) wrote:
> >
> > :-{ Did anyone ever answer the question about the Oscilloscope
> > :-{prescaler. All I have seen is talk about E-mail addresses.
> > :-{You can't prescale the input to an oscilloscope like you can
> > :-{to a frequency counter.
> > :-{ 73
> > :-{Bill wa4lav
> > :-{
> > :-{ William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
> > :-{ Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
> > :-{ University of Kentucky , Lexington, Ky 40506-0055
> > :-{
> > :-{
> > :-{
> > Weeding through the digressive BS.....I think the bandwidth in the
> > Oscilloscope is determined by frequency response of the vertical
> > amplifier components. By changing the components to those with a
> > higher frequency response, logically it should increase the bandwidth.
> > Maybe this is an oversimplification on my part, but its the best start
> > so far.
> >
> > "73" Gary KF9CM
>
> There have been some successful attempts at down converting higher
> spectrum information to the limited B/W of the older scopes. For example
> the 3.5-4 Mhz spectrum could be selectively down converted to the 0-500
> Khz spectrum of the old HP 130s and the like and be useful for looking
> at some stuff. Does not resolve the B/W limitation or make the scope
> respond any faster to a signal or pulse in a fast time domain, but in
> some limited cases a simple down converter would allow one to look at
> narrow band singles such as transmitted signals and some IF signals on a
> cheap or old machine. Perhaps some of the mates could point to a
> commercial extender or reference a home made project that would
> accomplish the task.
>
> 73
> Bob, KE6F
I wonder if there is any point in making such a device. You can get
amplitude information with a demodulator probe and a narrow-band scope.

The down converter does allow some frequency information but most modulation will be produce such small deviations that I doubt you could tell much even after the down conversion unless the local oscillator of the converter were good and were tuned rather close to the frequency of the signal to be studied. (but this is hardly a substitute for a fast scope- it is doing a job the fast scope is not able to do except with the same downconverter and a slower sweep.)

Bob

## 2787. Fax/SSTV Shareware Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <3423FB94.7217@primenet.com>
Source record: 90769

All Fax/SSTV Shareware Available via WWW (your web browser):
http://www.qsl.net/k7on/shareware/1997/fax_sstv/

Also visit my web page: http://www.qsl.net/k7on

atfax53.zip Colour SSTV, FAX and weathersatellite programs - OZ1AT
ef110.exe Easyfax 1.10 FAX reception - IK1IZA
ezsstv.zip Easy to use color SSTV reception program v3 - WB2OSZ
ftv-demo.zip FAX & SSTV software for Sound Blaster cards v0.98g - 9H1JS
ftv-noaa.zip Weather Satellite Samples for FTV - 9H1JS
ftv-sstv.zip SSTV Samples for FTV - 9H1JS
gshpc12.zip GSH-PC SSTV Converter v1.2 - DL4SAW
hiscn702.zip HiScan SSTV Program for ViewPort v7.02 - OZ2LW
jvfax70.zip FAX receive with a simple modem - DK8JV
jvfax71.zip FAX receive with a simple modem - DK8JV
jvfax71a.zip FAX receive with a simple modem - DK8JV
jvfaxgif.gif FAX receive with a simple modem (Schematics for HW needed)
k_fax.zip Fax Display for Kantronix KAM and KPC3 - N8WLC
mscan13p.zip MicroScan v1.3p (64k color VGA adapter not required) - PA3GPY
mscan211.zip MicroScan SSTV & FAX Program for PC v2.11 (ShareWare) - PA3GPY
proskan.zip Pro-Scan SSTV/FAX program v3.01 - KA1LPA
rh223a.zip Robot Helper SSTV utility for Windows and Robot 1200 - VE3EC
rh312.exe Robot Helper SSTV program v3.1.2 for Windows 95 - VE3EC
sslogtd.zip SSTV Picture Database - VE4RZ
sstvsou1.zip SSTV with Sound Card (Evaluation Copy) - DL1UR
sstvbl.zip Slow Scan TV with Soundblaster adapter - WB9MMM
vester_m.zip SSTV/FAX400/WEFAX system described in QST - K3BC
vptsr.zip Utility TSR to run JVFAX on ViewPort - KA2PYJ
winpix18.zip WinPix v1.83 SSTV program (demo) for Win 3.1/Win95 - K0HEO
winskans.zip Proscan for Windows v1.0
wxfax3_2.zip Weather Faximile Database Program v3.2
wxman201.zip WeatherMan 2.01 WEFAX Receive and Display with SoundBlaster
wxsat230.exe Weather Satellite Faximile Program using Sound Card

## 2788. TiCK keyer I.C. alternative

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: k1el@aol.com
Message-ID: <19970920172900.NAA06365@ladder02.news.aol.com>
Source record: 90770

Drop in replacement for TiCK keyer I.C., new design,
enhanced functionality.

http://members.aol.com/k1el/index.html

or e-mail me for text description

Steve K1EL

# 2789. 2 Meter or 6 Meter Antenna $ 20.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: arrow146@aol.com
Message-ID: <19970920181801.OAA04022@ladder01.news.aol.com>
Source record: 90771

1/4 wave Ground Plane

This is a very well built Antenna.

3/8" Solid Aluminum Vertical Element
gives very Wide Bandwidth (over 3 MHz)
2 Meter is over 12 MHz.

Four 1/4" Solid Aluminum Radials.
Angled for Minimum VSWR & low angle Radiation.

SO239 Connector & Stainless Hardware
for mounting on a mast up to 1 1/2".

This is a Limited Time Offer - 9/30/97

E-Mail me your UPS Address
I will ship the antenna with an invoice for
$20. + $5 Shipping (Total $25.)
Put it up, check it out.
If you don't like the antenna for any reason.
Just put it back in the box, send it back,
and owe nothing.

I am betting you will find this to be a quality product,
well worth the money and will send a personal check
for the $25.

Can I Build one for You ?

73 Allen Lowe N0IMW
Arrow Antenna
1803 S. Greeley Hwy. # B
Cheyenne, WY 82007
(307) 638-2369 Fax (307) 638-3521
Arrow146@aol.com

# 2790. FS: Special Pricing on NOS tubes and Test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <6015er$6eq$23@ha1.rdc1.occa.home.com>
Source record: 90772

NOS Tubes
6AZ8 Philips, 1 to 99 @ $2.75 ea, 100 or more @ $2.50ea
5829WA, 1 to 99 @ $3.25 ea, 100 or more @ $3.00ea
6186W (6AG5WA) 1 to 99 @ $0.12ea, 100 or more @ $0.11ea
6922 Sylvania, 1 to 99 @ $2.75 ea, 100 or more @ $2.50ea
7062/180cc Amperex, 1 to 99 @ $3.75 ea, 100 or more @ $4.00ea

Test Equipment
Hewlett Packard 8640B/323, Signal Generator, (Military AN/USM 323)
5 to 512 MHz, good working condition, but not recently calibrated,
may need minor repairs, $395.00

Microwave Components, Used, not checked, sold "as is"
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00ea
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00ea
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $45.00ea
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $45.00ea

Free Shipping in the USA on all of the above, on orders of $10.00 or over.
Orders under $10.00 add $4.00 for shipping. Sale prices valid until 9-30-97
or while supply lasts.

# 2791. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: spam_me_not@shore.net
Message-ID: <600hb8$8rd@fridge.shore.net>
Source record: 90773
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.a

narc@pacifier.com () wrote:

>For all you dumb ass's that said this was great writting, you must have
>just snuck on mommas account for this FAKE story has been used two other
>times. Each time the idiot "author" takes the name out and puts in his
>idol of the day.

Post ignored... :)

==========
73 de Jim, WK1V
Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
http://www1.shore.net/~jjmartin/jjm2.htm
==========
H

# 2792. Re: warning: mentor@cin.net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <600oqb$iso@dfw-ixnews12.ix.netcom.com>
Source record: 90774

In <5vkiqs$qld$1@morgoth.sfu.ca> peter@sfu.ca (Peter Corps) writes:
>
>
>James A. Young (mentor@cin.net) recently made several high bids on
>items up for auction on eBay: (http://cayman.ebay2.com/aw/index.html)
>
>He now refuses to even acknowledge my emails that I have sent to
>him trying to arrange payment. Apparently I'm not the only seller
>he is doing this to, as a result his feedback rating on eBay has
>now fallen to -4:
>
>http://206.79.255.84/aw-cgi/UserISAPI.dll?ViewFeedback?userid=mentor@c
n.net
>
>One of the other sellers at eBay informed me that this person has
>also posted to this newsgroup. As a public service I want you to
>know that based on his recent behaviour it is apparent that this
>person is UNTRUSTWORTHY and DOES NOT HONOR HIS COMMITMENTS.
>
>Anybody entering into a transaction with him should be careful!
>

The possibility also exsists that he disapproves of the auction process
and this is an effort to disrupt that process. If he takes equipment
and doesn't pay for it that is another matter. As it stands it looks
more like a protest effort to me.

73 Jerry

# 2793. www.potg.com = Free comedy radio, Unique and Award-Winning

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19970920151300.LAA22195@ladder01.news.aol.com>
Source record: 90775

www.potg.com = Free comedy radio, Unique and Award-Winning

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 2794. HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: DIRK BUIS <dicky.rolo@wxs.nl>
Message-ID: <34247CE6.68CD47A1@wxs.nl>
Source record: 90776

I HAVE PURCHASED A S.S.B.(IC-M710)WITH A ANTENA TUNER AT-130E ALSO A
ICOM PRODUCT.CAN'T GET THE THING TO WORK PROPERLY ANYONE KNOW'S
SOMETHING ABOUT THIS SYSTOM.
THANKS DENISE

## 2795. FT890 CAT program - free!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: "Brian E. Cauchi" <briane@geocities.com>
Message-ID: <601e8i$7e4@news.keyworld.net>
Source record: 90777
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

CatScan provides computer control for the Yaesu FT890 (and similar)
transceivers. It complements the facilities found on the radio, and adapts
the radio better to a radio facsimile monitoring environment.

*** It provides a simple way to use a Station database, and to browse the
bands selectively.

*** It has Advanced scanning facilities, to help you find the best signal on
the bands.

*** It has Short-cuts to otherwise awkward functions, such as Direct
frequency key-in, Write memories to radio and Side-band/filter toggle.

*** It has a Command line interface so that scripts can be used to control
the radio from within other programs.

It is free, and available for downloading at:
http://www.geocities.com/SiliconValley/2504/catscan.htm

73's from Brian.

# 2796. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34240389.103898871@news.atl.bellsouth.net>
Source record: 90778

On Sat, 20 Sep 1997 10:16:32 GMT, la8ak@online.no (J M Noeding) wrote:
>what is this PETER DAHL about? All I can see is that he has a
>Norwegian surname, hi

The Peter Dahl Company manufacturers transformers, particularly those
of interest to amateurs building high power equipment.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2797. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Travis Martin <travism@door.net>
Message-ID: <601k95$1e7@news.onramp.net>
Source record: 90779
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.a

You're right of course...your own writttting skills are far more eloquent. But I'm such a dumb ass that I don't know what "snuck on mommas account" could possibly mean; will you be so kind as to illuminate this?

narc@pacifier.com () writes: >
mateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital
> Followup-To: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.
>
> amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital
> References: <341F901C.A418BABF@voyager.net> <34204209.1606@juno.com>
<341ED3C8.5AA5@idiots.org>
> Distribution:
> :
> For all you dumb ass's that said this was great writting, you must have
> just snuck on mommas account for this FAKE story has been used two other
> times. Each time the idiot "author" takes the name out and puts in his
> idol of the day.

# 2798. Re: Pulse width modulator plans wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Steve <NOamradioSPAM@thebizlink.com>
Message-ID: <34245EB8.2155@thebizlink.com>
Source record: 90780

Send me an e-mail. Of course, remove the NO SPAM from my address.

N1DDZ RJC wrote:
>
> Looking to build a PWM for a Valiant or other 100-200 watt rig.
>
> Any tips or leads to the design info I need?
>
> Thanks
>
> Bob

# 2799. Re: [?] Low-noise analog adder design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34243074.7BC2@pop.removethistomailme.net>
Source record: 90781
Cross-posted to: sci.electronics.design;,sci.electronics.misc;,alt.engineering.electrical;,rec.radio.amateur.homebrew

Hi, Bob --

>
> Interesting that you'd want a sub-millisecond step. This is rather
> fast. I've done some pretty sophisticated systems that didn't need to
> step anywhere near this fast. This is a home project?

Yes, the idea being that it should be able to scan a range of several
hundred channels/second while a second receiver is monitoring one.

The low loop modulus (256) and high reference frequency range (3-5 MHz),
combined with a switchable-time-constant loop filter, makes it trivial
to achieve the switching-time goal. That part is already working,
albeith noisily. :-) There is no reason on earth why this shouldn't be
an exceptionally clean loop -- certainly reference sidebands are not a
problem. <g>

>
> Is the noise inside the loop bandwidth? If so, I'm guessing it might
> be the DDS itself....

The noise is definitely outside the loop bandwidth. It is independent
of whether the "fast" or "slow" loop filter is switched in. It does not
change when a 3.58 MHz crystal oscillator is substituted for the DDS.
In fact, it's still present with the loop open and a clean, filtered
2.5V DC source substituted for the loop filter output. It is
absolutely, unquestionably, coming from the DAC/op-amp combination.

The noise is *not* present with a filtered DC source driving the VCO
tuning line directly, without the DAC/op-amp.

> Count me among the "Great unwashed masses" who have never pre-steered
> a VCO with a DAC. So I can't help much here. But the loop topology
> scares me, I'm afraid.

The architecture sounds a lot more complicated and "scary" than it is,
but is actually pretty bulletproof. The whole thing is controlled via a
PC parallel port, and the sequencing looks like:

(frequency change request occurs)
- Switch loop filter to "fast, dirty" mode
(high bandwidth, low RC time constant)
- Look up output frequency and program DAC to
steer the VCO to the closest intermediate point
(within 2-3 MHz)
- Program DDS chip for required reference frequency

(=output in MHz / 256) -- takes about 350 uS
- Wait ~500 uS for frequency lock
- Switch loop filter to "slow, clean" mode
(BW = a few hundred Hz at most to clean up
multiplied DDS noise)
(frequency change request complete, elapsed time < 1 ms)

This business about getting a clean voltage sum has been the only real hangup I've experienced on the project, but it's a nasty one. I am far from knowledgeable when it comes to the noise performance of op-amps and such, which is why I'm very tempted to dodge the problem altogether with a dual-varactor VCO.

thanks -- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 2800. WTB: YG-455S, YG-455S-1 or similar SSB Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: k3ky@juno.COM
Message-ID: <19970920.191149.6862.3.k3ky@juno.com>
Source record: 90782

Did anyone do the International Radio mods and have one of these kicking around in a desk drawer somewhere? Looking for a reasonably priced used one. Either 2.4 or 2.1 KHz BW would be fine.
73, David

David Sinclair K3KY
e-mail: k3ky@juno.com

## 2801. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEGvDK1.9Ep@netcom.com>
Source record: 90783
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

In article <3422ff55.6227341@news1.mnsinc.com>,
Bry <bry@REMOVE.mnsinc.com> wrote:
>Your answer is VERY misleading here!
>Micro-broadcasting is done LEGALLY in many cases.
>
>There is provision for folks to transmit at 100mW into a five foot
>antenna legally - and in the broadcast bands. RAMSEY ELECTRONICS and
>SEVERAL other manufacturers sell a variety of transmitters for this
>purpose. Everyone knows Radio Shack and other toy companies sell
>"wireless microphones" and "wireless intercoms" etc. etc. that all use
>100 mW or so on the medium wave, as well as 49 MHz, VHF-FM broadcast
>bands etc. etc. and they are NOT illegal to use!!
>
>You can broadcast JUST LIKE a regular FM station if you want, and ON
>the FM band with a 100 mW stereo quality station. You can spend
>anything from $30-3000 on such a station.

This is SERIOUSLY WRONG. The relevant paragraphs, last I looked,
were 47 CFR 15.219 and 47 CFR 15.239. The Code of Federal regulations
is at http://www.access.gpo.gov/nara/cfr/index.html if you want to check.

First a minor quibble, AM broadcast band allows 100 milliwatts input
power with a 3 meter (10 foot) antenna/ground system.

FM broadcast band is severely restricted to a field strength of of
250 microvolts per meter at a distance of 3 meters. You plug this
into various antenna equations and you get a radidiated power of
around 30 NANOWATTS with an omni directional antenna. Enough to
get you about 100 feet.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 2802. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Bob Headrick <no@spam.com>
Message-ID: <3424A2D7.5828B4DD@proaxis.com>
Source record: 90784
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Bry wrote:

> You can broadcast JUST LIKE a regular FM station if you want, and ON
> the FM band with a 100 mW stereo quality station. You can spend
> anything from $30-3000 on such a station.

Not in the US without a licence.

# 2803. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: dnorris@nospam.k7no.com
Message-ID: <342332dc.3631048@news.dancris.com>
Source record: 90785
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Doug Younker <dougy@ruraltel.net> wrote:

>Hello,
> before this thread I had heard of three explanations for the term
>HAM. This thread has had all kinds of variations on those three. What
>gets me is the willingness no focus on the negative definitions, I don't
>deny there are poor operators in the amateur ranks.
>

Fer sure, fer sure. Hell, HAM is the very best part of a pig. The
rest is just PORK. I cleaned out hog houses when I was a kid and I
guarantee, I HATE PIG. Pigs, especially sows, are mean and very
dangerous. Boars are, .... well.... boars. I do eat ham and bacon
(Note, both are smoked) but the rest, fergit it.

> there is no absolute definitions of the term HAM, why worry about it?
>If a none amateur asks for a definition, what's wrong with replying.
>There is no verifiable answer, it's only a nick-name. IE; roughneck,
>swamper and so on?

C. Dean Norris, K7NO
e-mail to dnorris@k7no.com
What's a dazzling urbanite like you
doing in a rustic setting like this?

# 2804. FS: NATIONAL TANK ASSEMBLY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <5vv5rp$rqm@bgtnsc03.worldnet.att.net>
Source record: 90853

Have a National Tank Assembly MB-150, 150 watt,1500v , 3 coil, 4-ganged condenser, RF choke:tunes 80-10 mtrs for 50-600 ohms balanced or single ended amps. Used but in very good condx: $45 +UPS WS0E
Joe.7hc@juno.com

# 2805. FS: NATIONAL TANK ASSEMBLY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <5vv5sl$ca5@bgtnsc02.worldnet.att.net>
Source record: 90854

Have a National Tank Assembly MB-150, 150 watt,1500v , 3 coil, 4-ganged condenser, RF choke:tunes 80-10 mtrs for 50-600 ohms balanced or single ended amps. Used but in very good condx: $45 +UPS WS0E
Joe.7hc@juno.com

# 2806. Re: RE:ALINCO DR-130 SETUP FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Larry <lpen@mail1.nai.net>
Message-ID: <01bcc57b$fc7e0da0$77a485d0@default>
Source record: 90855

Larry <lpen@mail1.nai.net> wrote in article
<01bcc4c0$382efe20$92a485d0@default>...
> ALINCO 2M DR-130 MOBILE RADIO,
> CUSHCRAFT 124 2M BEAM ANTENNA AND POLES,
> ANTENNA ROTOR AND ACESSORIES,

> 12VDC 20AMP POWER SUPPLY WITH METER ,
> 50 FT RG-259
> USA SALE ONLY!!!!
> *** ALL FOR $400.00**203-743-7170 email lpen@mail1.nai.net
>
>

# 2807. Loking for some good KCT links for my homepage !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Geert <pass@glo.be>
Message-ID: <01bcc57b$8f25ce00$65b630ce@pass.glo.be>
Source record: 90856

Hello

I'm looking for some good links for my homepage can somebody help?

vissit my homepage and PLAESE SIGN my guestbook !!!!!!!!!!!

http://user.glo.be/~pass

Geert Pirens (onl2057)

73!

# 2808. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: narc@pacifier.com
Message-ID: <342317e5.0@news.pacifier.com>
Source record: 90857
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.a

mateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital
Followup-To: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.

amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital
References: <341F901C.A418BABF@voyager.net> <34204209.1606@juno.com>
<341ED3C8.5AA5@idiots.org>
Distribution:
:
For all you dumb ass's that said this was great writting, you must have
just snuck on mommas account for this FAKE story has been used two other
times. Each time the idiot "author" takes the name out and puts in his
idol of the day.

# 2809. Super VXO from Japan Really Works!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34236cb4.0@newshost.pcug.org.au>
Source record: 90858

wmeara@erols.com (Bill Meara ) wrote:
>
{talk about connecting two crystals in parallel to get wider VXO swing
deleted}
>
>This would be a very useful development for the QRP/Homebrew
>community.
>

It certainly is. I did some experiments with four crystals and the VXO circuit on the 7N3 station's homebrew home page (see my QRP page for the URL).

The worst increase in shift I got was 44%, while the best that I got was close to 200%. And, I didn't attempt to optimise the component values - the experiment was just to prove that using two crystals in parallel really works. Sometimes the increased range was at the top end, but at other times it was near the bottom. I found that the percentage increase in pulling range is the highest when a sizeable series inductor is being used in the crystal circuit.

Even the small (non HC/6) type that are not recommended for VXOs showed some improvement. The best change I got was with 7.159 MHz xtals whose range increased from 9 kHz to 27 kHz when I added the second xtal.

From my own experience, pulling ranges of 25-40 kHz should be possible on 40 metres, and correspondingly higher on the other bands. Certainly a little VXO DSB rig on 10 metres would be a fun project - a 100 or 150 kHz pulling range (say 28.350-28.500 MHz) should be sufficient.

73,
--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 2810. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Ted Phillips <ted@*spam-free*ll.net>
Message-ID: <9147cd$5172f.289@news.protocom.com>
Source record: 90859
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,r

That was incredibly witty. You should do more.

Sidewinder

# 2811. Re: Peter Dahl WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3423979a.711718@news.online.no>
Source record: 90860

On 11 Sep 97 14:08:52 GMT, staylor@whpost.wh.lucent.COM (Seth Taylor)
wrote:

>The correct URL is:
>
>http://www.pwdahl.com/
>
>
>Seth KC2WE

what is this PETER DAHL about? All I can see is that he has a
Norwegian surname, hi
....
73
Jan-Martin N�ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 2812. MFJ BLOWOUT unbelievable sale !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcc5a8$f2dd53a0$2f04d9cf@radiodan.earthlink.net>
Source record: 90861
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Hi Guys and Gals !

I've done it again!
Huge MFJ blowout sale !!
If you don't go you won't know!

If you don't get it now you'll definately kick yourself later!
Go to my web page, you'll see the link.

Check my pages OFTEN, I've got TONS of other stuff to list.

73, Dan W7RF
--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/
Classic & Modern Ham Equipment
Ramsey Kits "closeout" see my web page ! **

# 2813. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-20 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3423E860.B25@antispam.trader.com>
Source record: 90862

> > I once saw how de Forrest used a flame in his lab as a rectifier. Does

My dad was an EE for Wabash Magnetics, in Huntington, IN. DeForest
was from around there somewhere. I remember Dad showing me a memographed
technical paper, given to him by a co-worker, on this subject. The
drawings were hand done. Circa 1965.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 2814. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Jim <jim.parnell@nzart.org.nz>
Message-ID: <3423BD51.ACAB8507@nzart.org.nz>
Source record: 90786

Chris Lamousin wrote:

> I once saw how de Forrest used a flame in his lab as a rectifier. Does
>
> anyone have any info on this? I would be interested in the laws that
> govern this phenomena.
> Chris

Chris,

Go find a heating system specialist that sells ionisation detectors which are used as flame fail devices on furnaces and boilers. You will find all about the way that flames rectify from the manuals which they will have about the devices.

I used them a lot for this purpose many years ago.

73,
Jim, ZL2APE.
jim.parnell@nzart.org.nz

# 2815. FS: National Tank Assembly Sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <01bcc62f$437c1860$2811430c@dell>
Source record: 90787

Nat. tank Assembly has been spoken for. Joe.7hc@juno.com WS0E

# 2816. Re: Pulse width modulator plans wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <7A4E56803C587C16.9A5999012069ED95.D655A33D3A4FD5A4@library-proxy.airnews.net>
Source record: 90788

n1ddzrjc@aol.com (N1DDZ RJC) wrote:

>Looking to build a PWM for a Valiant or other 100-200 watt rig.
>Any tips or leads to the design info I need?

PWM cannot be used with these old transmitters, Bob. Without sophisticated Envelope Elimination and Restoration techniques and DC coupling of the modulator, you would wind up transmitting an unwanted sideband and a useless, annoying carrier. You would likely wind up with a conventional AM signal which, as you know, would be a selfish use of amateur spectrum space.

Fred, W8OY
jfriley@airmail.net

# 2817. Re: Radio E-mail discussion lists FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: jfeng@ibm.com
Message-ID: <19970920.191124.691@vnet.ibm.com>
Source record: 90789
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.swap

In article <342301dc.6874358@news1.mnsinc.com>, on Fri, 19 Sep 1997 22:53:08 GMT,
Bry <bry@REMOVE.mnsinc.com> writes:
>On Sat, 13 Sep 1997 12:45:12 GMT, syfr@mindspring.com (syfr) wrote:
>
>>bry@REMOVE.mnsinc.com (Bry) wrote:
>>
>>>Great new information on how to get on a REALLY GOOD E-mailing
>>>discussion list with hams who share your interests.
>>
>> Absent from this list is the information for the original
>>Boatanchors list. A trial sub to that list may be obtained by
>>writing:
>> listown@jackatak.theporch.com
>>and asking for a trial subscription.
>>
>> Wonder why you left this off, Brian?
>
>Found that list a bit overwhelming due to heavy volume PLUS they
>charge $12 or $15 a year ... for WHAT?
>
>All other lists are free, so I encourage folks to try them first!
>However, I should include the JACKATTACK boatanchors group with a
>caveat I suppose.
>
>I have links to their ARCHIVES on my links section. I find THAT more
>useful.
>
>If I want to reply to the whole group I can get the list and do that
>too!
>
>Thanks for your helpful comment though, and I will add that list.
>
>Bry, AF4K
>
>(remove the word REMOVE from my e-mail address to respond!)

I find it worth the $12/year for the BoatAnchors subscription because this
group has almost zero spam and has zero off-topic political pollution.
The signal-to-noise ratio is very high, and if you are interested in
tube-based communications or test equipment, I recommend you ask for
the free trial period. WPE9CGQ

## 2818. F.S. - NOS tubes, books, etc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970921034100.XAA18643@ladder02.news.aol.com>
Source record: 90790

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #911-T.

# 2819. Re: NE-602/Ceramic Resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970921032101.XAA11589@ladder01.news.aol.com>
Source record: 90791

Hi Barry--

Several home-builders in the QRP catagory have been successful using the NE602 as a balanced modulator. The MFJ SSB radios, and possibly some other kits, also use the NE602 for a balanced modulator. From my own experience, it's difficult to get really good carrier surpression driving the NE602 with its internal oscillator. However, when driven from a seperate LO source, very deep surpression is possible. In a transceiver, this means stealing LO from the receiver BFO. Don't know about using ceramic resonantors with the NE602--haven't tried it.

73

Rick K1BQT

# 2820. heathkit hx-10 marauder xmtr $125

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcc71a$1667a6a0$50ddd8cc@km3g.cts.com>
Source record: 90792
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Needs minor work. Cosmetically it is very collector quality. Extensive documentation.
The front panel is cherry-cherry!! $125.00 and you cover shipping from san diego zip 92139. Weighs 100 pounds. You won't be disappointed.

Lane
Kilo Mexico Three Germany

## 2821. vintage test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcc71c$866c7dc0$50ddd8cc@km3g.cts.com>
Source record: 90793
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Clearing out the shack. Everything works unless otherwise noted. I don't have documentation for most items (sorry).

-- Heathkit HM-102 2kw HF power and swr meter. $30.00
-- Heathkit HM-2102 vhf/uhf power and swr meter (untested). $25.00
-- Heathkit SB-600 speaker. Matches the SB line. Looks great. $45.00
-- Heathkit IM-25 laboratory all solid state VOM. This is the one with the huge 6" analog meter. $45.00. Could use a paint job. Heath used that rubbery type paint.
-- Heathkit HM-2140 2kw HF swr and power meter. Needs work. Cosmetically looks real good. No scats with this. Has potential as a parts unit or fixer-upper. $25.00
-- Heathkit IG-102 sig gen. Looks fair. $35.00
-- Heathkit electronic eye signal chaser. Model T-4. $30.00
-- Heathkit sig gen model SG-8. $25.00
-- Heathkit o'scope calibrator. No model number. Untested. Mid 70's era. $20.00
-- Heathkit o'scope. Very old but very, very good condx. Model IO-12. $40.00
-- Eico model 377 audio generator. Looks fair. $30.00
-- Philco sig gen model 7200. $30.00
-- Textronix model 317 oscope. Timebase goes down to .2uS or .04uS expanded. A very neat, little o'scope. $75.00
-- Heathkit IM-18 VTVM. $30.00

If you want EVERYTHING listed I will cut you a huge percentage off of the individual prices.

## 2822. Motorola MPN3401

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970921113001.HAA00919@ladder01.news.aol.com>
Source record: 90794

Anyone with an old Mot data book? Looking for data on the 3401. Obviously obsolete, all I can find is the 3404, VHF switcher. Need carrier lifetime of the 3401. I have exonerated them as a source of Intermod to the -33 dBM level on 20 meters, (Ip3 of +21) but my homebrew test equipment doesn't extend to 160!

Used in Cubic 102, 103 series as signal switchers and BPF switches.

Tnx if you can help

Well, tnx anyway.

W4ZCB

# 2823. Please help identify a Component

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Kin <kng@pacbell.net>
Message-ID: <01bcc663$60005df0$6401aace@kinsnt>
Source record: 90795

I am hoping if someone can help me identify this component for my Sony TV.

The TV's Model is KV-27EXR25, the component number is THP601.

The component is rectangular and looks like a regular relay. But it's only got 3 legs and is enclosed in a black plastic case. 2 of the legs connects directly to the 2 incoming power leads. The manufacture is TDK. There are 2 sets of numbers printed on top. They are:
081-23
1N02

My TV's symptom is that there is no sound and no picture. I traced the power all the way to this component. This component is very hot to the touch. But it's enclosed in a plastic case and there is no heat sink attached to it. So I think this component may be the culprit.

If anyone can help me with any info on where I can get the schematic for my TV, or where can I get the replacement component, or help me identify what it is, I'll appreciate greatly. Thanks in advance.

Kin

# 2824. NEED HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: DIRK BUIS <dicky.rolo@wxs.nl>
Message-ID: <34257126.A3690DE6@wxs.nl>
Source record: 90796
Body handling: HTML body converted to readable text

HELLO
Recently bought a S.S.B.IC.M710 with a antenna tuner AT-130E
also by ICOM
compagny.I folloed the instruction but can't get a medim or strong
signal on reciving or transmitting.For antena i use a normal steel wire
12 meters long.
Anyone know anything about this instalation?
merci NICOLE

HELLO

Recently bought a S.S.B.IC.M710 with a antenna tuner AT-130E also by ICOM

compagny.I folloed the instruction but can't get a medim or strong
signal on reciving or transmitting.For antena i use a normal steel wire
12 meters long.

Anyone know anything about this instalation?

merci NICOLE

## 2825. Project Argus Radio Telescope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: n1wkv@aol.com
Message-ID: <19970921193101.PAA28985@ladder01.news.aol.com>
Source record: 90797

I am trying to locate Radio Amateurs to help with development, construction and operation of a Dedicated SETI Radio Telescope. Please post here or E-mail me with questions or interest.

# 2826. Re: Motorola MPN3401

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: k7itm@aol.com
Message-ID: <19970921203501.QAA09082@ladder02.news.aol.com>
Source record: 90798

In article <19970921113001.HAA00919@ladder01.news.aol.com>,
johnsonhe@aol.com (JohnsonHE) writes:

>Anyone with an old Mot data book? Looking for data on the 3401. Obviously
>obsolete, all I can find is the 3404, VHF switcher. Need carrier lifetime
>of the 3401. I have exonerated them as a source of Intermod to the -33 dBM
>level on 20 meters, (Ip3 of +21) but my homebrew test equipment doesn't
>extend to 160!

(I believe the MMBV3401 is still current...and appears to be just in a
different package.)

The MPN3401 data sheet says "...designed primarily for VHF bandswitching
applications..." It's strangely quiet about carrier lifetime. Guess you
could do a
test with a pulse with fast rise/fall times and a scope?

73,
K7ITM

Cheers,
Tom
Please email to: tomb@lsid.hp.com.
The account from which this was posted is seldom checked for email.

# 2827. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: vorlin@mail.geocities.com
Message-ID: <vorlin-ya02408000R2109971451440001@snews.zippo.com>
Source record: 90799
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

somebody (attribution lost) wrote:

> >You can broadcast JUST LIKE a regular FM station if you want, and ON
> >the FM band with a 100 mW stereo quality station. You can spend
> >anything from $30-3000 on such a station.

From title 47 of the Code of Federal Regulations, Part 15, subpart C:

Sec. 15.239 Operation in the band 88-108 MHz.

(a) Emissions from the intentional radiator shall be confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the frequency range of 88-108 MHz.

(b) The field strength of any emissions within the permitted 200 kHz band shall not exceed 250 microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in Sec. 15.35 for limiting peak emissions apply.

(c) The field strength of any emissions radiated on any frequency outside of the specified 200 kHz band shall not exceed the general radiated emission limits in Sec. 15.209.

(d) A custom built telemetry intentional radiator operating in the frequency band 88-108 MHz and used for experimentation by an educational institute need not be certified provided the device complies with the standards in this part and the educational institution notifies the Engineer in Charge of the local FCC office, in writing, in advance of operation, providing the following information:
(1) The dates and places where the device will be operated;
(2) The purpose for which the device will be used;
(3) A description of the device, including the operating frequency, RF power output, and antenna; and,
(4) A statement that the device complies with the technical provisions of this part.

# 2828. Mirage Amplifiers NEW ! discounted!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcc6e5$d263d660$a68ad9cf@radiodan.earthlink.net>
Source record: 90800
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Here's the Mirage line of amplifers I promised to post.

Very limited quantites, buy now and save big!!

Visit my web site to see it all !!!

Visit often, much more to come!!

73, Dan W7RF

--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/
Classic & Modern Ham Equipment
MFJ/Ramsey Kits "closeout" see my web page ! **

## 2829. CMOS Super Keyer Info - circa 1981

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Don <audi4don@mediaone.net>
Message-ID: <3425D31E.5CC0@mediaone.net>
Source record: 90801

If anyone has any documentation for the original CMOS super keyer, plans, operating instructions, etc. I would be willing to compenstate them for any copying and mailing costs. This one has "KC0Q" in the upper left corner of the card and "N011" in the upper right corner.

Don Culpepper
KF4DQD

## 2830. MDT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Don Crozier <ka9qjg@tsrcom.com>
Message-ID: <3425F935.4EDE@tsrcom.com>
Source record: 90802
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.ham-radio,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,alt.radio.internet

Hi From Don, KA9QJG Here is a little better copy of the orignal MDT, we still need to share info and get it better let me know if it works for you ??E-MAIL KA9QJG@TSRCOM.COM We also need to know what the legality of monitoring this type of communications??Its not in the CELL portion of the band,Its not SCRAMBLED or ENCRYPTED but Clear ASCI TEXT 4800 BAUD like Ham Radio pkt
HAPPY SCANNING TO ALL AND ENJOY

# 2831. Re: NE-602/Ceramic Resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3425859d.0@newshost.pcug.org.au>
Source record: 90803

k1bqt@aol.com (K1BQT) wrote:

>it's difficult to get really good carrier surpression driving the NE602
>with its internal oscillator. However, when driven from a seperate LO
>source, very deep surpression is possible. In a transceiver, this means
>stealing LO from the receiver BFO. Don't know about using ceramic
>resonantors with the NE602--haven't tried it.
>

I tried using the 602 internal oscillator as a ceramic resonator VXO with
a DSB rig for 80m. It wasn't really successful. The main problem was
that the output of the transmitter changed drastically as you tuned
across the tuning range.

Using an external one transistor ceramic resonator VXO fixed the problem.

73,
--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____________________________________________________

# 2832. Transistor Substitutions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: astone@erols.com
Message-ID: <3425B418.1904@erols.com>
Source record: 90804

Hi -- I'm trying to repair an old Heath power supply and need some suggestions on transistor/fet substitutions. It appears that someone did try to repair this thing and attempted to use whatever they happened to have in their junk box. No good. The only source for substitutes I could find is from NTE but I expect that I could get buy with more common substitutes that I might find at Radio Shack or elesewhere. I've had no luck trying to find the original parts in the Newark, Mouser, Digikey, etc. catalogues. The original parts that I'm looking for are 2N4304 (fet), 2N3566 and 2N3393. They're used in the regulator circuitry -- I guess before the days of 3 terminal regulators. Any help would be appreciated.

73,

Ron (KA3J)

# 2833. Vectronics/MFJ new at major discounts!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcc6d0$f37d3ea0$a68ad9cf@radiodan.earthlink.net>
Source record: 90805
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have just bought out another brand new inventory of Vectronics stuff.
Vectronics was bought my MFJ. Alot of really neat stuff!!!

I'm having alot of fun finding, buying and posting this stuff so YOU
BENEFIT !!!

Go to my pages and see the Vectronics/MFJ stuff there

Check back often, you won't believe how much more I have to list!!

73, Dan
--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/
Classic & Modern Ham Equipment
MFJ/Ramsey Kits "closeout" see my web page ! **

# 2834. Re: Transistor Substitutions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970921183318.15967A-100000@Stratus.CAM.ORG>
Source record: 90806

I've used semiconductor replacement guides for twenty years, but I don't recall ever buying one of the replacement line products.

If I was looking for a replacement for something that I didn't have on hand, I'd look up the device I was trying to replace in something like the ECG replacement guide (I used to use an HEP guide years ago). From that, you'd get the specs. If it turns out to be fairly general purpose, then pick some transistors that you happen to have on hand, or which are readily available, and see if they happen to translate to the same replacement. If not, you might find the specs are similar enough that you could try the device. If the match isn't exact or good, try something else.

This often does work fine for general purpose devices. It's harder for things used in a more obscure function. I remember looking up quite a few power transistors to come close to even a close match to a horizontal output transistor to simply check if a new transistor would fix the problem.

For instance, I just looked up the 2N3566 and it crosses to an ECG123A. I know that must be a common device since I remember coming up with that ECG number quite a lot when looking up transistors. Picking a common "common" transistor, the 2N3904, I see that it too crosses to the ECG123A.

This may not be a suitable substitute, but then you might find that if you spent the money on the ECG replacement that it too would not work. But chances are that it will.

The MPF102 does not cross to the same device as the 2N4304. The DC characteristics are different, so it's not just a matter of the MPF102 having RF qualities. Whether it would work would depend on how it is used, and the circuit. I would think in a power supply the DC specs would tend to be more crucial than in a preamp.

How is the 2N4304 used in the cicuit? Is it by chance being used as a current source? The gate is connected to the source (or is it the drain?), perhaps with a resistor. I can picture such a circuit being used in a power supply feeding a zener diode instead of a voltage dropping resistor.

Michael VE2BVW

On Sun, 21 Sep 1997 astone@erols.com wrote:

> Hi -- I'm trying to repair an old Heath power supply and need some
> suggestions on transistor/fet substitutions. It appears that someone did

> try to repair this thing and attempted to use whatever they happened to
> have in their junk box. No good. The only source for substitutes I
> could find is from NTE but I expect that I could get buy with more common
> substitutes that I might find at Radio Shack or elesewhere. I've had no
> luck trying to find the original parts in the Newark, Mouser, Digikey,
> etc. catalogues. The original parts that I'm looking for are 2N4304
> (fet), 2N3566 and 2N3393. They're used in the regulator circuitry
> -- I guess before the days of 3 terminal regulators. Any help would be
> appreciated.
>
> 73,
>
> Ron (KA3J)
>
>

## 2835. CMOS Super Keyer--circa 1981--Documentation??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Don <audi4don@mediaone.net>
Message-ID: <3425CA6E.436F@mediaone.net>
Source record: 90807

If anyone has any documentation for the original CMOS super keyer, plans, operating instructions, etc. I would be willing to compenstate them for any copying and mailing costs. This one has "KC0Q" in the upper left corner of the card and "N011" in the upper right corner.

Don Culpepper
KF4DQD

## 2836. Source for Crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: jcarey@csn.net
Message-ID: <604ie6$lif$3@news-2.csn.net>
Source record: 90808

Hello All,

I am looking for a 10.700 MHz crystal for testing
the IF stage of a homebrew receiver. Any ideas
where I could find one of these? I'd really like
parallel resonant and an accuracy of a few tens
of ppm, but I'll compromise on those. Obviously,
this being a homebrew project, cost is a concern.

Thanks for any input,

Joe

# 2837. Re: Please help identify a Component

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEGx8wo.Myq@netcom.com>
Source record: 90809

In article <01bcc663$60005df0$6401aace@kinsnt>, Kin <kng@pacbell.net> wrote:
>I am hoping if someone can help me identify this component for my Sony TV.
>
>The TV's Model is KV-27EXR25, the component number is THP601.

The newsgroup sci.electronics.repair is a better place to ask this question. Also recommended is the WWW FAQ site for the group at http://www.repairfaq.org . Try reading that first.

>The component is rectangular and looks like a regular relay. But it's only
>got 3 legs and is enclosed in a black plastic case. 2 of the legs connects
>directly to the 2 incoming power leads. The manufacture is TDK.

It's the degaussing coil power control, sometimes called a Posistor. Every time the television is turned on after being off for a while, the magnetic coil that's built in around the front of the picture tube is energized to erase out any residual magnetism that can affect the quality of the colors that are displayed. Inside the component there are 1) a temperature dependent resistor and 2) a heater. When the set is cold, the temperature dependent resistor has a low resistance, and the degaussing coil gets a large current through it. (This is the loud hummming thunk you hear when you turn it on). The temperature dependent resistor then heats up, which causes its resistance to rise, and the current in the coil to decrease, pretty much down to nothing. The heater then keeps the temperature in the component high enough so that the high current doesn't reoccur until the set has been turned off for a while.

See the web site for suggestions on where you can get the servicing information and addresses for parts distributors that specialize in the repair market.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 2838. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-21 00:00:00 UTC
From: Bill <billharr@flash.net>
Message-ID: <3425FAB0.23CD@flash.net>
Source record: 90810
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Chris Hurd wrote:
>
> Howdy from Texas,
>
> Our microstation here in San Marcos
> has been up nearly six months. The
> only entity trying to shut us down
> is the city, and they're not doing
> a very good job... their case thrown
> out of municipal court (for "operating
> a bus. out of a res." the station is
> not a bus., entirely non-commercial).
>
> Broadcasting at 35 watts, reaching maybe
> five mile radius, can be heard along I-35
> between Austin/San Antonio. It is perfectly
> legal, mainly because it doesn't bleed on
> any lisc. stations. In fact, a new Houston
> station had to turn down their power so
> they wouldn't bleed us US (we're 105.9 FM).
>
> Invite all to listen live over the net
> via Real Audio, station is up 24/7, programming
> is extremely diverse in nature.
>
> Hear us at http://www.mediadesign.net
>
> Thanks,
> Chris

If you are not licensed, you are not legal in any sense of the word.

# 2839. Re: Source for Crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970922003314.14325A-100000@Ocean.CAM.ORG>
Source record: 90713

How wide is the bandwidth of the IF that you are testing? Various alternatives to getting a crystal come to mind, but depend on whether you need it on an exact frequency for alignment purposes, or just for testing.

The third harmonic of a color subcarrier crystal will come out about 40KHz high.

I recall a circuit in Elektor magazine from about twenty years ago that used a ceramic filter (not resonator) in an oscillator for use as a 10.7Mhz signal generator. I can't remember what kind of circuit it used.

If you are converting to a second IF of 455KHz, then a 10.240MHz crystal is commonly used to make the conversion to the second IF. If you were to mix that with a 455KHz signal (the BFO, perhaps?), you would get 10.7MHz. Even if you weren't doing a second converstion, you could pick up a 10.240 MHz crystal (found in double converstion CB sets, 49Mhz walkie talkies, and probably other pieces of electronic equipment) and mix it with a 455KHz signal. You might happen to have the latter at hand, or at least it being a common frequency might be easier to get ahold of. Or maybe you can get a 455KHz cerqmic filter (with three terminals, not a two terminal ceramic resonator) out of an AM broadcast receiver and get it to work in an oscillator).

Tapping a 10.7MHz IF signal from an already existing receiver (such as a 2Meter rig or a scanner, make sure the IF is in fact 10.7MHz) might be another possibility.

I'm sure there are other work arounds that will get you the needed signal without the exact crystal.

Michael VE2BVW

On Sun, 21 Sep 1997, Joe Carey wrote:

> Hello All,
>
> I am looking for a 10.700 MHz crystal for testing
> the IF stage of a homebrew receiver. Any ideas
> where I could find one of these? I'd really like
> parallel resonant and an accuracy of a few tens
> of ppm, but I'll compromise on those. Obviously,
> this being a homebrew project, cost is a concern.
>
> Thanks for any input,
>
> Joe

>
>

## 2840. Heathkit Tubetester Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Toolman <poustie@concentric.net>
Message-ID: <01bcc70c$3fad7ac0$2fd2adce@user>
Source record: 90714
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have a Heathkit tubetester model 17-21 in not working condition. I am seeking schematics, user and/or service manual, to put it into workable condition. Any help greatly appreciated. Will gladly send sase or ?
As I understand there are many close cousins of this small portable tester, I would welcome even similar model's info. Best Regards to all.......

Tim Poustie
VE7TBP
poustie@concentric.net

# 2841. Re: Please help identify a Component

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: dk3410@gnc.net
Message-ID: <605ocd$maj@niven.ksc.nasa.gov>
Source record: 90715

In article <01bcc663$60005df0$6401aace@kinsnt>, kng@pacbell.net says...
>
>I am hoping if someone can help me identify this component for my Sony TV.
>
>The TV's Model is KV-27EXR25, the component number is THP601.
>
>The component is rectangular and looks like a regular relay. But it's only
>got 3 legs and is enclosed in a black plastic case. 2 of the legs connects
>directly to the 2 incoming power leads. The manufacture is TDK. There are
>2 sets of numbers printed on top. They are:
>081-23
Have you been to sci.electronics.repair? The also have a very usefull FAQ on
the WEB.

# 2842. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Chris Hurd <chris@mediadesign.net>
Message-ID: <34267127.2AD8@mediadesign.net>
Source record: 90716
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Howdy from Texas,

Our microstation here in San Marcos
has been up nearly six months. The
only entity trying to shut us down
is the city, and they're not doing
a very good job... their case thrown
out of municipal court (for "operating
a bus. out of a res." the station is
not a bus., entirely non-commercial).

Broadcasting at 35 watts, reaching maybe
five mile radius, can be heard along I-35
between Austin/San Antonio. It is perfectly
legal, mainly because it doesn't bleed on
any lisc. stations. In fact, a new Houston
station had to turn down their power so
they wouldn't bleed us US (we're 105.9 FM).

Invite all to listen live over the net
via Real Audio, station is up 24/7, programming
is extremely diverse in nature.

Hear us at http://www.mediadesign.net

Thanks,
Chris

N8XYN wrote:
>
> > Your answer is VERY misleading here!
> > Micro-broadcasting is done LEGALLY in many cases.
> >
>
> I'll stick by my first statement (Its a matter of field strength). If
> you stay legal you'll be lucky to hear your own signal at the end of
> your house...not Mw but generated strength. I've played this game
> before and 100 Mw into a 5 foot antenna will be heard for at least 1
> block. Play at your own risk...73

# 2843. Re: [?] Low-noise analog adder design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: GEOTEK@FLEX.NET
Message-ID: <342665cf.227899633@NEWS.ZIPPO.COM>
Source record: 90717

John Miles <jmiles@pop.removethistomailme.net> wrote:

>
>Wondering if anyone can offer any suggestions on the following problem.
>
>I'm experimenting with a very simple homebrew PLL circuit based around a
>VCO running between 770 and 1290 MHz, using a 3-5 MHz DDS as a reference
>clock with a fixed division modulus of 256. This will ultimately serve
>as the first LO for a general-coverage VHF/UHF receiver project.
>
Using a DDS as a reference works pretty well, but you should really
narrow the range of the DDS and use a band-pass to limit the effects
of the spurs generated by the DDS. I have built synthesizers using
this approach with the nominal DDS output at 455KHz. I filtered the
DDS with a couple of ceramic resonators, and got a beatiful reference.
I reccomend trying the National Semi PLLatimum series of PLL chips.
Do course tuning with the "N" and fine tuning with the DDS. This
system works great. With a properly designed loop filter, youy will
have no problem reaching the 1mS settling time you need.

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

# 2844. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <342677AF.3777@worldnet.att.net>
Source record: 90718
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Dennis Erwin Thurlow wrote:
>
> > I'll stick by my first statement (Its a matter of field strength). If
> > you stay legal you'll be lucky to hear your own signal at the end of
> > your house...not Mw but generated strength. I've played this game
> > before and 100 Mw into a 5 foot antenna will be heard for at least 1
> > block. Play at your own risk...73
>
> N8XYN,
> I don't understand what you're saying here, but Bry _is_ correct.
> The old RS 12-in-1 kit had a 1 tube xmitr. The instructions for that
> experiment included the CFR47 regs on the circuit (Probably required by law).
>
> Ya' know...a 1/2 wave dipole for 100MHz(Commerial FM) is under 5' in length.
> Ask a QRP guy the best way to feed 100mW to a dipole, but I'll bet the
> range is in _kilometers_, not rooms or blocks. I've done 5 miles on 2m@500mW.
> --
> Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM

Ah! were talking apples and oranges! US (FCC) reqs wont allow field
strength levels to exceed a certain level. The FM10 with its tiny 10 Mw
output will create too high a field strength with a proper antenna.
What I was saying is that an "UNMODIFIED" FM10 cant be heard for more
than a hundred feet (AND IS LEGAL)...73

# 2845. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <3426782E.633E@worldnet.att.net>
Source record: 90719
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Chris Hurd wrote:
>
> Howdy from Texas,
>
> Our microstation here in San Marcos
> has been up nearly six months. The
> only entity trying to shut us down
> is the city, and they're not doing
> a very good job... their case thrown
> out of municipal court (for "operating
> a bus. out of a res." the station is
> not a bus., entirely non-commercial).
>
> Broadcasting at 35 watts, reaching maybe
> five mile radius, can be heard along I-35
> between Austin/San Antonio. It is perfectly
> legal, mainly because it doesn't bleed on
> any lisc. stations. In fact, a new Houston
> station had to turn down their power so
> they wouldn't bleed us US (we're 105.9 FM).
>
> Invite all to listen live over the net
> via Real Audio, station is up 24/7, programming
> is extremely diverse in nature.
>
> Hear us at http://www.mediadesign.net
>
> Thanks,
> Chris
>
> N8XYN wrote:
> >
> > > Your answer is VERY misleading here!
> > > Micro-broadcasting is done LEGALLY in many cases.
> > >
> >
> > I'll stick by my first statement (Its a matter of field strength). If
> > you stay legal you'll be lucky to hear your own signal at the end of
> > your house...not Mw but generated strength. I've played this game
> > before and 100 Mw into a 5 foot antenna will be heard for at least 1
> > block. Play at your own risk...73

Like I said "Lots of folks do it". But it is at your own risk...

# 2846. Signal intensity meter up to 2000MHz?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Brandon Dewberry <Brandon.Dewberry@msfc.nasa.gov>
Message-ID: <34267D61.31DFDBBC@msfc.nasa.gov>
Source record: 90720

Hi,
I need to determine the range of a digital phone system. It operates around 1800 and 1900MHz. Any suggestions how I can measure signal intensity at these high frequencies?

Thanks,

Brandon

# 2847. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <34269438.58C2@umich.edu>
Source record: 90721

Bill K|eronomos wrote:
>
> Try using Eudora Pro which includes an excellent, easy-to-use spam
> filter.
<description of filter options snipped for brevity>

Nice features, but these are short-term solutions to the spam problem. I believe spammers will find ways around such filters. The only real solution IMO is to send complaints to the sender's ISP, and if that fails, to THEIR ISP. I encourage you all to send notes of complaint. This is NOT a request to spam the spammers- merely a suggestion that you inform the responsible parties of your displeasure. Of course, if MANY people do this, the end effect is similar, and they'll eventually take the hint.

Here's what I do:

- switch "full headers" on for the offending message. Most email readers allow you to see 'brief' or 'full' headers.

- The 'From:' field is almost always bogus. Look instead at the list of systems through which the message passed. Figure out which ones were involved early on (please study the format of the list carefully, so you don't waste time sending email to irrelevent email hubs). In the list of 'received from ...' statements, it will be the bottom-most.

- Use various utilities to verify which systems are real and which are bogus. Try 'finger', 'whois', 'ping' and 'nslookup' (or your local equivalent programs). If you don't have access to such utils, skip this step.

- Send a complaint to the administrator of that system. I recommend trying to send to 'postmaster@xxxxxxx.yyy' or to'root@xxxxxxxx.yyy'. Alternatively, the 'whois utilities usually give the email addresses of administrative and technical contacts.

A note about the complaint - keep it relatively short and to the point, and avoid offensive words or threatening statements. They may be in a position to do you a favor, if so inclined. I always copy the original message (with *all* header info) into the bottom

Good luck, all.

Bob, KI8AB

of my email, where they can read it if they choose.

## 2848. Motorola MPN3401

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: k3ky@juno.COM
Message-ID: <19970922.000730.6742.0.k3ky@juno.com>
Source record: 90722

>From the Motorola 1980 RF Data Manual: The MPN3401 was not characterized for minority carrier lifetime. It is listed as a Si PIN switching diode. Ironically, the adjacent data sheet for the MBD501/701 Si hot-carrier diodes (Schottky) is so characterized. It seems they didn't bother with this parameter for any of their PIN-type diodes. Sorry. 73, David

David Sinclair K3KY
e-mail: k3ky@juno.com

# 2849. Army antenna tuner with antenna - sans titre - 1.jpg (1/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: pequiste@hotmail.com
Message-ID: <34267347.14471729@mail.netrover.com>
Source record: 90723
Body handling: Inline uuencoded payload not displayed: sans titre - 1.jpg

[Inline uuencoded payload not displayed: sans titre - 1.jpg]

# 2850. NO CODE "HAM CRAM" Review/EXAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: "Richard F. Gillette" <w9pe@starnetinc.com>
Message-ID: <3426ADAE.84D6CEC0@starnetinc.com>
Source record: 90724
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equiptment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.misc

Harper College in Palatine, IL will hold their one-day NO CODE Amateur Radio Review Course and Exam on Oct. 18, 1997. If you or someone you know or work with want an easy way to a License, this is it! Start at 08:30 review Radio, one hour lunch break, review Law and Operating Practices, then take the Exam at 16:30. Every subject on the exam is covered, hence if you have any physics or math background or have a radio background this is the "HAM CRAM " course for you.

Total course including pre course notes and exam $20.00.

Call 847-925-6994 for details.

Please copy and post at work and on local northern Illinois BBSs and nets.

Thank you;

--
Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 ( oo )
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 oOO=={}==OOoo=

# 2851. FS: Power Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: rl1856@i***x***.netcom.com
Message-ID: <606a9j$bm@dfw-ixnews6.ix.netcom.com>
Source record: 90725

9/22

Power Tubes For Sale:

Metal 6L6 used

6 RCA
1 TungSol

$45.00 + shipping for all 7

Metal 6V6 used

3 RCA

$15.00 + shipping for all 3

807

4 RCA brown base- clear logo/markings-used
1 NOS-KenRad 6bg6 (octal 807) in box

$20.00 + shipping for all 5

Or: $65.00 shipped for all.

Please reply to: rl1856@ix.netcom.com

Thank you,

Ross Lipman
--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

# 2852. MDT.1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Don Crozier <ka9qjg@tsrcom.com>
Message-ID: <3425FB70.66D5@tsrcom.com>
Source record: 90726
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,alt.radio.internetrec.radio.info

```
This is a multi-part message in MIME format.

--------------629448F73781
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all from Don KA9QJG yes I know I Forgot the ATTACHMENT

SORRY ENJOY
DON KA9QJG

--------------629448F73781
Content-Type: application/octet-stream; name="Mdt.exe"
Content-Transfer-Encoding: base64
Content-Disposition: attachment; filename="Mdt.exe"

<encoded_portion_removed>
YnVmZmVyAGN1cnAAaXN0ZW1wAHRva2VuAA==
--------------629448F73781--
```

# 2853. Re: All hail King Mackey the Idiot

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Bruce.Bennett@no.spam.tek.com
Message-ID: <Bruce.Bennett.291.00A0EC2E@no.spam.tek.com>
Source record: 90727
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.a
Body handling: HTML body converted to readable text

In article <341ED3C8.5AA5@idiots.org> Mackey the Idiot writes:
>From: Mackey the Idiot
>Subject: All hail King Mackey the Idiot
>Date: Tue, 16 Sep 1997 11:45:28 -0700

>Behold brothers and sisters, I bring you the profound story
>of how King Mackey the Great became so. It is an exciting
>tale filled with wonder, awe, and heroic deeds. Come closer,
>as I relate this grand history.

New name, OLD boilerplate!

73's,
Bruce
Remove (no.spam.) from my return address.

<<>>

# 2854. Cathode Follower Power Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199709221743.NAA00833@pop.uky.edu>
Source record: 90728

Has anyone had experience with Common Plate (Cathode Follower)
RF power amplifiers? I would like to operate a 304TL in this
configuration. The idea is to operate the tube in AB1 so that the
only drive power needed it to overcome losses in the grid tank
circuit in generating the 3KV or so peak grid voltage.
The filament will be heated by a home made low capacitance
transformer and the output circuit is to be a PI-L network.
I hope to get about 800 or so watts out with out the drive
requirements of a GG amplifier (almost 200watts for 304TL) and
with out the normal problems of grid driven triode tuned amplifiers.
If it works with this low Mu tube I may try it with the
others I have (3X3000F1) and (3CW5000F1). It be
a very low distortion and low drive power amplifier.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

# 2855. Re: Motorola MPN3401

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002209971143090001@news.primenet.com>
Source record: 90729

In article <19970921203501.QAA09082@ladder02.news.aol.com>, k7itm@aol.com (K7ITM) wrote:

: Guess you
:could do a
:test with a pulse with fast rise/fall times and a scope?
:
:73,
:K7ITM
:
:

I fuzzily remember such a test as a common lab/homework problem for IC Device Electonics classes.

If you apply a constant forward bias thru the diode, and then abruptly turn it off and measure the decaying voltage, the minority carrier lifetime is a function of that curve in some way. Couldn't find any simple formula in Muller and Kamins "Device Electronics for Int Cir", but it may be in there somewhere.

Maybe the easiest and most definitive solution is to just fwd bias a diode with a signal generator on input and scope or spectrum analyzer at the output. Then see what the lowest freq is for acceptable distortion.

Rob.

# 2856. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3426270e.0@newshost.pcug.org.au>
Source record: 90730

Bis_Wichy@webtv.net (Stop Yakking Start Clickin..C W 4 evr) wrote:
>Hmmm very interesting... but how does it work? 2 xtal's can't be exactly
>the same... Does this circuit force both xtals to resonate together?
>Change the Q? What happens if you put a third, fourth, fifth xtal? Do
>you get a wider swing than with two? How about FT243 types? What if one
>xtal was 10.14 and the other was 10.15?
>
>hmmm a small handful of parts and a RF freq counter could keep me busy
>for a few afternoons....
>

Exactly what I did 2 days ago. I'd recommend you give it a go.

I don't know precisely how it works, but works it does with all the crystals I tried. I got between 40 and 200% increase in pulling range when I added the second crystal.

As for more than 2 crystals, I tried adding a third, and the swing was only very marginally (200 Hz) more than with two crystals, and the oscillator had problems in starting.

FT243 crystals aren't much good in VXOs compared to HC6/U crystals. However some of my experiments were with HC18/u crystals (which also aren't very good in VXOs), and I got an extended swing with those as well. I didn't do any tests with crystals on different frequencies.

73,
--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____________________________________________________

# 2857. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <3426CC91.7BF4@HP.com>
Source record: 90731

Tony Giroux wrote:
>
> Does anyone know of a good one beside ByteMark Amidon?

Hi Tony OM,

Look at Fair-Rite Products and Ferroxcube (Philips). They have web
pages.
There are many other sources, including offshore companies. Use your
web
search capabilities.
By the way, the ring cores are called TOROIDS, not torroids.

73,
Don, W6JL

# 2858. Mirage, RF concepts, Timewave, 20-40% off !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcc734$54f68480$208ad9cf@radiodan.earthlink.net>
Source record: 90732
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

More stuff listed tonight,
Now, up to 40% off on certain equipment !!

See the appropriate link to whatever gear you want on my web page, better yet peek at all the stuff, you may be surprised and find something for yourself or a friend (Christmas is just around the corner).
.
And yes, there is still much more,
See the "what's coming" link

73, Dan W7RF

--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/
Classic & Modern Ham Equipment
MFJ/Ramsey Kits "closeout" see my web page ! **

# 2859. Extend fraquencie on ic 271 e

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Mega FX <cmsylvain@infonie.fr>
Message-ID: <01bcc794$10c403e0$271765c3@sylvain1>
Source record: 90733

I have an ic 271 e from icom
I would like to know how to extend the band
Actually it works from 144 to 146 Mhz
Tnx fer every answer
F5OQA QTH IN88PL
cmsylvain@infonie.fr

# 2860. Re: Motorola MPN3401

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970922215501.RAA24482@ladder01.news.aol.com>
Source record: 90734

>
>: Guess you
>:could do a
>:test with a pulse with fast rise/fall times and a scope

Yea, guess I could. To determine whether it's a problem on 1.8 MHz, I could just duplicate my 40/20 meter capability for Ip3 testing and check that too. That after all is what I'm interested in. Tnx anyway.

W4ZCB

# 2861. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3426b96f.2913222@news.online.no>
Source record: 90735

On 22 Sep 97 08:06:38 GMT, Peter Parker <parkerp@pcug.org.au> wrote:

>Bis_Wichy@webtv.net (Stop Yakking Start Clickin..C W 4 evr) wrote:
>>Hmmm very interesting... but how does it work? 2 xtal's can't be exactly
>>the same... Does this circuit force both xtals to resonate together?
>>Change the Q? What happens if you put a third, fourth, fifth xtal? Do
>>you get a wider swing than with two? How about FT243 types? What if one
>>xtal was 10.14 and the other was 10.15?
>>
>>hmmm a small handful of parts and a RF freq counter could keep me busy
>>for a few afternoons....
>>
>
>Exactly what I did 2 days ago. I'd recommend you give it a go.
>
>I don't know precisely how it works, but works it does with all the
>crystals I tried. I got between 40 and 200% increase in pulling range
>when I added the second crystal.
>
>As for more than 2 crystals, I tried adding a third, and the swing was
>only very marginally (200 Hz) more than with two crystals, and the
>oscillator had problems in starting.
>
>FT243 crystals aren't much good in VXOs compared to HC6/U crystals.
>However some of my experiments were with HC18/u crystals (which also
>aren't very good in VXOs), and I got an extended swing with those as
>well. I didn't do any tests with crystals on different frequencies.
>
Apart from rubber-tybe xtals, old HC6/U large plated overtone xtals
operated on fundamental frequency is best. Unfortunately writers
seldom refer to what type of xtals they have used, so many amateurs
make efforts invain!

I tried another VXO some years ago, a Hartley L/C oscillator with the
xtal connected in paralell to the circuit, a 7022 xtal would cover
more than half 40m band (which is 7-7.1 in this region).
Xtal was HC6/u based surplus type from JAN xtals

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

## 2862. Army antenna tuner with antenna - sans titre - 1.jpg (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: pequiste@hotmail.com
Message-ID: <34267246.14214770@news.netrover.com>
Source record: 90736

I have an antenna tuner "SIMULATOR AERIAL TUNING No !" serial
5985-99-949-1025 it came with a 5 sections army mobile antenna
model AERIAL BASE no 28 I include a pic of the tuner,can someone
help with freq.it cover,watts,it is also for sale
thanks

# 2863. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3426FC0A.3042@crpl.cedar-rapids.lib.ia.us>
Source record: 90737

Don Huff wrote:
>
> Tony Giroux wrote:
> >
> > Does anyone know of a good one beside ByteMark Amidon?

Is there something wrong with ByteMark?

Bill W0IYH

# 2864. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Randy Jones <rjones@plix.com>
Message-ID: <3427452F.3101@plix.com>
Source record: 90738

Chris Lamousin wrote:
>
> I once saw how de Forrest used a flame in his lab as a rectifier. Does
> anyone have any info on this? I would be interested in the laws that
> govern this phenomena.
> Chris

Chris,
First of all, it's good to see a "short" question.
Second, I believe Leon has the best description, so far. In fact, my understanding is that electrons are EVERYWHERE. Specifically, the molecules that make up air have many free electrons in them.
The flame acts just as the heater in a vacuum tube. It excites the electrons into travelling the distance from the cathode (flame) to the anode (electrode above the flame). The reason you can't get much current flow is because of the free molecules in the air between the flame and the anode. The electrons bump into them and miss the anode. That's why they suck the air out of vacuum tubes.
Speaking of hot air, if anyone disagrees with that description, I will sit humbly by whilst the student learns from one of greater wisdom. I may learn, also.
Radio Randy

## 2865. Harris RT1230

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: Rick Taylor <kb5zfc@3lefties.com>
Message-ID: <01bcc77b$b3bf6120$3b1865ce@Pkb5zfc>
Source record: 90739

I acquired a Harris RT-1230 (V)-1/URC 94 (V) from a government surplus auction. I have had no luck in trying to get any information from Harris Corp. Does anyone out there have any info on this, i.e. tech manual availability, etc. Any info would be appreciated.

TNX,

Rick, KB5ZFC

# 2866. WTB: Rcvn' Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: w1ksz@tiac.net
Message-ID: <6048vs$fj7@news-central.tiac.net>
Source record: 90811

Looking for Four (4) 6BA6, Two (2) 6BE6 and Two (2) 6C4 Tubes.
Prefer NOS, what have we out there ??

Tnx, Dick, W1KSZ

# 2867. Re: Ham-Homebrew Digest V97 #547

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-22 00:00:00 UTC
From: dbubke@juno.COM
Message-ID: <19970921.183837.8702.0.dbubke@juno.com>
Source record: 90812

>I am hoping if someone can help me identify this component for my Sony
>TV.
>
>The TV's Model is KV-27EXR25, the component number is THP601.

It's a thermistor for the automatic degaussing circuit that operates immediately upon power on. When cool, THP601 only measures a few ohms. Within 30 seconds of power on it warms up to several thousand ohms. That reduces the AC current in the degaussing coil to nil.That makes it a positive thermistor. It sounds like it's operating normally.

For a schematic, call Andrews Electronics 1-800-289-0300

## 2868. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <34283170.8241331@news.mnsinc.com>
Source record: 90663

On Mon, 22 Sep 1997 10:57:51 -0500, Robert Lyons <boblyons@umich.edu>
wrote:

>Bill K|eronomos wrote:
>>
>> Try using Eudora Pro which includes an excellent, easy-to-use spam
>> filter.
><description of filter options snipped for brevity>
>
>Nice features, but these are short-term solutions to the spam
>problem. I believe spammers will find ways around such filters.
>The only real solution IMO is to send complaints to the sender's
>ISP, and if that fails, to THEIR ISP. I encourage you all to
>send notes of complaint. This is NOT a request to spam the spammers-
>merely a suggestion that you inform the responsible parties of
>your displeasure. Of course, if MANY people do this, the end
>effect is similar, and they'll eventually take the hint.
>
>Here's what I do:
>
> - switch "full headers" on for the offending message. Most
> email readers allow you to see 'brief' or 'full' headers.
>
> - The 'From:' field is almost always bogus. Look instead
> at the list of systems through which the message passed.
> Figure out which ones were involved early on (please study
> the format of the list carefully, so you don't waste time
> sending email to irrelevent email hubs). In the list of
> 'received from ...' statements, it will be the bottom-most.
>
> - Use various utilities to verify which systems are real
> and which are bogus. Try 'finger', 'whois', 'ping' and
> 'nslookup' (or your local equivalent programs). If you
> don't have access to such utils, skip this step.
>
> - Send a complaint to the administrator of that system. I
> recommend trying to send to 'postmaster@xxxxxxx.yyy' or
> to'root@xxxxxxxx.yyy'. Alternatively, the 'whois utilities
> usually give the email addresses of administrative and
> technical contacts.
>
>A note about the complaint - keep it relatively short and to the
>point, and avoid offensive words or threatening statements. They
>may be in a position to do you a favor, if so inclined. I always

>copy the original message (with *all* header info) into the bottom
>
>Good luck, all.
>
>Bob, KI8AB
>
>of my email, where they can read it if they choose.

You can do a lot of this automatically with a program called SPAM HATER. It is a free program that will compose complaints for you automatically and send them to ALL of the offending addresses contained in the SPAM.

I have been doing this for months. The volume of UCE Spam I get has not diminished ONE BIT during that time.

Once the bastards have your e-mail address, the begin selling it to all the dumb people who think they will be able to sell things to you that you don't want.

Even if a SPAMMER offered me a new car for $1.00 I would not buy it from them just on principle.

I am going to look for some better spam filtering software. There has to be a way to head off this disaster before it destroys the Internet.

We have to get to the root of the problem, which is FOOLISH ISPs that allow irresponsible jerks to send THOUSANDS of bulk-mail messages to people who do not want the garbage.

Bry

(remove the word REMOVE from my e-mail address to respond!)

# 2869. Need Plans for Homebrew BA Xmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Steve Robertson <stephen.h.robertson@cpmx.saic.com.xxx>
Message-ID: <34281651.5445@cpmx.saic.com.xxx>
Source record: 90664
Cross-posted to: rec.radio.amateur.boatanchors;,rec.radio.amateur.homebrew

Hi,

I want to build a boatanchor CW transmitter. Medium power (25 - 150 watts) maybe an oscillator and a 6DQ6 or a 6146 or a pair of 6L6s or 807s, crystal control, pi-network output, and doesn't need coil forms that I can't get. Nothing too fancy. I've got the power supply iron.

I'm sure there have been plans for many such transmitters but can someone point me to a URL for a good one? Or point me to a book that is still available or to an old QST/73/CQ article?

Thanks in advance!!
73 de Steve, KE4OH
--
To get my real e-mail address, remove the characters ".xxx" at the end of my address.

# 2870. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3428458e.1894198@news.online.no>
Source record: 90665

On Thu, 18 Sep 1997 18:39:31 GMT, w1_k_sorter@qsl.net (K sorter)
wrote:

>
>Dave is absolutely correct! We need laws and Congressional
>Intervention to outlaw or atleast limit spam.
>
>If a user wishes to be on the no-spam list, then they should be able
>to register at a central database, which spammers and mass mailers
>should be required to check BEFORE mailing spam.
>
>Any UNSOLICITED COMM'L email is SPAM. FUK the spammers and the mass
>spamming domains.
>
In this country you may register in a database that you don't want to
have calls from companies selling goods via telephone. I have
registered, and very few calls of this kind are received, if so, I ask
if they have checked the list, and they might be prosecuted!
The same should apply for internet, at least for this country, hi

Jan-Martin N�ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

## 2871. Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Mark J Sandford <sandford@tridsys.com>
Message-ID: <342851B8.51459E9D@tridsys.com>
Source record: 90666

Is it possible to build a crystal filter with overtone crystals
operating in overtone if so how are the crystals made to operate within
the filter in the overtone vs. fundemental mode????

# 2872. Re: Subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: "Warren D. Anderson" <wdaorcda@usinternet.com>
Message-ID: <34288207.736A@usinternet.com>
Source record: 90667
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

Bry wrote:
>
> On Mon, 22 Sep 1997 19:53:19 -0700, "Michael D. Chodrick"
> <chodrick@ix.netcom.com> wrote:
>
> >Hi-
> >My Name is Michael Chodrick. I was told the cost of a subscription, is
> >$12.00 per year. How do I subscribe?
> >Thank you-
> >KQ6JG
>
> No, they are NOW charging $20.00 a year.
> It was $12 about 2 years ago, then he went up to $15 and now $20 with
> talk of going to $25 according to one person who wrote to me.
>
> NOW, with 600+ people sending him $20 each he is not doing too badly
> at all!
>
> Every other LIST is FREE!

Bry, since you are obviously a list expert, would you care to enlighten us on what you think it costs to run an operation like Jack runs and how much you think the citizens of Tempe are paying to support the "free" lists?

Warren Anderson
> )

# 2873. Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: "Quentin J. Lewis" <bigqueue@tiac.net>
Message-ID: <34287383.CD1@tiac.net>
Source record: 90668
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

I am sorry if this is a stupid/simple question, but it I guess I just skipped a part of my life.

I was wondering if there are "industry workhorse" P-Channel and P-Channel FETs, like there are NPN and PNP transistors.

You know, like the good old 2N2222, or for power the 2N3055, etc...

I am looking for logic level if possible....nothing fancy...nothing high frequency....just slow speed, jelly bean stuff. (in the same likeness as the 2N2222 or 2N3055. ;-)

Any insite would be appreciated.

Thanks,
-Quentin Lewis

PS: At work, I have designed in the BSS138 into a few circuits. It is sort of a standard for me....but it only seems to be sourced by two or perhaps three companies......doesn't sound like the 2N2222 to me.

## 2874. ethernet->analog radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: kazem_edmond@bbns.org
Message-ID: <kazem_edmond-2309972159160001@bstnma-d1-1.port.shore.net>
Source record: 90669

Hi. A friend of mine and I have been attempting for some time now to connect our computers over a radio ethernet (10BaseT) network. This has proved rather difficult considering that VERY few people have any idea about what this technology is.

We'd really like to know how to convert ethernet signals to analog ones. Specifically, ethernet -> analog radio signals. As much help as you can offer would be appreciated.
Thanx.

## 2875. 1.2 gig pll

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: justin@nac.net
Message-ID: <342883A4.7ECB@nac.net>
Source record: 90670

Ive seen some new stuff in the trade mags any pointerrs on making a phase locled loop for 1.2 Ghz?

# 2876. Re: Look at my homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Bill Harris <billharr@flash.net>
Message-ID: <34280DDC.1157@flash.net>
Source record: 90671
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

Geert wrote:
>
> Hello
>
> Look at my homepage and PLEASE sign my guestbook.
>
> 73!

It would make it a whole lot easier to visit your homepage if
you posted its URL.

# 2877. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <606svm$m37@apple.telalink.net>
Source record: 90740

Robert Lyons <boblyons@umich.edu> wrote:
> - Send a complaint to the administrator of that system. I
> recommend trying to send to 'postmaster@xxxxxxx.yyy' or
> to'root@xxxxxxxx.yyy'. Alternatively, the 'whois utilities
> usually give the email addresses of administrative and
> technical contacts.

I've found all responsible ISPs (i.e., not the fake domains run by the spammers themselves..) have an "abuse" address, i.e. "abuse@xxxxxxxx.yyy". This is a good place to send complaints. Assuming one can take their autoresponders at face value, these complaints *are* read and *are* dealt with. Some ISPs will even respond to inform you the account of the person you complained about has been cancelled.

BTW I agree that simply using spam-filtering software in one's mailer isn't a real solution. The spam still has to download to your PC (costing you disk space, connect time and, if your ISP is long-distance, long distance charges) still has to be stored on your ISP's mail server (costing your ISP, and by extension you, disk space), and still has to be downloaded to your ISPs computers. (costing them, and by extension you, network bandwidth) Spammers are *STEALING* from you. I don't know if we can stop them, but we certainly shouldn't tolerate them.

73 Doug

# 2878. What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <34271a9f.5124612@news.mnsinc.com>
Source record: 90741
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

What is a"BOATANCHOR" ??

Note the spelling. It is NOT Boat Anchor!!

Older radio equipment. Military transmitters and receivers
particularly seem to weigh a TON!
Older amateur radio equipment is qiote often described as a "B.A." or
a boatanchor. Heaby, no one wants it! It may need repair. So the
average appliance operator will not mess with it. That UNUSUAL guy
among unusual hobbyists is the "BA OP" who loves to shine the front
panel of a GLOBE KING or a an R-390A!! There are thousands of them out
there! They lurk at hamfests and in basements!

The BAs themselves are old, dusty, and they GLOW IN THE DARK!!
Because they use tubes and heavy iron. They get the job done in a
noble way! They sound "FB on AM, OM!!" They simply SING on CW!

The people who love and collect these old beasts have a number of
haunts on the web! Among them a FREE Reflector at TEMPE jsut called
Boatanchors, or informally known to some as "Free Boatanchors."

No they don't always have FREE RADIOS, but it is a FREE list as
opposed to being a PAY list like the other one!

So, IF you would like to try the FREE LIST, here is how to subscribe:

Simply send a message to:
LISTSERV@LISTSERV.TEMPE.GOV

with NO SUBJECT, and the text:

subscribe boatanchors <your full name>
as in " Joe H. Smith"

Alternatively, if you want to subscribe
anonymously, send the command: "SUBSCRIBE BOATANCHORS
Anonymous". Your subscription will then be hidden
automatically.
==========

Enjoy!! 73 de AF4K, Bry

(remove the word REMOVE from my e-mail address to respond!)

# 2879. www.hamradio-online.com: Now read in 76 countries!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: vbook@vbook-nospam.com
Message-ID: <607a61$1pu$1@kanga.accessone.com>
Source record: 90742
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

http://hamradio-online.com

We suffered an email crash a week ago that caused us to lose some articles, link requests, news items and calendar events submitted to us - especially in August up to and including September 15th may have been lost. If you sent a contribution during that period, please resend your article or news. Thank you!

Ham Radio Online is now 23 months old and read in 76 countries! We update feature stories all the time, plus we've got real-time radio propagation reports and forecasts, including aurora, real-time disaster world-wide disaster communications "at-a-glance" information, and a library of hundreds of articles.

Ham Radio Online is a free Internet "ezine" devoted to radio and telecommunications topics. Our web site is self-funded by us and does not carry any advertising. The web site exists to promote Amateur Radio and an interest in the fascinating world of telecommunications. Please stop on by and join the tens of thousands who are enjoying our web site. If you have a story or news item you'd like to share, please email to us at vbook@vbook.com. We allow reprinting of most anything at our web site according to our posted reprint policy.

---
Ed (KF7VY) and Kim (N7VPL) Mitchell
SEND email replies to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

# 2880. Re: MDT.1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: briang@bgserv.demon.co.uk
Message-ID: <874989771snz@bgserv.demon.co.uk>
Source record: 90743
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,alt.radio.internetrec.radio.info

A pratt who posts binaries. Roast him alive! :-)

Brian

--
briang@bgserv.demon.co.uk
Brian Gaff AKA B G Services - Still supporting Z80
The Spectrum Emulator

# 2881. Re: MDT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: briang@bgserv.demon.co.uk
Message-ID: <874990167snz@bgserv.demon.co.uk>
Source record: 90744
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.ham-radio,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,alt.radio.internet

In article <3425F935.4EDE@tsrcom.com> ka9qjg@tsrcom.com "Don Crozier" writes:

> Hi From Don, KA9QJG Here is a little better copy of the orignal MDT, we
> still need to share info and get it better let me know if it works for
> you ??E-MAIL KA9QJG@TSRCOM.COM We also need to know what the legality of
> monitoring this type of communications??Its not in the CELL portion of
> the band,Its not SCRAMBLED or ENCRYPTED but Clear ASCI TEXT 4800 BAUD
> like Ham Radio pkt
> HAPPY SCANNING TO ALL AND ENJOY

Send files to an ftp or web site and post the address.

A It lasts longer there than here

B It wastes space on servers all over the world

C It causes those with slow modems to spend time getting useless crap.

D it makes others think they can do it, which is NOT good!

E It can get groups dropped by sites who do not take binary
groups.

Brian

--
briang@bgserv.demon.co.uk
Brian Gaff AKA B G Services - Still supporting Z80
The Spectrum Emulator

# 2882. Re: RF choke for mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmEGy6uz.G6@netcom.com>
Source record: 90745

Tim (Hynde@flash.net) wrote:
: I have a handfull coils from TV's, these are the ones on a plastic form
: with an iron slug down the center. One has #18 or #20 gauge wire. Would
: this make a good RF choke for mobile applications? It appears to have 40
: to 60 windings around a 1/4" slug.

I assume you mean an RF choke for suppressing noise on the 12 volt power line in a motor vehicle. If so, your slug tuned coils are too small. Try taking the ferrite core out of a big junk TV flyback transformer. You can epoxy the ferrite halves together and wrap a a dozen or so turns around it. Wire it in series with the positive supply line to your mobile rig. That should help suppress noise.

# 2883. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Blenderman <blenderm@open.org>
Message-ID: <01bcc7cb$1b7e93e0$336802c7@blenderm.open.org>
Source record: 90746

> Don Huff wrote:
> >
> > Tony Giroux wrote:
> > >
> > > Does anyone know of a good one beside ByteMark Amidon?
>
> Is there something wrong with ByteMark?
>
> Bill W0IYH

Yes there is. My experience with ByteMarks Core-Calc software has shown me they are capable of false advertising claims. It never even came close to working as advertised on their web site and they never shipped me a working copy or any other copy. I paid them on May 14 1997. In July their story was the programmer quit. When I looked at their web site a few weeks ago they were still advertising and selling it. BTW Amidon is not affiliated with ByteMark.

Mike K7IC

# 2884. FS: MFJ 20M & 40M QRP rigs (NEW, CHEAP!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcc7f1$110f6a80$778ad9cf@radiodan.earthlink.net>
Source record: 90747
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a couple of 20M and 40M MFJ qrp rigs BRAND NEW at less than dealer prices. Click on MFJ on my homepage
Checkout the other neat stuff there!

73, Dan
--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/ Webmasters, please link to my page !!
Classic & Modern Ham Equipment
MFJ/Ramsey Kits "closeout" see my web page ! **

# 2885. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3427D1CC.5168@umich.edu>
Source record: 90748

Doug Smith wrote:
>
> Robert Lyons <boblyons@umich.edu> wrote:
> > - Send a complaint to the administrator of that system. I
> > recommend trying to send to 'postmaster@xxxxxxx.yyy' or
> > to'root@xxxxxxxx.yyy'. Alternatively, the 'whois utilities
> > usually give the email addresses of administrative and
> > technical contacts.
>
> I've found all responsible ISPs (i.e., not the fake domains run by the
> spammers themselves..) have an "abuse" address, i.e.
> "abuse@xxxxxxxx.yyy". This is a good place to send complaints.
> Assuming one can take their autoresponders at face value, these
> complaints *are* read and *are* dealt with. Some ISPs will even
> respond to inform you the account of the person you complained about
> has been cancelled.
>

Yup. I had one such notice yesterday, telling me the spammer's
account was cancelled. It was particularly gratifying because
this particular spam had been sent with a false "received from"
line, and I only guessed at the true source. Of course, the ISP
may just have been lying to placate me. <shrug>

An idea occurred to me yesterday - the major computer magazines
could play a critical role in halting spam, if we approach them
correctly. I'll email BYTE and ask them to run an article surveying
the major ISP's as to how they deal with spammers and complaints.
I, for one, would never patronize an ISP who propagated spam.
The providers will fall all over themselves to appear holier than
their neighbor - they might even follow up with an improved course
of action. Granted, the smaller ISP's won't be mentioned, and might
feel themselves immune to anti-spam campaigns, but they get THEIR
service through one of the big players - mci, uunet, etc. The
pressure should trickle down to the little guys too, if BYTE and
the Internet users lean hard enough. If the survey article were
an annual feature, the pressure would be ongoing.

Help me support this idea - pass it on to other anti-spam discussions
and web sites, and email the editors of computer magazines.

73 de Bob, KI8AB

# 2886. QB4/1100 (4-400A) curves ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: pascal S <pascal.sternis@art.NOSPAM.alcatel.fr>
Message-ID: <34284315.75A@art.NOSPAM.alcatel.fr>
Source record: 90749

Hi All,
I'm not myself a radio amateur, but maybe I could get here the information I'm looking for :
Lately, I bought from a ham , a pair of PHILIPS QB4/1100 tetrodes that I believe, is the european substitute for the 4-400A transmitting tube. (I suppose some of you are using this tube).
I would like to experiment in audio with these , but, before playing with kilovolts, I was wondering whether anybody could provide the (Ip/Vp) curves for this tube. I have already some of its characteristics and ratings, (which are really impressive!) but It 's not sufficient for me.
I have already posted this request to rec.audio.tubes, but I have got no answer so far (I think the use of this tube may be very seldom in audio).
These tubes look so nice and powerful, that not using it would be a shame for me!
Thanks in Advance,
Pascal
--
--------
please, remove ".NOSPAM" from adress before replying

# 2887. 2M meter plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Doug <dougy@ruraltel.net>
Message-ID: <3427E6D7.5747@ruraltel.net>
Source record: 90750

Hello,
Sometime ago, an individual posted a request to this group looking for
plans to build two meter radios.I saved his post with email address,
but now I can't find it. I recall he may have been at Kansas Univiristy
or Kansas State. I that person is reading this or some one else knows
this person. I woul like to corraspomd with thim. I appears we may
have similar interests.
--
Thank you and 73, Doug Younker, N0LKK
near Plainville, KS
dougy@ruraltel.net
N0KKK@K0JJV.#NWKS.KS.USA.NAOM

# 2888. Mot CA2870 amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Bill Rogers <rogers@rogers.rochny.uspra.abb.com>
Message-ID: <3427BD1D.915D1158@rogers.rochny.uspra.abb.com>
Source record: 90751

Re: Motorola CA2870

I recently picked up some of these at the Bflo hamfest. I can't find
a datasheet on them. Anyone have this info?

Thanks,
Bill
KA2CKI

## 2889. Storno Programming Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: gatsby@dircon.co.uk
Message-ID: <608vpq$gej$2@newsserver.dircon.co.uk>
Source record: 90752

Does anyone know where I can get a copy of the programming software
for a STORNO 6000 series radio 2m or 70cm

# 2890. Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: "H.P. Vermeulen" <pleun.vermeulen@prive.ordina.nl>
Message-ID: <01bcc84a$7eae0480$428cf1c3@default>
Source record: 90753
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I'm looking for any documentation on a very old (tube) HF set: SBE model 33 (15, 20, 40 and 80 meters). Probably made in USA. The 40 and 80 meter band starts at 7.15 and 3.8 MHz, but in Europe it is UP TO these frequencies. Want to modify this set to use it as a receiver. Anyone know anything of SBE??

I'm also looking for a European adress of the importer of ADI VHF/UHF transceiver. As you probably already noticed my call is pd1ADI so I want to ask those guys whether they can sponsor me while I'm like a living commercial for them (hi).

Any info is welcome!

Thnx

73! PD1ADI

# 2891. Looking for modifications on Kenwood TS 780 VHF/UHF all mode base rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: "H.P. Vermeulen" <pleun.vermeulen@prive.ordina.nl>
Message-ID: <01bcc84c$acb453a0$428cf1c3@default>
Source record: 90754
Cross-posted to: alt.ham-radio.marketplace,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I'm am desperately looking for modifications on Kenwood TS 780 VHF/UHF all mode base rig!

I want to:

- Extend the RX range (want to be able to receive around 150 MHz)
- Improve RX sensibility (is quite OK but if possible better RX would be nice)
- Pump up the HF power if possible (is now 10 watt, I've heard that 3dB gain is possible)
- Setup the Signal meter properly (The needle's a bit heavy.. hi)
- Change the "low power" settings (should be 1 watt, is now 180 mW)
- Built in CTCSS (To open "modern" repeaters)

The Kenwood TS 780 is a 80's VHF/UHF set, please be so kind to review your "old" docs and help a just started Dutch HAM friend out!

Thanks in advance!

Pleun (PD1ADI locator JO21WT)

# 2892. Look at my homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Geert <pass@glo.be>
Message-ID: <01bcc853$8f7547c0$7db630ce@pass.glo.be>
Source record: 90755
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

Hello

Look at my homepage and PLEASE sign my guestbook.

73!

# 2893. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <3427E5F1.2C57@ccm.intel.com>
Source record: 90756

Blenderman wrote:
> BTW Amidon is not affiliated with ByteMark. Mike K7IC

Hi Mike, why not deal directly with Amidon?
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

## 2894. Re: Q: Will a 572b take 3500 volts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: richwhiten@aol.com
Message-ID: <19970923172701.NAA29850@ladder02.news.aol.com>
Source record: 90757

They will if you apply proper bias and use more air for cooling,ie muffin fan on top, taking the heat out. Richwhiten@aol.com

# 2895. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34282BCC.7C92@crpl.cedar-rapids.lib.ia.us>
Source record: 90758

Cecil Moore wrote:
>
> Blenderman wrote:
> > BTW Amidon is not affiliated with ByteMark. Mike K7IC
>
> Hi Mike, why not deal directly with Amidon?
>

I have had nothing but success dealing with Amidon. They are an
excellent company.

Bill W0IYH

# 2896. Need *** Zetex FZT600 NPN Darlington Transistors ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: barryjr@worldnet.att.net
Message-ID: <609bda$coi@bgtnsc03.worldnet.att.net>
Source record: 90759

I am trying to complete a project that calls for Zetex FZT600 NPN darlington transistors. These are in the little surface mount package called SOT-223. Need 10 but would take 20 or so if I could find them. Local distributors are quoting 8-12 weeks!

Please reply via e-mail. Thanks for any suggestions

barryjr@worldnet.att.net

WA0AXB Jim Barry, Prior Lake, MN

# 2897. Need *** Zetex FZT600 NPN Darlington Transistors ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: barryjr@worldnet.att.net
Message-ID: <609bao$coi@bgtnsc03.worldnet.att.net>
Source record: 90760

I am trying to complete a project that calls for Zetex FZT600 NPN darlington transistors. These are in the little surface mount package called SOT-223. Need 10 but would take 20 or so if I could find them. Local distributors are quoting 8-12 weeks!

Please reply via e-mail. Thanks for any suggestions

barryjr@worldnet.att.net

WA0AXB Jim Barry, Prior Lake, MN

# 2898. Re: Subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <34282f9c.7773370@news.mnsinc.com>
Source record: 90761
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

On Mon, 22 Sep 1997 19:53:19 -0700, "Michael D. Chodrick"
<chodrick@ix.netcom.com> wrote:

>Hi-
>My Name is Michael Chodrick. I was told the cost of a subscription, is
>$12.00 per year. How do I subscribe?
>Thank you-
>KQ6JG

No, they are NOW charging $20.00 a year.
It was $12 about 2 years ago, then he went up to $15 and now $20 with
talk of going to $25 according to one person who wrote to me.

NOW, with 600+ people sending him $20 each he is not doing too badly
at all!

Every other LIST is FREE!

To subscribe to the FREE BOATANCHORS list at TEMPE, send a message to:

LISTSERV@LISTSERV.TEMPE.GOV

With a BLANK for a subject line and then text:

SUBSCRIBE BOATANCHORS YOURFULLNAME

and I suggest that you send a similar message with:

SUBSCRIBE HEATH YOURFULLAME

In both cases you will be VERY glad that you did!!!

(remove the word REMOVE from my e-mail address to respond!)

# 2899. Re: Micro-broadcasting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-23 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <34283102.8131646@news.mnsinc.com>
Source record: 90762
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

Yes, and the Ramsey Kits and others meet this requirement.

On Sun, 21 Sep 1997 14:51:44 -0500, vorlin@mail.geocities.com (R.
Harrison) wrote:

>
>somebody (attribution lost) wrote:
>
>> >You can broadcast JUST LIKE a regular FM station if you want, and ON
>> >the FM band with a 100 mW stereo quality station. You can spend
>> >anything from $30-3000 on such a station.
>
>From title 47 of the Code of Federal Regulations, Part 15, subpart C:
>
>Sec. 15.239 Operation in the band 88-108 MHz.
>
> (a) Emissions from the intentional radiator shall be confined within
>a band 200 kHz wide centered on the operating frequency. The 200 kHz
>band shall lie wholly within the frequency range of 88-108 MHz.
>
> (b) The field strength of any emissions within the permitted 200 kHz
>band shall not exceed 250 microvolts/meter at 3 meters. The emission
>limit in this paragraph is based on measurement instrumentation
>employing an average detector. The provisions in Sec. 15.35 for limiting
>peak emissions apply.
>
> (c) The field strength of any emissions radiated on any frequency
>outside of the specified 200 kHz band shall not exceed the general
>radiated emission limits in Sec. 15.209.
>
> (d) A custom built telemetry intentional radiator operating in the
>frequency band 88-108 MHz and used for experimentation by an educational
>institute need not be certified provided the device complies with the
>standards in this part and the educational institution notifies the
>Engineer in Charge of the local FCC office, in writing, in advance of
>operation, providing the following information:
> (1) The dates and places where the device will be operated;
> (2) The purpose for which the device will be used;
> (3) A description of the device, including the operating frequency,
>RF power output, and antenna; and,
> (4) A statement that the device complies with the technical
>provisions of this part.

(remove the word REMOVE from my e-mail address to respond!)

# 2900. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Doran Platt <jeepp@erols.com>
Message-ID: <3429BA91.3E50ED33@erols.com>
Source record: 90614
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Ray W. wrote:

> JJ wrote:
> >
> > Greg Dean <n9nwo@gte.net> wrote:
> >
> > >Herr Mueller:
> >
> > >The US Congress has two bills in front that would ban the
> manufacturing and use
> > >and scanning receivers to include amateur equipment. Law
> enforcement, news media,
> > >everyone, no one would be exempt. Because of the pressure from
> large businesses
> > >such as Motorola, this hints of fascism. Things are not going well
> here. I wish
> > >that I was back in Kaiserslautern.
> >
> > >Tsch&#65533;s....N9NWO/DA4NWO
> >
> > I wish I was back in Vogelweh myself..... :)
> >
> > Cheers!
> >
> > ==========
> > 73 de Jim, WK1V
> > Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
> > http://www1.shore.net/~jjmartin/jjm2.htm
> > ==========
>
> Things were not too bad at Hahn !
>
> Ray

Nor at Sembach
Jeep

# 2901. Re: Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Dana Gould <dgould@bev.NOSPAMetn.com>
Message-ID: <01bcc906$663705c0$4ce06e97@pc3527.bev.etn.com>
Source record: 90615

Carl R. Stevenson <wa6vse@fast.net> wrote in article
<01bcc8ef$423f12a0$0100005a@wa6vse>...
> Mark J Sandford <sandford@tridsys.com> wrote in article
> <342851B8.51459E9D@tridsys.com>...
> > Is it possible to build a crystal filter with
> > overtone crystals operating in overtone if so
> > how are the crystals made to operate within
> > the filter in the overtone vs. fundemental mode????
>
> Standard product xtal filters are readily available
> from multiple sources at frequencies like 45MHz,
> 70MHz, 75MHz, and 140 MHZ ... and more,
> but those are some of the most common freqs.

Pointers to manufacturers/distributers please?

--
Dana Gould
To respond by email, remove NOSPAM from my return address.
NOSPAMdgould@bev.etn.com

# 2902. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3429791F.4F7D@crpl.cedar-rapids.lib.ia.us>
Source record: 90616

europa@primenet.com wrote:

> would carry a J318 cross. And maybe even a MRF586 cross,

What does "cross" mean?

Bill W0IYH

# 2903. Re: 1.2 gig pll

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: lkraft@rose.hp.com
Message-ID: <60c9fa$fov$1@rosenews.rose.hp.com>
Source record: 90617

Carl R. Stevenson (wa6vse@fast.net) wrote:

: > Check Fujitsu, Motorola, National Semiconductor, Peregrine, Philips,
: > and Siemens web pages for PLL chip data and app notes ... (these
: > are presented alphabetically, not in order of personal preference,
: > quality or any other metric that should influence your decisions ...
: > furthermore it is early in the morning and I am not yet fully awake, so
: > I may have missed someone ...)

Do check out the Harris HFA3524 dual frequency synthesizer chip at:

http://www.semi.harris.com/data/fn/fn4/fn4062/index.htm

Lyle,
AA6LK

# 2904. Re: Hacking an antenna onto a Sony Boom Box

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: jphipps@aztec.asu.edu
Message-ID: <60bhmg$r61@news.asu.edu>
Source record: 90618

I had a similar problem, but attaching the coax directly to the antenna input proved worthless. What did work was to open the boom box, disconnect the whip antenna, and substitute a 75/300 ohm coax to twin lead adapter. I grounded the other side of the twin lead to a convenient IF can. A hole thru the back of the boom box and some epoxy to secure the adapter completed things.

This proved quite effective in adapting the boom box to cable, and particularly effective when using a coax-fed antenna up in the mountains. In the latter case, the boom box went from useless to almost full quieting on stations greater than 190 miles distant.

The boom boxes I adapted this way were PLL-types made by RCA.

John Phipps K7BTA

In a previous article, Casey@At.Bat (Tim Jenkins) says:

>
>Hey,
> I've got a Sony CD player AM/FM radio and I get rotten FM reception.
>There are no external FM (or AM) screws for me to hook in an external
>antenna. I was going to put the cable from the cable TV into the antenna
>jacks...but there aren't any means of connecting it to the radio.
> Can I solder leads onto the telescoping antenna then attach the Cable TV
>/FM reception cable to those wires?
> Is the telescoping antenna for FM . . .or AM??
>
>Thanks
>OggaBooga with the green teeth
>
--

# 2905. Re: MDT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "CA11739@aol.com" <CA11739@iname.com>
Message-ID: <34296DD8.6CE6@iname.com>
Source record: 90619
Cross-posted to: rec.radio.scanner,rec.radio.amateur.homebrew,rec.ham-radio,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,alt.radio.internet

Brian Gaff wrote:
>
> In article <3425F935.4EDE@tsrcom.com> ka9qjg@tsrcom.com "Don Crozier" writes:
>
> >
> > Hi From Don, KA9QJG Here is a little better copy of the orignal MDT, we
> > still need to share info and get it better let me know if it works for
> > you ??E-MAIL KA9QJG@TSRCOM.COM We also need to know what the legality of
> > monitoring this type of communications??Its not in the CELL portion of
> > the band,Its not SCRAMBLED or ENCRYPTED but Clear ASCI TEXT 4800 BAUD
> > like Ham Radio pkt
> > HAPPY SCANNING TO ALL AND ENJOY
> >
>
> Send files to an ftp or web site and post the address.
>
> A It lasts longer there than here
>
> B It wastes space on servers all over the world
>
> C It causes those with slow modems to spend time getting useless crap.
>
> D it makes others think they can do it, which is NOT good!
>
> E It can get groups dropped by sites who do not take binary
> groups.
>
> Brian
>
> --
> briang@bgserv.demon.co.uk
> Brian Gaff AKA B G Services - Still supporting Z80
> The Spectrum Emulator

CA11739@aol.com

## 2906. Any info for a school starting up a radio station?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: taozer@concentric.net
Message-ID: <taozer-ya02408000R2409972126360001@news.concentric.net>
Source record: 90620
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Everybody!
My highschool seems to have developed an interest in the idea of
building an on-campus local FM radio station. So I, being a bit of a geek,
have decided to take it upon myself to attempt to compile all information
possible on the subject- what equipment is needed, what FCC liscences are
necessary, where we could possibly look for grants, etc. So, if anyone has
any useful and valid information on the subject, please reply. Thanks.
-Ian the Grate

PS Also, what is needed to pass the FCC tech test(age requirements, degrees)?

# 2907. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Kevin Carney <carneyke@us.ibm.com>
Message-ID: <3428F85B.76A7@us.ibm.com>
Source record: 90621
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

John Miles wrote:
>
> Quentin J. Lewis wrote:
> >
> > I am sorry if this is a stupid/simple question, but it I guess I just
> > skipped a part of my life.
> >
> > I was wondering if there are "industry workhorse" P-Channel and
> > P-Channel FETs, like there are NPN and PNP transistors.
> >
> > You know, like the good old 2N2222, or for power the 2N3055, etc...
> >
> > I am looking for logic level if possible....nothing fancy...nothing high
> > frequency....just slow speed, jelly bean stuff. (in the same likeness as
> > the 2N2222 or 2N3055. ;-)
> >
> > Any insite would be appreciated.
> >
> > Thanks,
> > -Quentin Lewis
> >
> > PS: At work, I have designed in the BSS138 into a few circuits. It is
> > sort of a standard for me....but it only seems to be sourced by two or
> > perhaps three companies......doesn't sound like the 2N2222 to me.
>
> I'd guess the MPF-102 would be the leading candidate for a 2N2222-style
> "generic" N-channel JFET. P-channel JFETs are rarely used at the
> discrete-device level; they do exist, but no specific type #s come to
> mind.
>
> For casual RF work, the 40673 is an ancient, cheap, and still-passable
> dual-gate MOSFET. There are better parts, but I've always been fond of
> the 40673 for some reason.
>
> Low-to-moderate power FET designs often use the VN67AF or VN10KM devices
> (Radio Shack used to sell these off the rack, in fact). Plenty of other
> options here, too.
>
> -- jm
I believe 2N4391, 2N4392 & 2N4393 were very popular FET's
in industrial equipment. They should cross to SK or ECG
and be readily available. Take Care, Kevin

# 2908. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: andrewm <spam@quicknet.com.au>
Message-ID: <01bcc896$756a94a0$0b00a8c0@eros.int.quicknet.com.au>
Source record: 90672
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

Hiya,

I don't know if they a "standard" but the 5N05 or BUK456/60A are very
popular for

12v switching type FET thingies.

andrewm at quicknet dot com dot au

# 2909. Low current power supply IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <609vrf$8g2@news2.tds.net>
Source record: 90673

Hi Everyone,

I'm looking for some high tech PS chips. I need something that will run on batteries that will produce regulated -100 to -200 volts @ 1 to 100 ua.

I need high effeciency! A conventional saturated switching core step up transformer won't do it-they waste too much power because they aren't made to produce such low output currents.

Maxim and Microliner make fine switching supply chips for very reasonable prices! They use variable pulse frequency as the load increases, in order to maintain high effeciency at low to moderate current outputs. When the current required increases further, they switch over to pulse width operation. When the device achieves regulation, it shuts down EXCEPT for the output monitoring function (where they daraw 20 to 100 ua supply current in standby). This achieves even greater effeciency over a wider range of output currents. Unfortunately, these devices aren't made to provide 100 v output (most are 3 to 15 volt outputs), and they are not made to supply currents less than one or 2 ma -below that, they get very ineffecient.

Does anyone know of a vendor that makes high tech power supply chips for very low output currents?

Thanks...

Art...

# 2910. Re: Subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Anonymous <Use-Author-Address-Header@[127.1]>
Message-ID: <fb51be4b636647d9627e7a5908a51465@anon.efga.org>
Source record: 90674

>Hi-
>My Name is Michael Chodrick. I was told the cost of a subscription, is
>$12.00 per year. How do I subscribe?
>Thank you-
>KQ6JG

Hi Michael,

The subscription price has gone up a little. Please send me $150 for a six month subscription to each group, and get all your friends to do the same. I see you are interested in four groups, so that's $600. I know it seems like a lot of money, but look at all the great posts your current trial membership is bringing you. You wouldn't want to get cut off and lose all that, would you? So send the $600 today, in $10 and $20 bills. I'll credit your next six month subscription $5 for every friend you get to sign up!

Thanks,

Elmer

# 2911. Heathkit HX-10 Marauder Xmtr $125.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcc97d$a3f3f360$03ddd8cc@km3g.cts.com>
Source record: 90675
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Needs the I.F. coils replaced and or repaired. Front panel is collector quality. Over all condx is a 9.5. A worthwhile investment if you have the time to fix. I have the W7FG manual (very thick, high quality), and a large roll out master scat. I picked this up because it looks extremely nice but i have too many other projects.

$125.00. You pay shipping from san diego zip 92139. Weighs ~ 105 pounds boxed up.

Lane
Kilo Mexico Three Germany

# 2912. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: John Miles <jmiles@digitalanvil.com>
Message-ID: <3428CB35.155A@digitalanvil.com>
Source record: 90676
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

Quentin J. Lewis wrote:
> 
> I am sorry if this is a stupid/simple question, but it I guess I just
> skipped a part of my life.
> 
> I was wondering if there are "industry workhorse" P-Channel and
> P-Channel FETs, like there are NPN and PNP transistors.
> 
> You know, like the good old 2N2222, or for power the 2N3055, etc...
> 
> I am looking for logic level if possible....nothing fancy...nothing high
> frequency....just slow speed, jelly bean stuff. (in the same likeness as
> the 2N2222 or 2N3055. ;-)
> 
> Any insite would be appreciated.
> 
> Thanks,
> -Quentin Lewis
> 
> PS: At work, I have designed in the BSS138 into a few circuits. It is
> sort of a standard for me....but it only seems to be sourced by two or
> perhaps three companies......doesn't sound like the 2N2222 to me.

I'd guess the MPF-102 would be the leading candidate for a 2N2222-style "generic" N-channel JFET. P-channel JFETs are rarely used at the discrete-device level; they do exist, but no specific type #s come to mind.

For casual RF work, the 40673 is an ancient, cheap, and still-passable dual-gate MOSFET. There are better parts, but I've always been fond of the 40673 for some reason.

Low-to-moderate power FET designs often use the VN67AF or VN10KM devices (Radio Shack used to sell these off the rack, in fact). Plenty of other options here, too.

-- jm

# 2913. HANDHELD SCOPEMETER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: JACK LAI <jama3649@ms7.hinet.net>
Message-ID: <3428DDCC.2C1A@ms7.hinet.net>
Source record: 90677

OUR COMPANY IS DEVELOPING ONE PRODUCTS "HANDHELD SCOPEMETER". THE FINAL
PRODUCTION WILL BE DONE AFTER 3 WEEKS.
THIS IS SIMILAR WITH FLUKE MODEL NO.123.

WE ARE LOOKING FOR LONG TERM BUSINESS DISTRIBUTORS.

IF INTERESTING, PLEASE EMAIL TO ME
EMAIL ADDRESS : jama3649@ms7.hinet.net

JACK LAI
JAMA ORIENTAL CO.,LTD.

# 2914. Re: Low current power supply IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <3428C4F4.CCA280CA@rl.ac.uk>
Source record: 90678

K sorter wrote:

> Hi Everyone,
>
> I'm looking for some high tech PS chips. I need something that will
> run on batteries that will produce regulated -100 to -200 volts @ 1 to
>
> 100 ua.
>
> I need high effeciency! A conventional saturated switching core step
> up transformer won't do it-they waste too much power because they
> aren't made to produce such low output currents.

Build an audio oscillator. Use a transformer to raise the voltage to
-200V RMS.
Rectify the result (full wave!) and filter with a capacitor of good low
loss characteristics. Build a regulator to stabilise the output feeding
back to the
audio oscillator drive.

That is the way my CRO works, 12V in, 3kV out, tripled to 9 kV.

Alternatively, buy a 200V battery.

# 2915. Re: Looking for modifications on Kenwood TS 780 VHF/UHF all mode base rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: John Cramond <john@gm4nhi.demon.co.uk>
Message-ID: <maaimAA3MOK0Ewdg@gm4nhi.demon.co.uk>
Source record: 90679
Cross-posted to: alt.ham-radio.marketplace,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <01bcc84c$acb453a0$428cf1c3@default>, "H.P. Vermeulen"
<pleun.vermeulen@prive.ordina.nl> writes
>I'm am desperately looking for modifications on Kenwood TS 780 VHF/UHF all
>mode base rig!
>
>I want to:
>
>- Extend the RX range (want to be able to receive around 150 MHz)

NOT ADVISED - One of the advantages of the TS780 is that it was designed
to receive signals within the ham bands only. Extending the receive
coverage wiuld give you problems from break through of out of band
signals (pagers etc.)

>- Improve RX sensibility (is quite OK but if possible better RX would be
>nice)

Use an external mast head pre-amp.

>- Pump up the HF power if possible (is now 10 watt, I've heard that 3dB
>gain is possible)

Specification is 12 watts. 17 watts is possible but again not advised.
The difference is not going to be worth the risk of running out of spec.
If you must "have a go", remove the top cover and locate the TX board.
(second board from heatsink) VR1 adjusts the high power setting on 144
and VR2 adjusts the high power setting on UHF.

>- Setup the Signal meter properly (The needle's a bit heavy.. hi)

Setting up the signal meter properly involves a number of adjustments
and should not be tackled without a service manual. If you just want to
see a more active "S" meter the pre amp will do that for you.

>- Change the "low power" settings (should be 1 watt, is now 180 mW)

VR4 on the 430 final board (next to the heatsink) controls low power on
VHF. VR5 on the same board controls low power on UHF.

>- Built in CTCSS (To open "modern" repeaters)

Boards or kits should be available from most good dealers.
>
>The Kenwood TS 780 is a 80's VHF/UHF set, please be so kind to review your

>"old" docs and help a just started Dutch HAM friend out!
>
>Thanks in advance!
>
>Pleun (PD1ADI locator JO21WT)
>
Nice to see you want to "have a go" but don't rush in where others fear
to tread! You have an excellent base station and it is all too easy to
adjust the incorrect component if you don't have a service manual. Good
luck and look forward to working you soon.
--
John Cramond - GM4NHI
<john@gm4nhi.demon.co.uk>

# 2916. CIGAR BOX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: JACK LAI <jama3649@ms7.hinet.net>
Message-ID: <3428DF8D.4B25@ms7.hinet.net>
Source record: 90680

WE HAVE ONE PRODUCT "CIGAR BOX" INCLUDING A HAND HELD TORCH WITH 2400F
(1300C) TEMPERATURE FLAME, 3PCS CIGAR HOLDER, AND ONE CIGAR CUTTER.

WE ARE THE MANUFACTURE IN TAIWAN. IF YOU HAVE ORDER QUANTITY MORE THAN
600 SETS, PLEASE CONTACT WITH ME. EMAIL :jama3649@ms7.hinet.net

IF YOU WANT TO DISTRIBUTE OUR PRODUCTS BUT QUANTITY LESS THAN 600 SETS,
PLEASE CONTACT OUR U.S.A AGENT
WAHL CLIPPER
MS.PAM GOESSMAN
EMAIL ADDRESS : pgoessman@wahlclipper.com

PLEASE MENTION YOU ARE INTRODUCED BY JACK LAI, YOU MAY GET GOOD PRICE
FROM HER. IF YOU ARE INTERESTING IN CIGAR TORCH, PLEASE ALSO CONTACT
WITH HER OR EMAIL TO ME.

BEST REGARDS
JACK LAI

# 2917. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <f5YzYrAMGMK0Ew4S@lfheller.demon.co.uk>
Source record: 90681

In article <3427452F.3101@plix.com>, Randy Jones <rjones@plix.com>
writes
>Chris Lamousin wrote:
>>
>> I once saw how de Forrest used a flame in his lab as a rectifier. Does
>> anyone have any info on this? I would be interested in the laws that
>> govern this phenomena.
>> Chris
>
>Chris,
>First of all, it's good to see a "short" question.
>Second, I believe Leon has the best description, so far. In fact, my
>understanding is that electrons are EVERYWHERE. Specifically, the
>molecules that make up air have many free electrons in them.
>The flame acts just as the heater in a vacuum tube. It excites the
>electrons into travelling the distance from the cathode (flame) to the
>anode (electrode above the flame). The reason you can't get much current
>flow is because of the free molecules in the air between the flame and
>the anode. The electrons bump into them and miss the anode. That's why
>they suck the air out of vacuum tubes.
>Speaking of hot air, if anyone disagrees with that description, I will
>sit humbly by whilst the student learns from one of greater wisdom. I may
>learn, also.
>Radio Randy

I think that one of the electrodes would actually have been the gas
nozzle, rather than the flame itself. The flame would correspond to the
electrons in a conventional valve/tube. There used to be a device called
a thyratron that used ions - it was basically a gas-filled triode, with
similar characteristics to an SCR or thyristor (named after the earlier
device).

I've just remembered another interesting electronic flame application!
Someone once developed a loudspeaker using one - called the Ionophone.
How about using De Forrest's flame detector in a radio with an Ionophone
for the audio output. 8-)

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 2918. Re: Subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3428d6dd.0@newshost.pcug.org.au>
Source record: 90682

Anonymous <Use-Author-Address-Header@[127.1]> wrote:

>I see you are interested in four groups, so that's $600. I know it seems
>like a lot of money, but look at all the great posts your current trial
>membership is bringing you. You wouldn't want to get cut off and lose all
>that, would you? So send the $600 today, in $10 and $20 bills. I'll
>credit your next six month subscription $5 for every friend you get to sign
>up!
>

I wouldn't pay $600 for any subscription! That's equivalent to the cost
of several homebrew transceiver projects for me.

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 2919. Help Converting From 8874s to 3CX800A7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: daveb@buffnet.net
Message-ID: <60as76$ek2$1@buffnet2.buffnet.net>
Source record: 90683

Greetings,

Have a Henry Tempo 2002 2M amp that may need tubes in the near future.

Has anybody replaced the 8874s with a single3CX800A7 ?

Would like to hear from someone who has done it.

Thanks

daveb@buffnet.net

# 2920. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <60ajja$kjo$3@news1.teleport.com>
Source record: 90684

Sorry I missed the original message -- the responses have been interesting.

A "prescaler" in the digital world converts a two-level signal to another two-level signal of lower frequency. Virtually all the information about the original signal, except frequency, is lost. So this wouldn't be very useful with an oscilloscope, since you can measure the frequency in several other ways which are probably easier. An oscilloscope is used when you want to know other things about the waveform than just its frequency.

There are a couple of ways you can time-scale (down-convert) an analog signal while retaining its fidelity. One is to use a heterodyne converter, that is, make a superhet receiver and look at the IF with the 'scope. The disadvantages of this approach are the many possibilities for signal distortion in the conversion process, and that the input signal must be band-limited in frequency. Another way is by equivalent-time sampling. This is the method used in many sampling 'scopes. It does a true time-scaling of the input signal -- that is, the output is a replica of the input but slowed down. There are two common methods of doing this, known as random and sequential-sweep sampling. While both are simple in principle, making a clean sampling system is an exacting science. I know -- I've been there and done that. A brief explanation is given in _The XYZ's of Oscilloscopes_ by Tektronix. I believe it's still in print, and you should be able to get a copy by calling your local Tektronix field office.

Roy Lewallen, W7EL

# 2921. Re: ethernet->analog radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3428DD6F.7A3E@antispam.trader.com>
Source record: 90685

Cow Mutilator wrote:
>
> Hi. A friend of mine and I have been attempting for some time now to
> connect our computers over a radio ethernet (10BaseT) network. This has
> proved rather difficult considering that VERY few people have any idea
> about what this technology is.
>
> We'd really like to know how to convert ethernet signals to analog ones.
> Specifically, ethernet -> analog radio signals. As much help as you can
> offer would be appreciated.

10BaseT signals are encoded the same way Manchester modems encode.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 2922. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3428F354.12F6@crpl.cedar-rapids.lib.ia.us>
Source record: 90686

Roy Lewallen wrote:
>
> There are two common methods of doing this, known as random
> and sequential-sweep sampling.

Helmholtz, in 1869, invented the Helmholtz Pendulum. A switch attached to the pendulum would sample a waveform whose frequency was much greater than the pendulum frequency. By choosing the pendulum rate slightly different than a subharmonic of the waveform he could make a paper strip chart recording of the waveform. Hund, High Frequency Measurements, 1933.

Bill W0IYH

# 2923. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3429036C.417B@crpl.cedar-rapids.lib.ia.us>
Source record: 90687

Richard Karlquist wrote:
>
> In article <19970915183700.OAA01781@ladder02.news.aol.com>,
> JohnsonHE <johnsonhe@aol.com> wrote:
> >
> >>
> >>Many diode ring DBM seems to work better when fed by a square wave
> >>with steep edges containing a lot (odd) harmonics. Unfortunately,
> >>these harmonics mix with the upper part of the input spectrum and some
> >>mixing products will fall within the IF passband. Thus, general
> >>coverage receivers usually have (sub)octave filters in the RF
> >>amplifier to reduce the input spectrum that might mix with the
> >>harmonics of the local oscillator.
> >>
> >>>Would it improve things at all to have a bandpass filter prior to the
> >>>VFO input to the mixer or am I worried about something that doesnt
> >>>exist.
> >
> >You can filter the heck out of the VFO feeding a DBM. It'll be clean as a
> >whistle until you connect the DBM. The non-linear load of the diodes
> >turning on and off generates harmonics all over again. (Assuming enough LO
> >drive to turn on the diodes), but then, it isn't a mixer until you do.
> >
> >W4ZCB
>
> Yes, but the transformers in the DBM only have to pass sine waves
> if you use sine wave drive. It is difficult getting a square wave
> through a transformer in one piece. Also, your square wave must
> have exactly 50% duty cycle, to avoid intermod degradation. How
> do you assure that? With a sine wave, it is trivial to get
> exactly 50% duty cycle (just filter out all harmonics).
>

I am now using a push pull amplifier using MRF586's with about 6V DC
collector to emitter and about 2 dB of voltage feedback. A ferrite
xmission line twisted-wire choke (type FT37-43 core) feed to the
collectors is then capacitor coupled to the floating Mini-Circuits
SRA-3H L.O. terminals. The balance is quite good and the wave shape is
reasonably square from 12 to 40 MHz. I use two-tone intermod tests to
evaluate the L.O. quality and I meet Mini-Circuit's specs over the freq
range.

Bill W0IYH

# 2924. Re: Pulse width modulator plans wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Steve <NOamradioSPAM@thebizlink.com>
Message-ID: <3429066F.965@thebizlink.com>
Source record: 90688

Fred: Guess you don't get on the air anymore as any emission type would fall under your own "selfish use of amateur spectrum space."

Bob: PWM can and is used with these old transmitters. New ones too. As before, email me for info.

J. Fred Riley wrote:
>
> n1ddzrjc@aol.com (N1DDZ RJC) wrote:
>
> >Looking to build a PWM for a Valiant or other 100-200 watt rig.
> >Any tips or leads to the design info I need?
>
> PWM cannot be used with these old transmitters, Bob. Without
> sophisticated Envelope Elimination and Restoration techniques and DC
> coupling of the modulator, you would wind up transmitting an unwanted
> sideband and a useless, annoying carrier. You would likely wind up
> with a conventional AM signal which, as you know, would be a selfish
> use of amateur spectrum space.
>
> Fred, W8OY
> jfriley@airmail.net

# 2925. Re: Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcc8ef$423f12a0$0100005a@wa6vse>
Source record: 90689

Mark J Sandford <sandford@tridsys.com> wrote in article
<342851B8.51459E9D@tridsys.com>...
> Is it possible to build a crystal filter with overtone crystals
> operating in overtone if so how are the crystals made to operate within
> the filter in the overtone vs. fundemental mode????

Standard product xtal filters are readily available from multiple sources
at frequencies like 45MHz, 70MHz, 75MHz, and 140 MHZ ... and more,
but those are some of the most common freqs.

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 2926. Re: 1.2 gig pll

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcc8ef$06b20440$0100005a@wa6vse>
Source record: 90690

justin@nac.net wrote in article <342883A4.7ECB@nac.net>...
> Ive seen some new stuff in the trade mags any pointerrs on making a
> phase locled loop for 1.2 Ghz?
>

Check Fujitsu, Motorola, National Semiconductor, Peregrine, Philips,
and Siemens web pages for PLL chip data and app notes ... (these
are presented alphabetically, not in order of personal preference,
quality or any other metric that should influence your decisions ...
furthermore it is early in the morning and I am not yet fully awake, so
I may have missed someone ...)

73,
--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 2927. Re: Look at my homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3428d630.0@newshost.pcug.org.au>
Source record: 90691
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

Bill Harris <billharr@flash.net> wrote:
>
>It would make it a whole lot easier to visit your homepage if
>you posted its URL.

As a further suggestion, people inviting others to look at their home page could include a few lines telling the reader what their home page is about - eg QRP, homebrew, CW, VHF or operating. This is so the reader can determine whether they are likely to be interested in its contents without having to go to the page itself.

Every time someone announces a new home page without a description, I ignore the message and don't look at their page. When people include a brief description, my interest/curiousity is aroused, and I'll often look at it. I think there's many other readers who think similarly.

73,
--


---
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.


---

# 2928. FS: Special Low Prices on Tubes and Electronic Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <60b5o6$8ac$24@ha1.rdc1.occa.home.com>
Source record: 90692

NOS Tubes
5R4WGB, 1 to 99 @ $3.25 ea, 100 or more @ $3.00ea
EL84/6BQ5(Eastern European),1 to 99 @$3.75 ea,100 or more @$3.50ea

Used Tubes Untested, Pulled from Surplus Equipment, sold "as is"
6AN8A, 6CL6, 8136, and/or 8532W $0.50 each
12AU7 $1.75 each
6080 $2.00 each

Test Equipment
BOONTON 190A "Q" meter, working, but may need minor repairs
and/or calibration $75.00

Microwave Components
(2) "X" Band waveguide A/B switch (SPDT) - DB Products #XWM5003
NOS, never used $40.00 each
(1) HP11517a mixer 12.4 TO 40 GHz, looks clean but not tested,
sold "as is" $100.00

Free Shipping in the USA on all of the above, on orders of $10.00 or over.
Orders under $10.00 add $4.00 for shipping. Sale prices valid until 10-6-97
or while supply lasts.

# 2929. RE: Dealing with SPAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: efbrya@acxiom.COM
Message-ID: <c=US%a=_%p=Acxiom_Corporati%l=PO-CONWAY-1-9709241257l3Z-70359@po-conway-1.conway.acxiom.com>
Source record: 90693

If people are talking about using spam filters but don't want to pay
for the connect/download charges, why not create filters that will work
at the ISP's system? That way the ISP could simply reject the message
before it ever got to the hard drive. If you wanted to get really cute
you could even reply automatically that "This address does not accept
SPAM" so that the incoming volume might (hopefully) diminish eventually
when spammers realize that their messages are being blocked.

Eric Bryan
efbrya@acxiom.com

# 2930. Re: Help Converting From 8874s to 3CX800A7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <3428FC79.4A3A8320@rl.ac.uk>
Source record: 90694

daveb@buffnet.net wrote:

> Greetings,
>
> Have a Henry Tempo 2002 2M amp that may need tubes in the near future.
>
> Has anybody replaced the 8874s with a single3CX800A7 ?
>
> Would like to hear from someone who has done it.
>

I think you will find it rather difficult. The 2002 uses a pair of 8874s
in
push pull. You want a single 3CX800. You may find it easier to convert
to a pair of 3CX800s but keep the power down. You can't use 4CX250s
even with a screen supply as the isolation and cooling are just not up
to it.

It is possible to use a single 3CX800, but you will need to replace the
entire
anode circuitry with a 1/4 wave line type system, as in the ARRL
handbook.

--
Mike

(Remove the space from the Email address to reply)

# 2931. Re: 1.2 gig pll

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: c.c.tqbssz@92.killspam.us.com
Message-ID: <60bevt$9f6$1@samba.rahul.net>
Source record: 90695

Don't forget Maxim, not only do they have some interesting RF front end
products, they also have a generous sampling policy:-)

Stephen

Carl R. Stevenson (wa6vse@fast.net) wrote:

: Check Fujitsu, Motorola, National Semiconductor, Peregrine, Philips,
: and Siemens web pages for PLL chip data and app notes ... (these
: are presented alphabetically, not in order of personal preference,
: quality or any other metric that should influence your decisions ...
: furthermore it is early in the morning and I am not yet fully awake, so
: I may have missed someone ...)

: 73,
: --
: Carl - wa6vse
: wa6vse@fast.net
: NCI #1052
: Join No Code International!
: Support the modernization of ham radio and
: help to assure its survival into the 21st century!

# 2932. Re: ethernet->analog radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34294758.16301736@news.atl.bellsouth.net>
Source record: 90696

On Wed, 24 Sep 1997 02:29:19 -0700, Dennis Erwin Thurlow
<geosynq@antispam.trader.com> wrote:
>Cow Mutilator wrote:
>>
>> Hi. A friend of mine and I have been attempting for some time now to
>> connect our computers over a radio ethernet (10BaseT) network. This has
>> proved rather difficult considering that VERY few people have any idea
>> about what this technology is.
>>
>> We'd really like to know how to convert ethernet signals to analog ones.
>> Specifically, ethernet -> analog radio signals. As much help as you can
>> offer would be appreciated.
>
>10BaseT signals are encoded the same way Manchester modems encode.

And that means you can feed them directly to a FM radio (or FSK radio,
same difference if response is true FM). All you need is adequate modulator
bandwidth (and adequate bandspace). In practice, I think you want to operate
at 10 GHz. Gunnplexers can easily handle video rate signals (about 6 MHz
bandwidth), and should stretch to handle 10 Mb/s data streams without any
fancy tricks.

Of course you could use a more complex modulation and reduce the bandwidth
required, but at the cost of much increased complexity.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2933. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970924133201.JAA25036@ladder02.news.aol.com>
Source record: 90697

>
>I'd guess the MPF-102 would be the leading candidate for a 2N2222-style
>"generic" N-channel JFET. P-channel JFETs are rarely used at the
>discrete-device level; they do exist, but no specific type #s come to
>mind.
>
>For casual RF work, the 40673 is an ancient, cheap, and still-passable
>dual-gate MOSFET. There are better parts, but I've always been fond of
>the 40673 for some reason.
>
>

The MPF-102 is a very poorly graded FET with Idss sometimes varying over range of 10:1. The 40673 was a pretty fair MosFet, but has been unobtainium for several years.
My best offer would be the JFet J-310. UHF device, works to DC, and Future Electronics sold me my last 100 at $19.00 a hundred.

W4ZCB

# 2934. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970924180901.OAA09866@ladder02.news.aol.com>
Source record: 90698

>
>Richard Karlquist wrote:
>>
>> In article <19970915183700.OAA01781@ladder02.news.aol.com>,
>> JohnsonHE <johnsonhe@aol.com> wrote:
>> >
>> >>
>> >>Many diode ring DBM seems to work better when fed by a square wave
>> >>with steep edges containing a lot (odd) harmonics. Unfortunately,
>> >>these harmonics mix with the upper part of the input spectrum and some
>> >>mixing products will fall within the IF passband. Thus, general
>> >>coverage receivers usually have (sub)octave filters in the RF
>> >>amplifier to reduce the input spectrum that might mix with the
>> >>harmonics of the local oscillator.
>> >>
>> >>>Would it improve things at all to have a bandpass filter prior to the
>> >>>VFO input to the mixer or am I worried about something that doesnt
>> >>>exist.
>> >
>> >You can filter the heck out of the VFO feeding a DBM. It'll be clean as a
>> >whistle until you connect the DBM. The non-linear load of the diodes
>> >turning on and off generates harmonics all over again. (Assuming enough LO
>> >drive to turn on the diodes), but then, it isn't a mixer until you do.
>> >
>> >W4ZCB
>>
>> Yes, but the transformers in the DBM only have to pass sine waves
>> if you use sine wave drive. It is difficult getting a square wave
>> through a transformer in one piece. Also, your square wave must
>> have exactly 50% duty cycle, to avoid intermod degradation. How
>> do you assure that? With a sine wave, it is trivial to get
>> exactly 50% duty cycle (just filter out all harmonics).
>>
>
>I am now using a push pull amplifier using MRF586's with about 6V DC
>collector to emitter and about 2 dB of voltage feedback. A ferrite
>xmission line twisted-wire choke (type FT37-43 core) feed to the
>collectors is then capacitor coupled to the floating Mini-Circuits
>SRA-3H L.O. terminals. The balance is quite good and the wave shape is
>reasonably square from 12 to 40 MHz. I use two-tone intermod tests to
>evaluate the L.O. quality and I meet Mini-Circuit's specs over the freq
>range.
>
>Bill W0IYH

Hi Bill, somebody snipped my whole second response out of this thread, then gave me credit for it!

I too favor the square wave drive. As long as you minimize the switching time, I'd use Impulse functions if I could lay my hands on a string of them!

By the way, doing a lot better than using 5 GHz bipolars in push pull with Wes's "neither fish nor fowl" gate source feedback fet amplifiers using quad J-310's. Neutralize it with a drain feedback winding, and get noise figure under 1.5 dB, input return loss greater than 30 dB, output return loss greater than 20 dB, 12 dB gain and reverse gain greater than -55 dB. Ip3 is +24 input, and my intermod limit is now the coils in the antenna filter. Part of it is the construction of the feedback transformer, I'd be happy to make you up one for you to play with as a partial payback for "The solid-state receiver." Works pretty well for $0.80 worth of devices.

W4ZCB

# 2935. Re: VFO harmonics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34295DFF.6BA5@crpl.cedar-rapids.lib.ia.us>
Source record: 90699

JohnsonHE wrote:

> I'd be happy
> to make you up one for you to play with as a partial payback for "The
> solid-state receiver." Works pretty well for $0.80 worth of devices.

Thanks anyway Harold, but on the project I'm working on I am doing my own circuit designs and doing my own thing. Sometime in the next millenium or two I will have a completely homebrew 150W bandswitching Xcvr, 160 to 10, SSB/CW. Not state-of-the-art specs, but using as many parts on hand as possible (e.g., MRF586's) with compromises of one kind or another.

Bill W0IYH

## 2936. Magnet wire wanted (surplus)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: "W. Worley" <worley@snowhill.com>
Message-ID: <34296ED3.3DA3@snowhill.com>
Source record: 90700

I am looking for at least 3 or 4 lbs. of surplus #25 magnet wire. Will consider #24 or #26 also. Must be surplus, not over $2/lb. please. Willing to buy up to 10 lbs. of one size. Email or call 334-347-5281.

# 2937. F.S. - NOS tubes, books, misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970924193801.PAA15296@ladder02.news.aol.com>
Source record: 90701

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #911-T.

# 2938. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002409971259150001@news.primenet.com>
Source record: 90702

:
:The MPF-102 is a very poorly graded FET with Idss sometimes varying over
:range of 10:1. The 40673 was a pretty fair MosFet, but has been unobtainium
:for several years.
:My best offer would be the JFet J-310. UHF device, works to DC, and Future
:Electronics sold me my last 100 at $19.00 a hundred.
:
:W4ZCB

RF Parts has a good selection of n channel and p channel fets. Also, I always advise people who purchase from Newark, and need to get to the $50 minimum level to pad their order with J318 or U318's or some other neat fets from Motorola.

Cause when you need them, you can't find them retail anywhere. I wish NTE would carry a J318 cross. And maybe even a MRF586 cross, but then I'm now into dreamland.

Rob.

# 2939. Re: Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Mark J Sandford <sandford@tridsys.com>
Message-ID: <34296BDF.8CF58231@tridsys.com>
Source record: 90703

Carl R. Stevenson wrote:

> Mark J Sandford <sandford@tridsys.com> wrote in article
> <342851B8.51459E9D@tridsys.com>...
> > Is it possible to build a crystal filter with overtone crystals
> > operating in overtone if so how are the crystals made to operate within
> > the filter in the overtone vs. fundemental mode????
>
> Standard product xtal filters are readily available from multiple sources
> at frequencies like 45MHz, 70MHz, 75MHz, and 140 MHZ ... and more,
> but those are some of the most common freqs.
>
> --
> Carl - wa6vse
> wa6vse@fast.net
> NCI #1052
> Join No Code International!
> Support the modernization of ham radio and
> help to assure its survival into the 21st century!
>

Yes I understand that commerical products are available but as I want to homebrew a low VHF IF I was wondering how they are built and if it was possible to make one like you would a regular crystal ladder filter using overtone crystals?????? As with most at home projects its hard to get small quanities of nonstandard parts and I have more time than cash.

# 2940. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002409971312180001@news.primenet.com>
Source record: 90704
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

Despite what anyone says about the technology, these old rigs represent the utimate in quality. Back in the days when you could call up the manufacturer and actually talk to the engineer- in contrast to today then you get some marketing guy who has to be threatened before he will even send a schematic. And passes the buck to some guy in Japan at the slightest hint of criticism.

Rob.

# 2941. Re: Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002409971306460001@news.primenet.com>
Source record: 90705

In article <342851B8.51459E9D@tridsys.com>, Mark J Sandford
<sandford@tridsys.com> wrote:

:Is it possible to build a crystal filter with overtone crystals
:operating in overtone if so how are the crystals made to operate within
:the filter in the overtone vs. fundemental mode????

Commonly overtone crystals are used in ladder filters in very high quality (note I'm not talking about ham gear) 800mhz gear like police radios. I have several Toshiba radios that use an IF near 42mhz via a 3 pole ladder filter.

However, realize that normalized Q is very low for a VHF crystal filter when compared to the lower HF equivalent. Thus wide BW's are used so that receiver noise figure is not compromised.

This is the bane of up-conversion. The need for a wide roofing filter that guarantees that inband IMD will be awful. See the Sherwood Engineering web page if you need proof of this.

I believe that a much higher quality receiver can be made by mixing down a VHF synthesizer into the HF region. I have shown this with a hybrid DDS/PPL, but its questionable whether its very useful for homebrewers, since you need basically a computer to crunch the math as the tuning knob is turned.

Rob.

# 2942. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: Reid Fletcher <fletcher@uwyo.edu>
Message-ID: <342931D0.41C6@uwyo.edu>
Source record: 90706

Chris Lamousin wrote:
>
> I once saw how de Forrest used a flame in his lab as a rectifier. Does
> anyone have any info on this? I would be interested in the laws that
> govern this phenomena.
> Chris

Chris,

This doesn't answer your question about DeForest's setup, but it
is a related application, I'd wager...

Years ago, I built what might be described as a flame speaker. The
premise was that any flame is composed of (among other things)
very excited ions (a plasma). It should therefore conduct
electricity. Also, the flame occupies a volume of space.
Imposing a current on the flame should make the volume vary
proportionally to the current.

I used an acetylene torch for the flame. I used a wick in a
saturated solution of sodium chloride to "dope" the flame at it's
base to add extra ions. The circuit was simple. I needed a high
voltage power supply (I used 2 kv DC), a macho audio transformer,
an audio amplifier (rated at 100 watts into 8 ohms) and the flame.
The audio amp output was wired into the 8 ohm secondary of the
audio transformer. The primary was wired in series with the HV
power supply, and the flame. The "connection" to the flame was
done with some nichrome wire scavenged from an old toaster, which
had been straighted and inserted into the flame spaced about
2 inches apart. If you drove the setup hard enough, you could
easily hear audio coming from the flame. It totally lacked low
frequency content and had a distracting signal to noise ratio due
to the sound of the flame itself trashing the noise floor. But it
was fun to do. (Excuse me while I light the speakers...).

There was an article about this project in one of the electronics
magazines (maybe Popular Electronics) in the late 60s or early 70s.

-- Reid WB7CJO

# 2943. Re: Magnet wire wanted (surplus)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <342990CC.19B1@phoenix.net>
Source record: 90707

W. Worley wrote:
>
> I am looking for at least 3 or 4 lbs. of surplus #25 magnet wire. Will
> consider #24 or #26 also. Must be surplus, not over $2/lb. please.
> Willing to buy up to 10 lbs. of one size. Email or call 334-347-5281.
W.Worley, the best place to find this kind and quan. is at a motor
rewind shop. They usually scrap the ends of rolls which are too short to
do a complete motor as all windings are done with out splices. Just go
to one and plead your case that you are an expermenter/ham and need a
small quanity to do a project.
They'll prob. give it to you. or charge you their price per lb.
joe d

# 2944. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: klocko@toad.net
Message-ID: <875146835.18372@dejanews.com>
Source record: 90708

In article <34184222.2D51@flash.net>,
billharr@flash.net wrote:
>
> klocko@toad.net wrote:
> >
> > In article <01bcbdfd$ccdad400$LocalHost@slirp.med.auth.gr>,
> > "koystravas dimitris" <sv2dsu@med.auth.gr> wrote:
> > >
> > > ...i need to make an 1:1 balun for my G5RV antenna
> > > for 3.5 to 30 Mhz.
> > > ....
> >
> > Hi Dimitris, One of the W2DU baluns should do the job. Get 7 or 8 ferrite
> > beads (the ones that are about one inch long) that will fit over your
> > coax. Make sure they are rated for 3.5 to 30 MHz. They should be fairly
> > cheap. Slip them over the coax at the point where the coax meets the
> > balanced line, and secure them with nylon ties. The beads should suppress
> > any currents on the outside of the coax feed line without interfering
> > with antenna operation. 73 and good luck. Bill N3WK
>
> That is technically not a balun, it is only an rf choke.
>

Bill, This is a new response to your old post, but I want to pass on some info on the ferrite bead choke balun to try to show that it is more than just an RF choke. An article in QST (March 1983, p. 38) describes two such baluns, one for the 1.8 to 30 MHz bands and the other for the 30 to 250 MHz bands. Using a balance measurement technique, the output terminal imbalance for these baluns was found to be "undetectable". The ferrite beads provide a high impedance to possible currents on the outer shield surface, so equal currents on the arms of a dipole are maintained. Of course, the effectiveness of a ferrite bead choke balun depends on the type of ferrite, the number of beads, etc., etc. 73, Bill N3WK

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2945. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002409971741160001@news.primenet.com>
Source record: 90709

In article <3429791F.4F7D@crpl.cedar-rapids.lib.ia.us>,
sabinw@crpl.cedar-rapids.lib.ia.us wrote:

:europa@primenet.com wrote:
:
:> would carry a J318 cross. And maybe even a MRF586 cross,
:
:What does "cross" mean?
:
:Bill W0IYH

You've gotta be kidding???? Worked too long in the world of OEM???

# 2946. Re: Cathode Follower Power Amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002409971751190001@news.primenet.com>
Source record: 90710

In article <199709221743.NAA00833@pop.uky.edu>, wlfuqu00@pop.UKy.EDU
(William L. Fuqua III) wrote:

:
: Has anyone had experience with Common Plate (Cathode Follower)
:RF power amplifiers? I would like to operate a 304TL in this
:configuration. The idea is to operate the tube in AB1 so that the
:only drive power needed it to overcome losses in the grid tank
:circuit in generating the 3KV or so peak grid voltage.
: The filament will be heated by a home made low capacitance
:transformer and the output circuit is to be a PI-L network.
:I hope to get about 800 or so watts out with out the drive
:requirements of a GG amplifier (almost 200watts for 304TL) and
:with out the normal problems of grid driven triode tuned amplifiers.
: If it works with this low Mu tube I may try it with the
:others I have (3X3000F1) and (3CW5000F1). It be
:a very low distortion and low drive power amplifier.
:
: 73
: Bill wa4lav
:

OK, I'll bite. I have designed audio amps using the 6080 tube directly
driving speakers. I'm not sure if that qualifies me as an expert or as one
of the criminally insane :) But I have used common plate circuits.

According to all that I have read, common plate for RF power amps is
viable. Has as good freq response as anything else.

But in this case drive needs to be from Vcc down to -Vcc, thus centered at
0v. In most RF amps, drive is from 2Vcc to 0v. Anything higher produces
excessive grid currents.

Other than the drive considerations, I can't think of why it wouldn't work.
Please keep us informed.

Rob.

# 2947. In bad need of printed circuit board for 1or2 trans 6mtr linear amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: bogus@fake.com
Message-ID: <60bj3v$rtr@camel15.mindspring.com>
Source record: 90711

Gentlemen,
In bad need of printed curcuit board for a 1 or 2 transistor 6 mtr
linear amplifier, will accept all plans or boards in the 100w to 300w
range. wanting to homebrew a transistor box but I need a board,
or a board layout i can trace on copper clad. please help this lowly,
extra class cber. A>K>A> no-code tech. 73
emailat:
kf4jzh@mindspring.com
Donnie Smith

# 2948. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-24 00:00:00 UTC
From: bgudgel@eskimo.com
Message-ID: <60c04a$4v6$1@eskinews.eskimo.com>
Source record: 90712
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

```
: > P-Channel FETs, like there are NPN and PNP transistors.
: >
: > You know, like the good old 2N2222, or for power the 2N3055, etc...
: >

Off the top of my head, the VN2222 comes to mind. It's a to-92 too.
I'm not sure, but maybe there's a VN2907 etc., also.
Bob K7IQ

--
K7IQ
```

# 2949. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <60cet1$q3o$1@news1.teleport.com>
Source record: 90622

In article <3428F354.12F6@crpl.cedar-rapids.lib.ia.us>,
"William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Roy Lewallen wrote:
>>
>> There are two common methods of doing this, known as random
>> and sequential-sweep sampling.
>
>Helmholtz, in 1869, invented the Helmholtz Pendulum. A switch attached
>to the pendulum would sample a waveform whose frequency was much greater
>than the pendulum frequency. By choosing the pendulum rate slightly
>different than a subharmonic of the waveform he could make a paper strip
>chart recording of the waveform. Hund, High Frequency Measurements,
>1933.
>
>Bill W0IYH

This is the technique currently called "sequential-sweep" sampling. A stroboscope provides a good example. If you look at a turning fan with a stroboscope exactly synchronized with the fan, it'll appear to be standing still. If you change the strobe frequency just slightly, the fan will appear to turn slowly. What you see is a replica of the actual fan motion, but scaled in time.

Oh, one thing I didn't mention in the previous posting. Equivalent-time sampling methods require a periodic waveform -- they won't work with a single-shot event.

Thanks for the history lesson. I knew the technique was very old, but didn't know its origin.

Roy Lewallen, W7EL

# 2950. Re: Look at my homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: bust@spammers.net
Message-ID: <3429d1e7.5287739@news.mnsinc.com>
Source record: 90623
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.space

On 23 Sep 1997 19:05:35 GMT, "Geert" <pass@glo.be> wrote:

>Hello
>
>Look at my homepage and PLEASE sign my guestbook.
>
>
>73!

OK! But uh - did you forget to tell us that your web page is at:

http://www.mnsinc.com/bry/

???

(remove the word REMOVE from my e-mail address to respond!)

# 2951. transformer details

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: User Name <username@mpx.com.au>
Message-ID: <60de42$pjt@inferno.mpx.com.au>
Source record: 90624

I have obtained a power transformer manufactured by American Monarch
Corp. Minneapolis MN 55421.

I have had no luck finding an address (either E-Mail or snail mail)
to get the details of this transformer.

Its details are as follows:-

AM No H504731A
Cust No 3181-9.659
REV./EC B
00D044 83??

It is out of a Burroughs B90 Computer and has a 7.5Amp 240 volt input.

If anyone can help with either an E-Mail Address, a snail mail address
or details of the transformer, I will be extremely greatful.

73's and thanks in anticipation

Gary Bonnor

garyb@albury.net.au

## 2952. HQ-129X FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Nelson <5560@notso.net>
Message-ID: <342A5531.1016@notso.net>
Source record: 90625

Hammarlund HQ-129x ForSale. Functional, complete and good shape
$135 plus shipping from RI. Please reply to: shiso@ici.net
Thank You. Bruce KD1MW

# 2953. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: spam_me_not@shore.net
Message-ID: <60di9d$7sl@fridge.shore.net>
Source record: 90626
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Doran Platt <jeepp@erols.com> wrote:

>Ray W. wrote:

>> Things were not too bad at Hahn !

> Nor at Sembach
>Jeep

I worked in the control tower on the flight line side of Sembach.

==========
73 de Jim, WK1V
Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
http://www1.shore.net/~jjmartin/jjm2.htm
==========
H

# 2954. Re: HANDHELD SCOPEMETER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: OT <ot@321.net>
Message-ID: <342A19E8.1E6D9D6E@321.net>
Source record: 90627

JACK LAI wrote:
>
> OUR COMPANY IS DEVELOPING ONE PRODUCTS "HANDHELD SCOPEMETER". THE FINAL
> PRODUCTION WILL BE DONE AFTER 3 WEEKS.
> THIS IS SIMILAR WITH FLUKE MODEL NO.123.
>
> WE ARE LOOKING FOR LONG TERM BUSINESS DISTRIBUTORS.
>
> IF INTERESTING, PLEASE EMAIL TO ME
> EMAIL ADDRESS : jama3649@ms7.hinet.net
>
> JACK LAI
> JAMA ORIENTAL CO.,LTD.

Ah, so! The product, if equivalent, should have a good market in the
orient ....in the US? Knock-offs are generally not appreciated anymore.
Good Ruck.

# 2955. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <342A7F5B.2273@ccm.intel.com>
Source record: 90628

klocko@toad.net wrote:
> The ferrite
> beads provide a high impedance to possible currents on the outer shield
> surface, so equal currents on the arms of a dipole are maintained.

Hi Bill, the beauty of this device is that it chokes currents on the
outer shield (the common-mode currents) and it doesn't matter if it
is working into a balanced load or an unbalanced one. I use one in my
mobile configuration and I wouldn't call it a balun in that case
although it is physically identical to the "balun" I use on my dipole.
It is always a choke. Whether it functions as a balun or not (unun)
depends on how it is used.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

## 2956. RF Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199709251309.GAA18259@mail.ucsd.edu>
Source record: 90629

I'am looking for the e-mail address or the Web Site address.

Thanks

73 de IW1DZD

# 2957. Re: RF Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <342A80A8.613@onramp.net>
Source record: 90630

chalpm@hqlab.ico.olivetti.COM wrote:
>
> I'am looking for the e-mail address or the Web Site address.
>
> Thanks
>
> 73 de IW1DZD

Don't know about a web site yet but e-mail is..

rfp@rfparts.com
--
Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 2958. Re: Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <342A96C6.3B20@boeing.com>
Source record: 90631

Mark J Sandford wrote:
>
> Carl R. Stevenson wrote:
>
> > Mark J Sandford <sandford@tridsys.com> wrote in article
> > <342851B8.51459E9D@tridsys.com>...
> > > Is it possible to build a crystal filter with overtone crystals
> > > operating in overtone if so how are the crystals made to operate within
> > > the filter in the overtone vs. fundemental mode????
> >
> > Standard product xtal filters are readily available from multiple sources
> > at frequencies like 45MHz, 70MHz, 75MHz, and 140 MHZ ... and more,
> > but those are some of the most common freqs.
> >
> > --
> > Carl - wa6vse
> > wa6vse@fast.net
> > NCI #1052
> > Join No Code International!
> > Support the modernization of ham radio and
> > help to assure its survival into the 21st century!
> >
>
> Yes I understand that commerical products are available but as I want to
> homebrew a low VHF IF I was wondering how they are built and if it was
> possible to make one like you would a regular crystal ladder filter using
> overtone crystals?????? As with most at home projects its hard to get small
> quanities of nonstandard parts and I have more time than cash.
Ceramic resonators are essentially crystals. Even the Radio Shack
DX-394 use a 45 MHz ceramic resonator as a filter.
Ralph

# 2959. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <342a7e75.9423103@news.atl.bellsouth.net>
Source record: 90632
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

On 24 Sep 1997 13:08:00 -0700, europa@primenet.com wrote:
>Despite what anyone says about the technology, these old rigs represent the
>utimate in quality. Back in the days when you could call up the
>manufacturer and actually talk to the engineer- in contrast to today then
>you get some marketing guy who has to be threatened before he will even
>send a schematic. And passes the buck to some guy in Japan at the
>slightest hint of criticism.
>
>Rob.

I wouldn't exactly call the old rigs the ultimate in quality, though some of the gear intended for the military did use top quality parts. Most of the stuff intended for the amateur market, however, suffered from serious corner cutting. And the circuit designs, sigh, they were so limited by the number of active devices they could include that the designs were always seriously compromised (and that includes prestige makes like Collins).

You can still call up the manufacturer and talk to the designer(s). But it may be an international call, and it helps if you speak Japanese. (Don't bother calling the US reps with technical questions, they're just sales droids.). I've had occasion to consult the Japanese manufacturers about various equipments, both professional and amateur equipment. I've found them to be uniformly friendly and helpful if you can overcome the language barrier. I have an in there. One of our staff speaks fluent Japanese, and can act as translator. I've even had them return my calls, on their nickel. Like design engineers anywhere, they just love to talk shop.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 2960. lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <342A98A3.2DB1@phoenix.net>
Source record: 90633
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

The lawyer thing and this post is a test for radio transmission of
newsgroups. Don't be upset. Take a deep breath and just think of me as
some other nut wasting internet bandspace. WE ARE WATCHING.
joe d

## 2961. WTB: Air Variable Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Stuart Browne <satcom@lava.net>
Message-ID: <342AAEBF.379C@lava.net>
Source record: 90634

I need several 30 uuf variable capacitors for gamma matching sections
for homebrew quads. Any body tell me where I can get some?

Aloha and 73's
Stu Browne
WH6H

# 2962. Re: Low current power supply IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <60ed26$i6o@news2.tds.net>
Source record: 90635

I had intended to send this via email, but it bounced (as follows).
Mike, hope you are still monitoring usenet. Here goes my reply,
thanks...

Art...

----- Transcript of session follows -----

Your mail addressed to 'm.j.willis ' has not been delivered because
the
RAL mailer could not determine with confidence the intended recipient.
The most likely candidates that were found are listed below.

Miss A.M.H.1, Mail to: "A.M.H.1@RL.AC.UK"
Press and Public Relations, R71 Room 1.03, x6750

----- Original message follows -----
Return-Path: w1_k_sorter@qsl.net
Received: from ns1.qsl.net by nameserv.rl.ac.uk with ESMTP
id QAA01192 for <M.J.Willis\ @rl.ac.uk>; Thu, 25 Sep 1997
16:40:30 +0100
Received: from atlas.colby.edu (mome1-a12.northlandlink.com
[207.0.87.205]) by ns1.qsl.net (8.7.6/8.7.3) with SMTP id KAA26787 for
<M.J.Willis\ @rl.ac.uk>; Thu, 25 Sep 1997 10:42:09 -0400
Message-Id: <199709251442.KAA26787@ns1.qsl.net>
From: w1_k_sorter@qsl.net (K sorter)
To: Mike Willis <"M.J.Willis "@rl.ac.uk>
Subject: Re: Low current power supply IC's?
Date: Thu, 25 Sep 1997 18:40:44 GMT
Reply-To: w1_k_sorter@qsl.net
X-Newsreader: Forte Free Agent 1.0.82

Hey Mike,

Interesting concept, but... In order to make it work without alot of
wasted power, it has to charge a cap, then shut down till its needed
again (which is what the inductive kickback single chip controllers
do).

Your voltage monitoring IC alone is going to consume 2 or 3 ma of
supply current all by itself, isn't it? Then the audio oscillator has
to operate class ab-20 percent effecient at best, plus it runs all the
time, even if the output current requirements are met, doesn't it?

I had a temp lashup for this using a high linearity dual transistor
descrete component (twin T, high impedance output type) oscillator,
and I couldn't get the quiescent current down to less than 4 ma (thats

without load or voltage monitoring overhead.

Also, the transformer needed to do this right isn't a dimestore item,
and would have to be designed and built custom. The transformer design
is no small task. A hugh core from an existing piece of switched power
supply gear won't make it...

Can you tell me how much quiescent current your circuit draws and give
me some other details? I have become aware of some comparators that
use very low supply currents, but not sure if they have the necessary
HIGH input impedances to make the voltage regulation work without
loading the output. Also, I need to avoid the audio range, it needs
to work at 10X audio range, 50 to 100khz is the minimum design
frequency.

Very much appreciate the assistance, and I hope I missed something in
my initial evaluation of this method.

Can you enlighten me further?

I can accept email attachments if you have the ability to send the
schematic via email.

Again, many thanks..

Art.

Mike Willis <"M.J.Willis "@rl.ac.uk> wrote:

>K sorter wrote:

>> Hi Everyone,
>>
>> I'm looking for some high tech PS chips. I need something that will
>> run on batteries that will produce regulated -100 to -200 volts @ 1 to
>>
>> 100 ua.
>>
>> I need high effeciency! A conventional saturated switching core step
>> up transformer won't do it-they waste too much power because they
>> aren't made to produce such low output currents.

>Build an audio oscillator. Use a transformer to raise the voltage to
>-200V RMS.
>Rectify the result (full wave!) and filter with a capacitor of good low
>loss characteristics. Build a regulator to stabilise the output feeding
>back to the
>audio oscillator drive.

>That is the way my CRO works, 12V in, 3kV out, tripled to 9 kV.

>Alternatively, buy a 200V battery.

# 2963. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <60e4jn$isk@hpcvsnz.cv.hp.com>
Source record: 90636

europa@primenet.com wrote:
: In article <3429791F.4F7D@crpl.cedar-rapids.lib.ia.us>,
: sabinw@crpl.cedar-rapids.lib.ia.us wrote:

: :europa@primenet.com wrote:
: :
: :> would carry a J318 cross. And maybe even a MRF586 cross,
: :
: :What does "cross" mean?
: :
: :Bill W0IYH

: You've gotta be kidding???? Worked too long in the world of OEM???

Let's see here... "Cross: n. 1. An upright post with a transverse
piece near the top, used in former times as an instrument of execution
for certain types of criminals." No, that's probably not it. Oh, here:
"intr.v. 4. Involving intercahnge; reciprocal." In other words, an
equivalent replacement. (Just in case he wasn't kidding, and in case
it wasn't obvious from the context.)

--
Cheers,
Tom
tomb@lsid.hp.com

# 2964. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <342a7b99.8691018@news.atl.bellsouth.net>
Source record: 90637

On Wed, 24 Sep 1997 09:29:20 -0600, Reid Fletcher <fletcher@uwyo.edu> wrote:
>I used an acetylene torch for the flame. I used a wick in a
>saturated solution of sodium chloride to "dope" the flame at it's
>base to add extra ions. The circuit was simple. I needed a high
>voltage power supply (I used 2 kv DC), a macho audio transformer,
>an audio amplifier (rated at 100 watts into 8 ohms) and the flame.
>The audio amp output was wired into the 8 ohm secondary of the
>audio transformer. The primary was wired in series with the HV
>power supply, and the flame. The "connection" to the flame was
>done with some nichrome wire scavenged from an old toaster, which
>had been straighted and inserted into the flame spaced about
>2 inches apart. If you drove the setup hard enough, you could
>easily hear audio coming from the flame. It totally lacked low
>frequency content and had a distracting signal to noise ratio due
>to the sound of the flame itself trashing the noise floor. But it
>was fun to do. (Excuse me while I light the speakers...).

To get rid of (most of) the flame noise, use a quiet low pressure burner
instead of the acetylene torch. And to get low frequency response, use a
larger burner unit and adjust for a long soft flame. A "gas log" burner,
or the burner out of a gas grill, will work best. You can get quite respectable
sound out of these things.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 2965. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199709251310.GAA18332@mail.ucsd.edu>
Source record: 90638

```
test
```

## 2966. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <60eigq$kbi@news2.tds.net>
Source record: 90639

Have read all the posts on this-

Please realize-when I say 'attack' the spammers computer, I don't mean to send it signals which will do physical harm to the spammers computer!!!!

'Attack' means to use hacking techniques, UDP specialized commands sent via the network, polling-any low thruput command sent via the network that causes the target computer to take time to process it, and that DOESN'T genearate a reply meets this criteria.

This limits the spammer computers ability to send spam for a short time!

The second phase is to generate an online site that lists up to the minute spammer domain names-if the spammers domain operates for more than a month sucessfully, then move up to the spammers HOST computer, and re-attack! The info on WHO to attack would be held on a central database, available to all. Then get the authors of various internet software packages to generate these commands at random during periods of NO/LOW thruput by the user!

This way, we could all participate-think of how long some of us are on the internet without really inputing data or downloading data. If our apps would issue a command like this twice per second (we'll say), it would be a powerful antispamming tool-because EVERYONE would be doing it!!!

Sick of spam?

Let's take OUR internet back. Run these fukers out of biz!!!

What Say?

de K.

PS-no local dialup ISP-still paying 9 cents per minute to download spam! Pissed, you bet I am!

# 2967. Re: RF Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342A82F7.3217@crpl.cedar-rapids.lib.ia.us>
Source record: 90640

chalpm@hqlab.ico.olivetti.COM wrote:
>
> I'am looking for the e-mail address or the Web Site address.
>
> Thanks
>
> 73 de IW1DZD

e-mail rfp@rfparts.com

Bill W0IYH

## 2968. WTB 813 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: r.e.marsh@juno.com
Message-ID: <60eqh0$lbg$2@moe.thenet.net>
Source record: 90641

Need to buy a pair of 813 tuber for upcomming linear project.
I have a large junk box , but no high power tubes. They can be used
or new but they must work. thanks WA4JJQ. remarsh@juno.com

# 2969. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342AAE74.5A24@crpl.cedar-rapids.lib.ia.us>
Source record: 90642
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

Gary Coffman wrote:
>
>
> I wouldn't exactly call the old rigs the ultimate in quality, though some
> of the gear intended for the military did use top quality parts. Most of
> the stuff intended for the amateur market, however, suffered from
> serious corner cutting.

One problem with vacuum tube HF ham receivers was the noise figure mania. Hams thought that if an HF receiver didn't have a 5 dB noise figure it was not very good and would not buy it. As a result, strong signal performance suffered because of vac tube limitations. Special tubes like the 7360 beam deflection tube (Squires-Sanders SS-1) showed up just as the transistor age began to take over, but by then it was too late.

Bill W0IYH

# 2970. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Dana Gould <dgould@bev.NOSPAMetn.com>
Message-ID: <01bcc9cb$bf877180$4ce06e97@pc3527.bev.etn.com>
Source record: 90643

europa@primenet.com wrote in article
<europa-ya023580002409971741160001@news.primenet.com>...
> In article <3429791F.4F7D@crpl.cedar-rapids.lib.ia.us>,
> sabinw@crpl.cedar-rapids.lib.ia.us wrote:
>
> :europa@primenet.com wrote:
> :
> :> would carry a J318 cross. And maybe even
> :> a MRF586 cross,
> :
> :What does "cross" mean?
> :
> :Bill W0IYH
>
> You've gotta be kidding???? Worked too long
> in the world of OEM???

That was certainly informative.

I think he's referring to a functionally equivalent part from another
manufacturer. The term probably derives from the cross-reference tables
used to find functionally equivalent semiconductors.

But what do I know, I'm just a programmer.

--
Dana Gould, WA1UIW
To respond by email, remove NOSPAM from my return address.
NOSPAMdgould@bev.etn.com

# 2971. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: klocko@toad.net
Message-ID: <875230064.30639@dejanews.com>
Source record: 90644

In article <342A7F5B.2273@ccm.intel.com>,
CecilMoore@delphi.com wrote:
aintained.
>
> Hi Bill, the beauty of this device is that it chokes currents on the
> outer shield (the common-mode currents) and it doesn't matter if it
> is working into a balanced load or an unbalanced one. I use one in my
> mobile configuration and I wouldn't call it a balun in that case
> although it is physically identical to the "balun" I use on my dipole.
> It is always a choke. Whether it functions as a balun or not (unun)
> depends on how it is used.
> --
>

Hi Cecil, there are some other nice features - it's extremely easy to put one together, and it does the job of suppressing currents on the outer shield without modifying the radiating system itself. I tried putting together a 4:1 toroid balun, and was never happy with it, I think because the added inductance of the toroid winding changed everything. 73, Bill N3WK

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 2972. Re: Low current power supply IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: w1_k_sorter@qsl.net
Message-ID: <60edc4$i8r@news2.tds.net>
Source record: 90645

I had intended to send this via email, but it bounced (as follows).
Mike, hope you are still monitoring usenet. Here goes my reply,
thanks...

Art...

Your mail addressed to 'm.j.willis ' has not been delivered because
the
RAL mailer could not determine with confidence the intended recipient.
The most likely candidates that were found are listed below.

Miss A.M.H.1, Mail to: "A.M.H.1@RL.AC.UK"
Press and Public Relations, R71 Room 1.03, x6750

----- Original message follows -----
Return-Path: w1_k_sorter@qsl.net
Received: from ns1.qsl.net by nameserv.rl.ac.uk with ESMTP
id QAA01510 for <M.J.Willis\ @rl.ac.uk>; Thu, 25 Sep 1997
16:49:02 +0100
Received: from atlas.colby.edu (mome1-a12.northlandlink.com
[207.0.87.205]) by ns1.qsl.net (8.7.6/8.7.3) with SMTP id KAA26922 for
<M.J.Willis\ @rl.ac.uk>; Thu, 25 Sep 1997 10:50:37 -0400
Message-Id: <199709251450.KAA26922@ns1.qsl.net>
From: w1_k_sorter@qsl.net (K sorter)
To: Mike Willis <"M.J.Willis "@rl.ac.uk>
Subject: Re: Low current power supply IC's?
Date: Thu, 25 Sep 1997 18:49:12 GMT
Reply-To: w1_k_sorter@qsl.net
X-Newsreader: Forte Free Agent 1.0.82

The battery idea is very practical for this application (and the
preferred method IMHO), but I have searched far and wide for 100 to
200 volt batteries or cells that could be put in series.

Best I could do was some 1.2 volt ni-cad coin cells, but they cost
over a dollar each, and I need ALOT of them to make 200 v!

If I could find appropriate batteries for a reasonable price, I would
buy them and be happy!

A proper battery (rechargable) would be the best answer by a longshot.

I only need 5 ma hour capacity, but they would have to be
rechargable-or else VERY VERY cheap! I don't see any way to justify
the high expense of a battery purchase unless it is rechargable.

Ideas?

Many thanks...

Art...

>Alternatively, buy a 200V battery.

## 2973. Canon Copier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: tsimonds@icanect.net
Message-ID: <60e3bh$cbe$1@news.icanect.net>
Source record: 90646

Anybody out there work for Canon, or know someone who does, that may be able to help with a PC6 problem?

It copies very well, but puts up a "jam" fault just as the sheet comes out of the delivery end. There is no paper jam. I have the service manual and all seems to be in order (obviously not!). It seems to be temperature-related.

I'm hoping someone might help before I have to endure the usual run-around with the service people.

Thanks...

73 Terry/WB4FXD
*** Change the tsimonds to fsimonds for e-mail
Address in header is SPAM filter

# 2974. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Greg Dean <n9nwo@gte.net>
Message-ID: <60dv0n$qe$1@gte1.gte.net>
Source record: 90647
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital,soc.culture.german

JJ wrote:
>
> Doran Platt <jeepp@erols.com> wrote:
>
> >Ray W. wrote:
>
> >> Things were not too bad at Hahn !
>
> > Nor at Sembach
> >Jeep
>
> I worked in the control tower on the flight line side of Sembach.
>
> ==========

I started this when I replied about missing K-town. We need to get all the folks on the net who were in the K-town area and email each other.

BTW, Sembach does not have aircraft working out of it. It is used as a secondary site. Some of the old hangers are being used as commercial go cart racing. It is great fun!! (So much easier to have recreational activities when the lawyers are kept at bay.)

## 2975. lawyers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <342A9759.6B67@phoenix.net>
Source record: 90648
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Millions upon millions of lawyers are possiably killed or maimed or die
of natural causes each year and we never see or hear anything in the
news media.!!WHY?!! You may ask. Because who cares?

# 2976. Dual Band Antenna Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: AARON SCHMITZ <aschmitz@marktwain.net>
Message-ID: <342B1D75.1523@marktwain.net>
Source record: 90649

Thanks for reading this message.
I am looking for plans on building a dual band base antenna. I saw one that someone had built and was selling at a hamfest. It had dual 5/8 wave elements on 440 and was a shortened 5/8 wave on 2 meters. The antenna used two coils one of which was shunt fed(the bottom on which I believe had 8 turns on a 1/2" form. ) Any Help would be appreciated. It can be posted to the newsgroup or directly to me. 73

Aaron
--
---
Aaron Schmitz
KB0YKI
Route 1 Box 31
Ewing, MO 63440
Email:
aschmitz@marktwain.net
aschmitz@culver.edu
Web:
http://www.marktwain.net/~aschmitz/home.html
"Specializing is computer assistance for Macintosh and IBM"

## 2977. High power directional coupler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Jabran Soubeih <soubeih@expert.cc.purdue.edu>
Message-ID: <Pine.SOL.3.91.970925131153.6811A-100000@expert.cc.purdue.edu>
Source record: 90650

I am searching for a directional coupler for a microwave project.
Here are the specs:
Power: 300 watts
Freq.: 2.5GHz

That's about all I need.
Can anyone help??

THanks, Jabran
N9KZA
jabran@purdue.edu

# 2978. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342AABB0.3754@crpl.cedar-rapids.lib.ia.us>
Source record: 90651

Dana Gould wrote:
>
> europa@primenet.com wrote in article
> <europa-ya023580002409971741160001@news.primenet.com>...
> > In article <3429791F.4F7D@crpl.cedar-rapids.lib.ia.us>,
> > sabinw@crpl.cedar-rapids.lib.ia.us wrote:
> >
> > :europa@primenet.com wrote:
> > :
> > :> would carry a J318 cross. And maybe even
> > :> a MRF586 cross,
> > :
> > :What does "cross" mean?
> > :
> > :Bill W0IYH
> >
> > You've gotta be kidding???? Worked too long
> > in the world of OEM???
>
> That was certainly informative.
>
> I think he's referring to a functionally equivalent part from another
> manufacturer. The term probably derives from the cross-reference tables
> used to find functionally equivalent semiconductors.
>
> But what do I know, I'm just a programmer.

That is right, as I later learned. I was not familiar with that term.

Bill W0IYH

## 2979. How to homebrew site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: geotek@flex.net
Message-ID: <342ab926.15584164@news.zippo.com>
Source record: 90652

There is an interesting series of articles in the Tech Topics section
of the Northwest Amateur Radio Society web site. The articles cover
several aspects of quality homebrewing from the procurement of the
parts to the design of front panels.
Check-out http://www.flash.net/~nars/

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

# 2980. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002509971537530001@news.primenet.com>
Source record: 90653

In article <342AABB0.3754@crpl.cedar-rapids.lib.ia.us>,
sabinw@crpl.cedar-rapids.lib.ia.us wrote:

:Dana Gould wrote:
:>
:> europa@primenet.com wrote in article
:> <europa-ya023580002409971741160001@news.primenet.com>...
:> > In article <3429791F.4F7D@crpl.cedar-rapids.lib.ia.us>,
:> > sabinw@crpl.cedar-rapids.lib.ia.us wrote:
:> >
:> > :europa@primenet.com wrote:
:> > :
:> > :> would carry a J318 cross. And maybe even
:> > :> a MRF586 cross,
:> > :
:> > :What does "cross" mean?
:> > :
:> > :Bill W0IYH
:> >
:> > You've gotta be kidding???? Worked too long
:> > in the world of OEM???
:>
:> That was certainly informative.
:>
:> I think he's referring to a functionally equivalent part from another
:> manufacturer. The term probably derives from the cross-reference tables
:> used to find functionally equivalent semiconductors.
:>
:> But what do I know, I'm just a programmer.
:
:That is right, as I later learned. I was not familiar with that term.
:
:Bill W0IYH

I'm sorry, Bill. Please accept my apology.

Sincerely, Rob.

# 2981. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Doran Platt <jeepp@erols.com>
Message-ID: <342ADFA0.2327AEB5@erols.com>
Source record: 90654
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

JJ wrote:

> Doran Platt <jeepp@erols.com> wrote:
>
> >Ray W. wrote:
>
> >> Things were not too bad at Hahn !
>
> > Nor at Sembach
> >Jeep
>
> I worked in the control tower on the flight line side of Sembach.
>
> ==========================================
> 73 de Jim, WK1V
> Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
> http://www1.shore.net/~jjmartin/jjm2.htm
> ==========================================
> H

Well, I was with the 2nd MOB, just down the road past the tower bldg, where the Air Commandos used to be! Small world..... I remember the really short runway (count 'em ONE!)!! The barrier helps!!! Nice R&G club.... Did you live up the hill or off base in Balborn (?) etc? 73

# 2982. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580002509971528080001@news.primenet.com>
Source record: 90655
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

:You can still call up the manufacturer and talk to the designer(s). But
:it may be an international call, and it helps if you speak Japanese.
:(Don't bother calling the US reps with technical questions, they're just
:sales droids.). I've had occasion to consult the Japanese manufacturers
:about various equipments, both professional and amateur equipment.
:I've found them to be uniformly friendly and helpful if you can overcome
:the language barrier. I have an in there. One of our staff speaks fluent
:Japanese, and can act as translator. I've even had them return my
:calls, on their nickel. Like design engineers anywhere, they just love
:to talk shop.
:
:Gary

Gary, your experience has been much different than mine.

(repeated from another NG)

I was seriously thinking of buying an ICOM 775. I asked the sales person if I could look at the schematic. I've never seen a schematic that looked like that. It was obvious that they were trying to keep the consumer from figuring out how the rig worked. Obviously, the designers were embarrassed with the design. Any designer worth his salt will go to great lengths to make it readable, so that the design inovations were more apparent. Not in this rig. Garbage, pure and simple.

Now, even though the US manufacturers cut corners, etc in those old rigs, the new Japanese rigs still pale in comparison. After all, there is no rec.radio.amateur.japanese newsgroup, now is there??

Rob

## 2983. Inductance calculations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Diamond Jim <koehler@mars.ark.com>
Message-ID: <01bcc9e3$656665e0$530232cc@DiamondJim.ark.com>
Source record: 90656

I recall, vaguely, seeing a comment in a magazine many years ago (perhaps 'ham radio') giving a better formuola for calculating the indcuctance of small air wound coils than the 'standard' equation which is very simple. Does anyone know of this one? The standard equation (i.e., the one in the ARRL handbook) was widely used in the olden days when we all just had slide rules. It seems to me that, with modern calculators, one might just as well use the more accurate equation.

Thanks,

Jim

# 2984. Re: 1.2 gig pll

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-25 00:00:00 UTC
From: Ken Yu <ak165@lafn.org>
Message-ID: <342AF86E.795B@lafn.org>
Source record: 90657

Kraft_Lyle wrote:
>
> Carl R. Stevenson (wa6vse@fast.net) wrote:
>
> : > Check Fujitsu, Motorola, National Semiconductor, Peregrine, Philips,
> : > and Siemens web pages for PLL chip data and app notes ... (these
> : > are presented alphabetically, not in order of personal preference,
> : > quality or any other metric that should influence your decisions ...
> : > furthermore it is early in the morning and I am not yet fully awake, so
> : > I may have missed someone ...)
>
> Do check out the Harris HFA3524 dual frequency synthesizer chip at:
>
> http://www.semi.harris.com/data/fn/fn4/fn4062/index.htm
>
> Lyle,
> AA6LK
>
>
>I want to built a 1.2Ghz PLL too. Any information on how to built a
>device to maintain the data after the power off.

# 2985. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <342b7783.73190452@news.atl.bellsouth.net>
Source record: 90564
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

On Thu, 25 Sep 1997 13:33:24 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Gary Coffman wrote:
>>
>> I wouldn't exactly call the old rigs the ultimate in quality, though some
>> of the gear intended for the military did use top quality parts. Most of
>> the stuff intended for the amateur market, however, suffered from
>> serious corner cutting.
>
>One problem with vacuum tube HF ham receivers was the noise figure
>mania. Hams thought that if an HF receiver didn't have a 5 dB noise
>figure it was not very good and would not buy it. As a result, strong
>signal performance suffered because of vac tube limitations. Special
>tubes like the 7360 beam deflection tube (Squires-Sanders SS-1) showed
>up just as the transistor age began to take over, but by then it was too
>late.

I've seen the 7360 used in SSB balanced modulators, but hadn't considered
the possibility of using it in a receiver front end. I can see how it would be
a good first mixer.

But the real problem with the old designs is the limited number of active
devices which could practically be used. Because of the bulk and filament
power consumption, the number of vacuum tubes you could practically
squeeze into a radio was sharply limited. That meant that every circuit
was severely compromised because it had to met many, often conflicting,
criteria. With the ability to throw many more devices at the problem, each
can serve an optimized purpose. The total system is still a compromise,
but you can make better tradeoffs for the total system because you aren't
as sharply constrained by the characteristics of any individual device.

A modern radio often has millions of active devices in it. That allows you
to produce functions which were simply impractical in the tube days. Yet
the radio can be much smaller, and consume much less power. If we tried
to do that with tubes, the reliability would be so poor that it would never
work, and it would take a dedicated generating station to power it.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2986. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <342B99F0.4752FB9E@rl.ac.uk>
Source record: 90565
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

A device to stop boats moving when at sea. Usually a heavy metal hook
that
grips the seabed attached to the boat with a strong cable.

# 2987. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <342b7c54.74423671@news.atl.bellsouth.net>
Source record: 90566

On Fri, 26 Sep 1997 01:20:40 GMT, lar01@sprynet.com (larry) wrote:
>greetings
>I have been an amateur since the mid 60's. I have been involved in
>most of the popular modes since they came into conception, eg 2 meter
>fm early 70's, packet mid 80's, ssb 68ish, etc.
>I am now trying to figure out where this hobby is going. I know that
>spread spectrum is, more or less, just around the corner but I don't
>think it will really arrive until the next decade.
>Any ideas on what the next major new mode is going to be and where?
>Larry ve3fxq

I don't know that amateur radio is going anywhere new. There is an enormous resistance to change in amateur radio currently. But lets set that aside and see where the greatest impacts could be made by newer techniques.

I think it should be obvious that the entire communications world is moving in the direction of digital techniques. They offer us so much more capability that this is inevitable for any service feeling capacity pressure on its spectrum.

Now amateur radio doesn't feel the capacity pinch on most of its spectrum, so adoption of superior techniques has to be driven more by the desire for the novel than by necessity. But lets look at those areas of amateur spectrum currently feeling a capacity pinch, real or perceived.

The most obvious area of amateur spectrum feeling a capacity pinch is HF. Yet this is the area least likely to be open to innovative techniques due to tradition and regulatory limitations. SS could be of considerable benefit at HF, but that isn't likely to happen soon because of the mentioned social factors. But relatively narrowband digital methods may gain strength here in a number of different ways.

Clover and PACTOR II are already in use on HF, and they are likely to gain in popularity. Other protocols may be developed, but they will only be icing on the cake as to what can be done in a 500 Hz bandwidth under HF conditions.

We may see some movement in narrower bandwidth digital techniques, however. There are methods we could easily adopt which could carry 20 WPM equivalent signals in a 2.33 Hz occupied bandwidth. This would represent a large improvement over conventional OOK Morse signaling (because we could actually pack signals 2.33 Hz apart without adjacent channel interference by using ideal matched filter detection,

something we can't do with Morse coding). It allows a much higher packing density, and allows weaker signal work, so it should be of benefit to QRP operators. I've been doing some experiments in this area, the equipment needed for large performance gains is really simple, simpler than most current amateur equipment, though the frequency stability requirement is quite stringent.

On the other end of the narrow digital spectrum, if we could get some regulatory relief, we could fit digital voice in an ordinary SSB bandwidth. There are a number of advantages to doing this. We can work at a lower CNR, and we can gain a considerable immunity to adjacent channel interference. It also allows us to easily adopt adaptive power control, which would go far toward increasing total band capacity. This doesn't give us all the advantages of SS (in particular we don't get the freedom from multipath skywave fading that SS offers), but it avoids some of the perceived drawbacks (more political than real) of SS.

Another area feeling a perceived capacity crunch is 2m. This is the most popular and most heavily used amateur band. FM and repeaters dominate here, but there is a perceived lack of available repeater pairs. The spectrum is "full" to all intents and purposes in most areas. But it is very lightly utilized. We can do much better while preserving the social utility of repeater style operation.

One very obvious, but old, technique would be to convert to trunking operation. This would allow much better use of our repeater spectrum while imposing little in the way of new site costs. Trunk groups would simulate traditional repeater operation, but we could also implement smaller trunk groups for one to one contacts. Given the current repeater sites, this could allow wide area HT to HT communications for large numbers of amateurs at once (linked repeaters don't give us this, linking alone only allows a few amateurs to use the systems at once.)

A more ambitious step would be to move to cellular style operation. The drawback is many more sites are needed, but the advantage is that they don't have to be high sites, and are thus more likely to be available to amateurs either free or at low cost (many could be co-located with home stations). We can have much more frequency reuse using cellular style systems, allowing the number of amateurs to share the spectrum to be much larger. Multi-way calling could be arranged to simulate conventional roundtable activity.

Digital cellular would be the obvious extension of this idea, bringing with it the ability to operate at a lower CNR and with less co-channel and adjacent channel interference. The best way to implement a digital cellular system is with SS, but amateur politics (mostly ARRL opposition) seems likely to prevent this from happening on 2m.

A compromise position between traditional trunking and full cellular is to adopt ESMR methods. This gives us many of the advantages of cellular at a lower cost and with a somewhat lower technical complication. The commercial two way industry is moving rapidly in this direction. We

could too. In fact, ESMR may be the better way to go for amateurs for a number of reasons, including preservation of an ability to operate simplex if the host systems are down.

Due to legal restraints and continuing political opposition, SS is largely confined to the UHF spectrum. But amateurs have so much idle capacity at UHF that the sharing advantages of SS aren't needed there. So there isn't much likelyhood that SS will be widely deployed at UHF for the foreseeable future. About the only useful thing it brings to the table at UHF is relief from multipath fading, and that's only of real interest to mobile operators.

What we may see at UHF is much more point to point high speed digital operation. But that operation likely doesn't need to employ SS. (Though it may, using recycled Part 15 equipment.) With the large unused capacity that amateurs have at UHF and above, conventional wideband digital data transmission fills the bill.

The reason we may see much more high speed data operation at UHF is the desire of amateurs to provide high speed data MANs which can be linked by the internet to other MANs in other parts of the world to form amateur global virtual networks. And if trunking or cellular operation becomes popular, we'll need those MANs to provide the switching and linking needed for those activities too. Fortunately, computer power is now cheap and pervasive, so these switching systems are easily within our grasp.

(Note that this promises *global* HT coverage if implemented in conjunction with internet wormholes to form global virtual networks. We've seen hints of this with the use of internet phone to link pairs of conventional repeaters, but that only scratches the surface of what we could do. Note that we could use amateur satellite links in place of internet wormholes, but amateur satellite capacity is very limited, so it can only supplement, not substitute, for internet wormholes.)

Most of the things I've talked about for VHF and UHF require a degree of *cooperation* among amateurs which is often sadly lacking. So none of these things may be realized in practice, and we may continue to operate in the inefficient ways we always have until our bands are taken away from us because we have been warehousing valuable spectrum rather than utilizing it to the best of our abilities.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 2988. Re: de Forrest

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: chrisl@netdoor.com
Message-ID: <60g9he$1uk$1@axe.netdoor.com>
Source record: 90567

>I've just remembered another interesting electronic flame application!
>Someone once developed a loudspeaker using one - called the Ionophone.
>How about using De Forrest's flame detector in a radio with an Ionophone
>for the audio output. 8-)

First of all, thanks to everyone who replied to my question. I plan to chase it down in the local library or heating repair store soon. I happen to have found a book(which I can't seem to find in this mess) that shows how to make an"Ionophone". If you're interested, I'll post the title and author when I find it.
Chris

# 2989. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <342BAC00.6D46@ix.netcom.com>
Source record: 90568

larry wrote:
>
> greetings
> I have been an amateur since the mid 60's. I have been involved in
> most of the popular modes since they came into conception, eg 2 meter
> fm early 70's, packet mid 80's, ssb 68ish, etc.
> I am now trying to figure out where this hobby is going. I know that
> spread spectrum is, more or less, just around the corner but I don't
> think it will really arrive until the next decade.
> Any ideas on what the next major new mode is going to be and where?
> Larry ve3fxq
----
Hi larry -- maybe take a look at spread spectrum and laser
communications at URL:
http://pw2.netcom.com/~ac6v/pagew.html

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 2990. Re: Oscilloscope prescaler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: San Rotter <rotter@postoffice.worldnet.att.net>
Message-ID: <60gbbf$foa@mtinsc03.worldnet.att.net>
Source record: 90569

>From: w7el@teleport.com (Roy Lewallen)
>.....A brief explanation is given in _The XYZ's of Oscilloscopes_ by
>Tektronix. I believe it's still in print, and you should be able to get a
>copy by calling your local Tektronix field office.
>
>Roy Lewallen, W7EL

The XYZ's of Oscilloscopes is at this URL:

http://www.tek.com/Measurement/App_Notes/XYZs/intro.html

73,

San, WB9ELB

# 2991. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342BB9B1.771C@crpl.cedar-rapids.lib.ia.us>
Source record: 90570

Tom Bruhns wrote:
>
> europa@primenet.com wrote:
> : In article <3429791F.4F7D@crpl.cedar-rapids.lib.ia.us>,
> : sabinw@crpl.cedar-rapids.lib.ia.us wrote:
>
> : :europa@primenet.com wrote:
> : :
> : :> would carry a J318 cross. And maybe even a MRF586 cross,
> : :
> : :What does "cross" mean?
> : :
> : :Bill W0IYH
>
> : You've gotta be kidding???? Worked too long in the world of OEM???
>
> Let's see here... "Cross: n. 1. An upright post with a transverse
> piece near the top, used in former times as an instrument of execution
> for certain types of criminals." No, that's probably not it. Oh, here:
> "intr.v. 4. Involving intercahnge; reciprocal." In other words, an
> equivalent replacement. (Just in case he wasn't kidding, and in case
> it wasn't obvious from the context.)

The latest Motorola handbook says that the MRF586 is "active" but not recommended for new designs. The suggested replaceement is the MRF5812, which is available in a pill or surface mount package. RF Parts has the MRF586 (TO5) in stock at about 4 bucks each.

Bill W0IYH

# 2992. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342BBC68.5C2D@crpl.cedar-rapids.lib.ia.us>
Source record: 90571
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

Gary Coffman wrote:
>
> I've seen the 7360 used in SSB balanced modulators, but hadn't considered
> the possibility of using it in a receiver front end. I can see how it would be
> a good first mixer.

>
> But the real problem with the old designs is the limited number of active
> devices which could practically be used.

I don't agree with that at all. Some excellent receivers were designed using a limited number of tubes. You don't make a receiver better by throwing more tubes into it. You make a better receiver by choosing the tube types carefully and then using them in an optimal manner in a carefully designed block diagram. This was a highly developed technology.

With vacuum tubes, more is not better. With RF integrated circuits the exact same thing is true.

Bill W0IYH

# 2993. Re: Dual Band Antenna Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "George J. Molnar" <gmolnar@cyberportal.net>
Message-ID: <342B90F9.AAC345EA@cyberportal.net>
Source record: 90572

AARON SCHMITZ wrote:
>
> Thanks for reading this message.
> I am looking for plans on building a dual band base antenna. I saw one
> that someone had built and was selling at a hamfest. It had dual 5/8
> wave elements on 440 and was a shortened 5/8 wave on 2 meters.

Don't have the specifics on the antenna you saw, but an easy and sturdy
2m/70cm antenna you can build is a simple 2m 1/4-wave ground plane.
On 70cm, it works as a 3/4-wave vertical, providing (some) gain. No
coils, no taps, no mechanical monstrosities. Just a simple, effective
radiator.

Good luck & 73...

--
George J. Molnar (KF2T)
Lebanon, New Hampshire
http://www.cyberportal.net/gmolnar/index.html

# 2994. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342BBF31.7F2E@crpl.cedar-rapids.lib.ia.us>
Source record: 90573

Gary Coffman wrote:
>
>
> This
> would represent a large improvement over conventional OOK Morse
> signaling (because we could actually pack signals 2.33 Hz apart without
> adjacent channel interference by using ideal matched filter detection,
> something we can't do with Morse coding).

Not true. There is a "dot" matched filter, a "dash" matched filter and matched filters for the spaces in-between (all of them integrate and dump). These can be combined and decoded by algorithms. The code speed can be "learned" by the processor.

Bill W0IYH

Bill W0IYH

## 2995. Re: Dual Band Antenna Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: ed@gnc.net
Message-ID: <60gktk$f02@niven.ksc.nasa.gov>
Source record: 90574

Suggest you try; http://members.aol.com/arrow146/j-pole.html

# 2996. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970926151700.LAA05746@ladder02.news.aol.com>
Source record: 90575

>
>The latest Motorola handbook says that the MRF586 is "active" but not
>recommended for new designs. The suggested replaceement is the MRF5812,

Unless something got clipped here, the original question was " is there
generic replacements for FET's ", something like a generic 2N2222.

You're back to bipolars Bill.

By the way, can you give me the reverse gain of your push pull pair with
voltage feedback? Just wondering how much isolation it provides against
filter impedance variations.

Boy, if we don't start getting accustomed to surface mount and 0.05 inch
centers, we're all gonna be appliance operators.

W4ZCB

# 2997. Re: WTB Satellite TV Antenna (Dish)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: rstevew@armory.com
Message-ID: <60gjc7$jel@news.scruz.net>
Source record: 90576
Cross-posted to: rec.radio.swap,rec.radio.homebrew,rec.ham-radio.swap,rec.radio.misc,sci.electronics.misc,sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <342B304E.11A9@pacbell.net>,
Norman Franklin <norman@pacbell.net> wrote:
>Can any one out there tell me where to pick up new/used dish
>type antennas (CHEAP). Preferably in the San Fransico Bay area.
>To be used for amateur radio telescope. Almost any size will do for
>a start.
>
>Thanks
>
>Norman
---
Building your own is very cheap and effective among amateur radio
telescopists!! See my web-ftp site's subdir and file: PHYSX/parabola.tut
and in your case mount it's axis on an equatorial mounting!!
-Steve
--
-Steve Walz rstevew@armory.com ftp://ftp.armory.com:/pub/user/rstevew
-Electronics Site!! 1000 Files/50 Dirs!! http://www.armory.com/~rstevew
Europe:(Italy) ftp://ftp.cised.unina.it:/pub/electronics/ftp.armory.com

# 2998. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <342BD8BE.944@ccm.intel.com>
Source record: 90577

klocko@toad.net wrote:
> I tried putting together a 4:1 toroid balun, and was never happy with it,
> I think because the added inductance of the toroid winding changed everything.

Hi Bill, more than likely the reason that you were never happy with it is
that it was never happy with the impedance you tried to force it to tolerate.
Was the 4:1 balun load impedance somewhere around 200 ohms resistive? If one
doesn't know the answer to that question, one should never use a 4:1 toroidal
transmission line transformer. Especially for non-resonant length antennas,
the poor balun never sees anything close to 200 ohms. It's more likely to
see 20 ohms or 6000 ohms or something in between with lots of reactance.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 2999. Re: Dual Band Antenna Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Dana Gould <dgould@bev.NOSPAMetn.com>
Message-ID: <01bcca96$4fabde20$4ce06e97@pc3527.bev.etn.com>
Source record: 90578

AARON SCHMITZ <aschmitz@marktwain.net> wrote in article
<342B1D75.1523@marktwain.net>...
> Thanks for reading this message.
> I am looking for plans on building a dual band base antenna. I saw one
> that someone had built and was selling at a hamfest. It had dual 5/8
> wave elements on 440 and was a shortened 5/8 wave on 2 meters. The
> antenna used two coils one of which was shunt fed(the bottom on which I
> believe had 8 turns on a 1/2" form. ) Any Help would be appreciated.
> It can be posted to the newsgroup or directly to me. 73

Dual-band j-poles look pretty straightforward. There were plans for one in
QST a while back.

--
Dana Gould, WA1UIW
To respond by email, remove NOSPAM from my return address.
NOSPAMdgould@bev.etn.com

# 3000. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342BF54F.64F2@crpl.cedar-rapids.lib.ia.us>
Source record: 90579

JohnsonHE wrote:

> Unless something got clipped here, the original question was " is there
> generic replacements for FET's ", something like a generic 2N2222.
>
> You're back to bipolars Bill.

This discussion is going into orbit around some strange planet somewhere. The question was asked about a "cross" for a MRF586. I responded to that.

>
> By the way, can you give me the reverse gain of your push pull pair with
> voltage feedback? Just wondering how much isolation it provides against
> filter impedance variations.

More confusion. The MRF586 circuit that I described is an injection amplifier, +17 dBm to a Mini-circuits SRA-3H LO port.

For the amplifier that you are inquiring about I would not use voltage feedback for the reason that you mention.

However, if you put your test paper in the middle of the stack, I won't say anything.

Bill W0IYH

# 3001. Re: Low current power supply IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <60gtm8$mjf@hpcvsnz.cv.hp.com>
Source record: 90580

K sorter (w1_k_sorter@qsl.net) wrote:

: I'm looking for some high tech PS chips. I need something that will
: run on batteries that will produce regulated -100 to -200 volts @ 1 to
: 100 ua.

I'd have a closer look at Maxim and Linear Technology chips before giving up on them, but if they fail, you can do it with just some low power comparators and a "power" mosfet. I may have cut out a part where you say what battery voltage you are willing to start with, but if I assume something in the 7 to 9 volt range (a "9 volt battery"), then a little controller that consumes maybe 50uA or less of 9V power, coupled to the mosfet which pulls an inductor up to +9 and lets it fly back, should do the trick. The inductor flyback charges a cap thru a very-fast-recovery, 200PIV diode--chosen for low leakage, too. To keep current low, you need a very high impedance voltage divider from the -100 to generate the feedback that allows pulses to be generated or stops them. -- If you could stand the idle current of a tlc555, I can imagine a simple circuit using one of those and a P-channel power mosfet that would generate pulses on demand....I don't recall what the tlc555 idle current is, but think it's in the couple hundred uA region. You can also do a simple circuit with a dual comparator that will be roughly equivalent, and a tlc393 only draws about 40uA. Obviously the efficiency is rotten at 1uA output, but at 100uA output, it should be pretty good, since that corresponds to about 1.1mA at 9 volts, at 100% efficiency.

--
Cheers,
Tom
tomb@lsid.hp.com

## 3002. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: nightman <catboy@writeme.com>
Message-ID: <342C0165.BB6A7639@writeme.com>
Source record: 90581
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

joe d wrote:

> The lawyer thing and this post is a test for radio transmission of
> newsgroups. Don't be upset. Take a deep breath and just think of me as
> some other nut wasting internet bandspace. WE ARE WATCHING.
> joe d>

Ohhhh, I'm quivering in my boots!

--
NIGHTMAN-Email: nightman@techie.com
Pardon my driving; I'm reloading.

# 3003. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <342BDB59.55F7@ccm.intel.com>
Source record: 90582

William E. Sabin wrote:
> There is a "dot" matched filter, a "dash" matched filter and
> matched filters for the spaces in-between (all of them integrate and
> dump). These can be combined and decoded by algorithms. The code speed
> can be "learned" by the processor.

Hi Bill, are you saying that there is no advantage to constant bit width,
fixed word length FSK signals?
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3004. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342BF8A4.F14@crpl.cedar-rapids.lib.ia.us>
Source record: 90583

Cecil Moore wrote:
>
> William E. Sabin wrote:
> > There is a "dot" matched filter, a "dash" matched filter and
> > matched filters for the spaces in-between (all of them integrate and
> > dump). These can be combined and decoded by algorithms. The code speed
> > can be "learned" by the processor.
>
> Hi Bill, are you saying that there is no advantage to constant bit width,
> fixed word length FSK signals?

Cecil, would I say a nasty thing like that? *u know I wud not*. My statement stands exactly as you quoted it. Please don't embellish it, OM. I assure you I am rather knowledgeable about signal processing principles. Systems such as I have described have been designed and built, although I don't recall exactly where I read about it a long time ago. It may have been Wireless World. The Brits, like Ian, are always thinking up things like that.

(...-.-)

Bill W0IYH

# 3005. Re: Low current power supply IC's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <60gu4h$mjf@hpcvsnz.cv.hp.com>
Source record: 90584

K sorter (w1_k_sorter@qsl.net) wrote:

: The battery idea is very practical for this application (and the
: preferred method IMHO), but I have searched far and wide for 100 to
: 200 volt batteries or cells that could be put in series.

: Best I could do was some 1.2 volt ni-cad coin cells, but they cost
: over a dollar each, and I need ALOT of them to make 200 v!

Oh, if batteries are a viable alternative, go with cheap "9V" batteries.
They are trivial to stack, just plug them together! You can go
rechargeable; I believe Costco has 7.2V (6-cell) NiCd's for around
$3 each, maybe less; and you can get the alkalines which start at
about 9.5 volts fresh for much less. Since they are about 500mAH,
they should last a very long time, if your average current is
in the 20uA range. In fact, if that's the case, I'd recommend against
NiCd's, since the NiCd's must be recharged at least every month.
Seems like $10 or so every couple years for a fresh alkaline would
be better than the hassle of recharging. Are the "9V" rectangulars
too big?

--
Cheers,
Tom
tomb@lsid.hp.com

# 3006. Re: Project Argus Radio Telescope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: schultz@cddis.gsfc.nasa.gov
Message-ID: <schultz-2609971607080001@dhcp108_113.hst.nasa.gov>
Source record: 90585

In article <19970921193101.PAA28985@ladder01.news.aol.com>, n1wkv@aol.com (N1wkv) wrote:

> I am trying to locate Radio Amateurs to help with development,
> construction and operation of a Dedicated SETI Radio Telescope. Please post
> here or E-mail me with questions or interest.

check out www.setileague.org

# 3007. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <342C2D2F.25A1@phoenix.net>
Source record: 90586
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

nightman wrote:
>
> joe d wrote:
>
> > The lawyer thing and this post is a test for radio transmission of
> > newsgroups. Don't be upset. Take a deep breath and just think of me as
> > some other nut wasting internet bandspace. WE ARE WATCHING.
> > joe d>
>
> Ohhhh, I'm quivering in my boots!
>
> --
> NIGHTMAN-Email: nightman@techie.com
> Pardon my driving; I'm reloading.
we all are

# 3008. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <342C2FB8.2064@phoenix.net>
Source record: 90587
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

```
joe d wrote:
>
> nightman wrote:
> >
> > joe d wrote:
> >
> > > The lawyer thing and this post is a test for radio transmission of
> > > newsgroups. Don't be upset. Take a deep breath and just think of me as
> > > some other nut wasting internet bandspace. WE ARE WATCHING.
> > > joe d>
> >
> > Ohhhh, I'm quivering in my boots!
> >
> > --
> > NIGHTMAN-Email: nightman@techie.com
> > Pardon my driving; I'm reloading.
> we all are reloading the software.
The 10.3 gkz link is almost complete. With the reloading ALL problems
should show themselves (well almost ALL). page 342.col2 line 16 keyword
lumberjill.
```

# 3009. 50.400 AM this weekend

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Dave Booth <*SPAMSAVER*booth@pactitle.com>
Message-ID: <342BEB8C.59E2@pactitle.com>
Source record: 90588

Hello everyone,

I will be calling CQ on 50.400 AM all this weekend.

Fri 9/26/97 16:00-22:00(PDT 23:00Z-05:00Z
Sat 9/27/97 07:00-22:00(PDT) 14:00Z-05:00Z
Sun 9/28/97 07:00-20:00(PDT) 14:00Z-03:00Z

I'll be calling CQ on the top and bottom of the hour.

Lets all get out on 50.400 AM and have some fun.
Solar conditions are favorable!

Equipment being used will be:

Gonset G-50 25w into ARX-6
Swan 250 40w into G5rv
Icom IC-726 into Marage A1015 150W into ARX6

If you have not seen my 50.400 AM page please check it out and let me
know what you think.

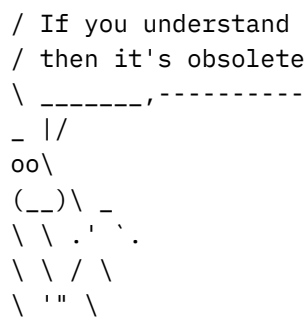
http://www.geocities.com/Hollywood/5860/50am.html

I think this will be a FUN weekend!!!!!
Everyone let me know how you all did and what equipment you used.

Thanks for your participation!

73...
Dave Booth KC6WFS DM04rk
Saugus Ca
kc6wfs@juno.com (on the weekends)
http://www.geocities.com/Hollywood/5860/50am.html

Remove the *SPAMSAVER* when replying!
--



```
. ( ) \
'-| )__| :. \
| | | | \ '.
c__; c__; '-..'>.__
```
Dave Booth KC6WFS

# 3010. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342C64AE.4073@crpl.cedar-rapids.lib.ia.us>
Source record: 90589

Carl R. Stevenson wrote:
>
> Please, please, please elaborate on this one, oh sage of wisdom ...
> How does one do an "integrate and dump matched filter" for the
> (nonexistent)
> energy of "the spaces-in-between elements" ???
> (hint ... all that exists there is noise and/or interference)
>

It's easy, oh brother of a flea. If there is a gap in the signal, invert the 0 to a 1 with a simple inverter. The empty spaces convey just as much information about the Morse signal as a dot or dash.

I really don't want to get into a bunch of crap about the merits or lack thereof regarding Samuel F.B. Morse and his code. As a CW guy since 1939 (age 13) I enjoy CW and I really don't give a damn about that controversy.

As a professional radio engineer I am also well informed about the relative merits and technology of the other modes, both analog and digital, so if you think I am some kind of stick in the mud, guess again.

I am just not interested in your vitriolic opinions on this subject.

Bill W0IYH

# 3011. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <342C2E7A.650A@phoenix.net>
Source record: 90590
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

nightman wrote:
>
> joe d wrote:
>
> > The lawyer thing and this post is a test for radio transmission of
> > newsgroups. Don't be upset. Take a deep breath and just think of me as
> > some other nut wasting internet bandspace. WE ARE WATCHING.
> > joe d>
>
> Ohhhh, I'm quivering in my boots!
>
> --
> NIGHTMAN-Email: nightman@techie.com
> Pardon my driving; I'm reloading.
Tnks for all the replies, the software is doing what it was designed to
do. As WE WATCHED the Net Medic program do it's thing we noticed an
inprovement in throughput. thanks again.
The Group

# 3012. looking for advice, again

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <342c30cb.1358931@news.sprynet.com>
Source record: 90591

greetings

I don't know, the responces to my original message seemed to have
nothing to do with my message, so, I will try again.

I have been an amateur since the mid 60's. I have been involved in
most of the popular modes since they came into conception, eg 2 meter
fm early 70's, packet mid 80's, ssb 68ish, etc.
I am now trying to figure out where this hobby is going. I know that
spread spectrum is, more or less, just around the corner but I don't
think it will really arrive until the next decade.
Any ideas on what the next major new mode is going to be and where?
Larry ve3fxq

# 3013. RE: Damage by virus (was Dealing with SPAM)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: efbrya@acxiom.COM
Message-ID: <c=US%a=_%p=Acxiom_Corporati%l=PO-CONWAY-1-970926130401Z-6436@po-conway-1.conway.acxiom.com>
Source record: 90592

This is not correct. It is uncommon. On older computers one could tell the HD to move the heads to an extreme position that they would not be able to reach. This resulted in damage to the head positioning mechanism and/or the heads. This problem does not exist (as far as I know) on drives made since 1985 or so. On more modern computers one can tell the video card to change the video rates to some extreme value that most monitors cannot handle. The end result of this is either a fried monitor or damaged card. This setting would probably have to be left running for a while to accomplish this and it would be evident that something was occuring. I think it may be possible to screw up modern Plug and Play cards that use EEPROM by simply rewriting them repeatedly until the EEPROM fails. Haven't heard of this being done yet....

Eric Bryan
efbrya@acxiom.com

>There's no known way to cause physical damage to a computer by sending
>it a message/signal/packet/virus. (I suppose a lot of less-technical
>readers don't realize that -- there have been quite a few virus hoaxes
>over the years suggesting that a given virus could cause physical
>damage..)
>
>

# 3014. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: maurizio.CHalp@ocwi.COM
Message-ID: <c=IT%a=master400%p=olivetti%l=OPCO01S01-970926070715Z-8167@opco01s01.ocwi.com>
Source record: 90593

```
Test
```

# 3015. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: w9dmk-at-crosslink@crosslink.net
Message-ID: <342c2723.30844638@news.crosslink.net>
Source record: 90594

On Fri, 26 Sep 1997 01:20:40 GMT, lar01@sprynet.com (larry) wrote:

>greetings
>I have been an amateur since the mid 60's. I have been involved in
>most of the popular modes since they came into conception, eg 2 meter
>fm early 70's, packet mid 80's, ssb 68ish, etc.
>I am now trying to figure out where this hobby is going. I know that
>spread spectrum is, more or less, just around the corner but I don't
>think it will really arrive until the next decade.
>Any ideas on what the next major new mode is going to be and where?
>Larry ve3fxq

What a wonderful question. Let's assume that your objective, although unstated, is to be ready for the next major change, whether it be a regulatory change, a new mode, or just newer technology to do the same old things.

Fortunately, the hobby of amateur radio, because of the CW mode, has been able to maintain some downward compatibility with a significant amount of boat-anchor hardware. In contrast, it is clear that narrow band FM and AM have bitten the dust. And thank goodness for that, because SSB is a far better mode than AM - both in terms of spectrum utilization and in terms of how many watts it takes to communicate reliably in a given frequency-time-path situation.

I think we have to assume that any new mode would have to offer to the majority of the active members of the community the same thing - i.e., a distinct improvement in efficiency in relation to cost while also providing a degree of downward compatibility with fundamental technology, such as CW.

Have you noticed that the antenna technology has not improved as much in the same time span? Granted there have been improvements - especially at the shorter wavelengths, but the antennas for 160 through 6 meters haven't changed that much in the last 50 or more years. I would be willing to bet that it will continue that way for several more decades. But those same 160 through 6 meter bands may fall into disuse, and that would make it irrelevant.

My crystal ball tells me that the amateur community will be talking more and more via satellite. The only question is, how do we finance it? The funding situation today is grim. Unless the amateur community can quickly agree on a way to develop and produce an entire infrastructure for satellite communication AND figure out how to collectively fund it, we will miss out on the opportunity of the century.

Bob
73 de W9DMK
[Delete the "-at-crosslink" for direct replies]

# 3016. File HFRIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199709261310.GAA09067@mail.ucsd.edu>
Source record: 90595

I have the "Summary of Data from QST of Revieuw of Amateur HF
Transceiver Version 4 16 Dec 92".

It exist the new version?

Thanks in advance.

73 de IW1DZD

# 3017. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342C287B.11A4@crpl.cedar-rapids.lib.ia.us>
Source record: 90596

Cecil Moore wrote:
>
> Gary said: >> This
> >> would represent a large improvement over conventional OOK Morse
> >> signaling (because we could actually pack signals 2.33 Hz apart without
> >> adjacent channel interference by using ideal matched filter detection,
> >> something we can't do with Morse coding).
>

I was referring to matched filters for the various dot, dash, space time intervals for Morse code.

Bill W0IYH

# 3018. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <342C21D6.7A79@ccm.intel.com>
Source record: 90597

William E. Sabin wrote:
> Cecil, would I say a nasty thing like that? *u know I wud not*. My
> statement stands exactly as you quoted it. Please don't embellish
> it, OM.

Hi Bill, I wasn't trying to embellish it. I was just trying to
understand
what you meant. Here's the rest of the quote:

Gary said: >> This
>> would represent a large improvement over conventional OOK Morse
>> signaling (because we could actually pack signals 2.33 Hz apart without
>> adjacent channel interference by using ideal matched filter detection,
>> something we can't do with Morse coding).

You said: >Not true.

I was just asking what part of Gary's statement that you said was not
true.
You could have been saying "Not true" about the method Gary was talking
about - that it was no improvement over conventional OOK Morse ...
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3019. Re: Mirage Amplifiers NEW ! discounted!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: John Zaleska <john_s_zaleska@ccm.ch.intel.com>
Message-ID: <342C3C56.71576899@ccm.ch.intel.com>
Source record: 90598
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I just purchased their dual band hand held amp. Quality of workmanship
was extremely poor. All cover screws were stripped out!

Dan W7RF wrote:

> Here's the Mirage line of amplifers I promised to post.
>
> Very limited quantites, buy now and save big!!
>
> Visit my web site to see it all !!!
>
> Visit often, much more to come!!
>
> 73, Dan W7RF
>
> --
> Dan Magro W7RF/Portable Clinic (Ham since 1972)
> Two way radio sales/service/rentals (since 1982) **
> Ham & Two way used radios/acessories **
> http://home.earthlink.net/~radiodan/
> Classic & Modern Ham Equipment
> MFJ/Ramsey Kits "closeout" see my web page ! **

# 3020. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Tom Mills <"tmills@flash.net"@flash.net>
Message-ID: <60i62b$6i1$2@excalibur.flash.net>
Source record: 90599
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

```
joe d wrote:
>
> nightman wrote:
> >
> > joe d wrote:
> >
> > > The lawyer thing and this post is a test for radio transmission of
> > > newsgroups. Don't be upset. Take a deep breath and just think of me as
> > > some other nut wasting internet bandspace. WE ARE WATCHING.
> > > joe d>
> >
> > Ohhhh, I'm quivering in my boots!
BANDSPACE? Never heard of "bandspace". He must mean "bandwidth" which
also doesn't really apply to Internet. A better term might be
"information". Bandwidth refers to information per second, information
is just that, the total amount of whatever. However, there is no
correlation between information and intellegence.

> >
> > --
> > NIGHTMAN-Email: nightman@techie.com
> > Pardon my driving; I'm reloading.
> we all are
```

# 3021. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <60en8h$mo0@apple.telalink.net>
Source record: 90658

w1_k_sorter@qsl.net (K sorter) wrote:
>Please realize-when I say 'attack' the spammers computer, I don't mean
>to send it signals which will do physical harm to the spammers
>computer!!!!

There's no known way to cause physical damage to a computer by sending it a message/signal/packet/virus. (I suppose a lot of less-technical readers don't realize that -- there have been quite a few virus hoaxes over the years suggesting that a given virus could cause physical damage..)

>'Attack' means to use hacking techniques, UDP specialized commands
>sent via the network, polling-any low thruput command sent via the
>network that causes the target computer to take time to process it,
>and that DOESN'T genearate a reply meets this criteria.

Just be aware this could be technically illegal in some jurisdictions. In some ways, it should be -- what happens if one of the spammers decides something *you're* doing is wrong & decides to attack qsl.net? On the other hand, if someone does attack a spammer, I'm sure not going to have any sympathy for the victim!

73 Doug

# 3022. looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <342b0db8.14133380@news.sprynet.com>
Source record: 90659

greetings
I have been an amateur since the mid 60's. I have been involved in most of the popular modes since they came into conception, eg 2 meter fm early 70's, packet mid 80's, ssb 68ish, etc.
I am now trying to figure out where this hobby is going. I know that spread spectrum is, more or less, just around the corner but I don't think it will really arrive until the next decade.
Any ideas on what the next major new mode is going to be and where?
Larry ve3fxq

# 3023. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: spam_me_not@shore.net
Message-ID: <60fcrk$c7q@fridge.shore.net>
Source record: 90660
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Doran Platt <jeepp@erols.com> wrote:

> Well, I was with the 2nd MOB, just down the road past the tower bldg,
>where the Air Commandos used to be! Small world..... I remember the
>really short runway (count 'em ONE!)!! The barrier helps!!! Nice R&G
>club.... Did you live up the hill or off base in Balborn (?) etc? 73

Hehehe! Well, when I left Sembach I went to Patrick AFB, Fl....to the
2nd MOB.....2nd Combat Comm Gp to be exact (1977-1981). Talk about
small world! I lived off base in Gollheim (With two dots over the
"o") out toward Eisenburg and under Donnersberg, and then moved into
base housing at Vogelweh-->2731 Apt N. Can't believe I still remember
that. Different life....different wife.

==========
73 de Jim, WK1V
Ex: KA5MWD, N1CLS, KB1LW, HL9ZF
http://www1.shore.net/~jjmartin/jjm2.htm
==========
H

# 3024. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <60emv4$mo0@apple.telalink.net>
Source record: 90661

Robert Lyons <boblyons@umich.edu> wrote:
>I'll email BYTE and ask them to run an article surveying
>the major ISP's as to how they deal with spammers and complaints.

A good idea. Hopefully they'll go along - I personally would find
such an article interesting reading.

>I, for one, would never patronize an ISP who propagated spam.

I read an (unconfirmed) report that one of the best-known spammers was
about to get kicked off their current ISP. They had a tentative
contract with another ISP, but the clients of that ISP got word of
what was happening. When several dozen said "he goes, or I do", the
deal fell through.. IOW, you're not alone<g>.

73 Doug

# 3025. FS: Solar panels (perfect for QRP portable)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-26 00:00:00 UTC
From: Dan W7RF <radiodan@earthlink.net>
Message-ID: <01bcca41$ca678c40$2d03d9cf@radiodan.earthlink.net>
Source record: 90662
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Hi Fellow QRPers,

I have a few Hoxan Solar panels for sale at my site.

Go to http://home.earthlink.net/~radiodan/

73, Dan W7RF

Alaska QRP club 256, Norcal 91, QRP ARCI 8064

--
Dan Magro W7RF/Portable Clinic (Ham since 1972)
Two way radio sales/service/rentals (since 1982) **
Ham & Two way used radios/acessories **
http://home.earthlink.net/~radiodan/ Webmasters, please link to my
page
Classic & Modern Ham Equipment
MFJ/Ramsey Kits "closeout" see my web page ! **

# 3026. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <342D6529.5646@antispam.trader.com>
Source record: 90514

William E. Sabin wrote:
>
> Carl R. Stevenson wrote:
> >
> > Please, please, please elaborate on this one, oh sage of wisdom ...
> > How does one do an "integrate and dump matched filter" for the
> > (nonexistent) energy of "the spaces-in-between elements" ???
> > (hint ... all that exists there is noise and/or interference)
> >
>
> It's easy, oh brother of a flea. If there is a gap in the signal, invert
> the 0 to a 1 with a simple inverter.

Even if you don't believe Carl's question was serious, I would like
a better explanation. You can't invert the 0 if it doesn't _look_
like a 0 due to noise. What if a long 0 gets truncated by noise?
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3027. Re: RFI in Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "George J. Molnar" <gmolnar@cyberportal.net>
Message-ID: <342D5B55.5531B33E@cyberportal.net>
Source record: 90515

kn4ab@home.com wrote:
>
> I have a Heath keyer that is shorting out due to rf
> in shack.. Recommendation was to nuse ferrite cores
> from MFJ over leads. The ant is an inverted vee fed with RG213.
> Would it help to install a current balun where
> it enters the shack? or at the antenna itself?
> TNX 73 George KN4AB

A lot of people (me included) have had good results placing ferrites
(not necessarily a balun) at the feedpoint, and optionally at the radio.
I use "Line Isolators", from Radio Works and they've been very effective
at reducing RF in the shack, and also feedline noise pickup.

73

--
George J. Molnar (KF2T)
Lebanon, New Hampshire
http://www.cyberportal.net/gmolnar/index.html

# 3028. FS: MOD TRANSFORMER 300W

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <01bccb7b$ecd306c0$f912430c@dell>
Source record: 90516

Thordarson CHT Series Modulation Transformer Multi-Match 125-300 watts
T-11M77 $40 + shipping :WS0E, Joe Joe.7hc@juno.com

# 3029. Re: Batteries (Charging/Circuit)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Bob Recny <brecny@neo.lrun.com>
Message-ID: <60jrem$bnb@akron5.neo.lrun.com>
Source record: 90517

You might want to add a series diode with the current limiting resistor so
the power supply does not get fried from reverse voltage if it is turned off
or your power goes out.

Bob / N8SQT

Cecil A. Moore wrote in article <342D2F43.16B2@delphi.com>...

>David Toste wrote:
>> I would like to get some feed back from anyone with circuit ideas.
>
>Hi David, 12v lead-acid batteries can be charged with no time limit
>from a 13.8v power supply. Simply limit the charging current with
>a resistor in series with a 13.8v power supply. This won't give
>them a full charge but it won't hurt them either.
>
>73, Cecil, W6RCA

# 3030. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342D7099.23E2@crpl.cedar-rapids.lib.ia.us>
Source record: 90518

Dennis Erwin Thurlow wrote:
>
>
> Even if you don't believe Carl's question was serious, I would like
> a better explanation. You can't invert the 0 if it doesn't _look_
> like a 0 due to noise. What if a long 0 gets truncated by noise?

Logic circuit designers do this all the time. Anything below a certain level is a 0. If you invert it, it becomes a 1. Anything above a certain level is a 1. The trick is to define the optimal thresholds for 0 and 1.

In logic pc boards there is all kinds of junk close to ground level that has to be ignored. In radio on-off keying the junk level is sometimes pretty high and the identification of 0 and 1 can be difficult. This is one of the basic limitations of on-off keying, including but not limited to Morse code.

In Morse, distinguishing a dot from a dash can sometimes be difficult. One thing that helps a great deal is the difference between a musical tone sound and a noise sound. The operator is good at making this distinction.

If the signal to noise ratio is a few dB the process works OK. Highly skilled CW operators are good at doing this mentally. They also know how to operate their CW equipment in a manner that helps to get the job done. In other words, personal operating skill is a factor.

Bill W0IYH

## 3031. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: kb5two@aol.com
Message-ID: <19970927211301.RAA16972@ladder02.news.aol.com>
Source record: 90519

Just ask Williamson Co. Texas E.C. John Sneed about HAM Radio concerning
The F-5 Tornado at Jarrell TX. He can be Reached at wcems@aol.com KB5TWO WC
HAM Radio E.C.

# 3032. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: joe d <jedent@phoenix.net>
Message-ID: <342D7B87.6256@phoenix.net>
Source record: 90520
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Tom Mills wrote: Ohhhh, I'm quivering in my boots!
> BANDSPACE? Never heard of "bandspace". He must mean "bandwidth" which
> also doesn't really apply to Internet. A better term might be
> "information". Bandwidth refers to information per second, information
> is just that, the total amount of whatever. However, there is no
> correlation between information and intellegence.
We were using the 10.3 KMZ and other microwave bands to do the code
reconnition software test. Messages were sent via RF to landline ISP
back to landline to cellphone to Pager.
Get it?
The quick blue goat crept under the sleeping green wolf.
ryryryryryryryryryryryryryryryryryryryry73

# 3033. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: klocko@toad.net
Message-ID: <875402636.25486@dejanews.com>
Source record: 90521

In article <342BD8BE.944@ccm.intel.com>,
CecilMoore@delphi.com wrote:
>
> Hi Bill, more than likely the reason that you were never happy with it is
> that it was never happy with the impedance you tried to force it to tolerate.
> Was the 4:1 balun load impedance somewhere around 200 ohms resistive? If one
> doesn't know the answer to that question, one should never use a 4:1 toroidal
> transmission line transformer. Especially for non-resonant length antennas,
> the poor balun never sees anything close to 200 ohms. It's more likely to
> see 20 ohms or 6000 ohms or something in between with lots of reactance.
> --
> 73, Cecil, W6RCA, OOTC (not speaking for my employer)
>

Cecil, In initial tests of my 4:1 toroid balun, I did use a 200 ohm
resistive load. Unfortunately, I think this type balun is more tricky
than it looks, with the wire size, wire spacing, etc., all having an
effect on the final outcome. Maybe someday I'll sort everyting out and
try to fix it up. Thanks for the comments. 73, Bill N3WK

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3034. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bccb9d$b65d40c0$0100005a@wa6vse>
Source record: 90522

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<342D7099.23E2@crpl.cedar-rapids.lib.ia.us>...
> Dennis Erwin Thurlow wrote:
> >
> >
> > Even if you don't believe Carl's question was serious, I would like
> > a better explanation. You can't invert the 0 if it doesn't _look_
> > like a 0 due to noise. What if a long 0 gets truncated by noise?

My (Carl's) question was QUITE serious ... your (Dennis') questions
above are astute, but they are just "the tip of the iceberg" ... Bill's in
DEEP (bullshit) here ...

> Logic circuit designers do this all the time. Anything below a certain
> level is a 0. If you invert it, it becomes a 1. Anything above a certain
> level is a 1. The trick is to define the optimal thresholds for 0 and 1.

(What a bunch of hand-waving and dodge ball ...)

I (dis)respectfully submit that you're full of crap ... you've already done
the demod (sliced out the bits) if you can tell that it's a 0 or a 1 ... thus,
you are still deciding on the basis of tone vs. no_tone (where no-tone
boils down to some undiscernable combination of noise/interference/fade,
so you haven't a clue and can't really infer shit from it, all you can do is
*guess* that the "dit" or "dah" tones weren't there ) ... where as FSK
sends BOTH tones, so there is mark energy vs space energy to compare
rather than simply tone vs. no_tone (which no_tone equates to "I don't have
a f___ing clue what that may have been")

Simply not sending the second tone (as in BFSK) results in a power
penalty and implementation loss for OOK vs. BFSK ... you can't
make a silk purse out of a sow's ear, no matter what your religious
beliefs ...

How does your mythical "matched filter/integrate and dump" receiver for
OOK Morse decide if it saw a 0 (noise in the interval between symbols)
or simply a 1 (tone) that had experienced a fade? How does it tell the
difference between a "dit" and a "dah" with a fade at each end???
Once again ... you're full of crap ... but I have to give you credit in one
respect ... like most rabid pro-coders, you are creative to the extreme
in conjuring up mythical scenarios that "support" and "justify" your
religious beliefs despite an overwhelming preponderance of facts to the
contrary ... (the "simply invert the 0 to a 1" part was really funny ...)

> In logic pc boards there is all kinds of junk close to ground level that
> has to be ignored. In radio on-off keying the junk level is sometimes

> pretty high and the identification of 0 and 1 can be difficult. This is
> one of the basic limitations of on-off keying, including but not limited
> to Morse code.

So you admit that you dismissed some very real limitations with
a faithful "wave of the hand" ???

The limitations/disadvantages of OOK relative to orthogonal signalling
such as BFSK not withstanding, you've dodged the fact that your
mythical "matched filter/integrate and dump" demodulator for OOK Morse
would be FAR more complex than an ideal demod for BFSK ... even if you
COULD solve the problem of the non-existent "space" energy without
incurring an additional implementation loss

In fact ... even if you keyed Morse as BFSK to avoid the power penalty
of not sending signal energy during the "space" intervals in Morse,
your receiver would STILL be FAR more complex due to the irregular
symbols ... facts are that regular codes (where symbols are all the same
length) are demonstrably superior to irregular codes ... and the receivers
remarkably simpler ...

> In Morse, distinguishing a dot from a dash can sometimes be difficult.

No shit ... we've been trying to tell you that OOK Morse is GROSSLY
sub-optimal for some time now ... but, despite the above admission of
difficulty, I somehow don't think you really comprehend the message yet.
(or are simply unwilling to accept the facts because they conflict with
your preconditioned religious beliefs that Morseodism is the "true religion")

> One thing that helps a great deal is the difference between a musical
> tone sound and a noise sound. The operator is good at making this
> distinction.
>
> If the signal to noise ratio is a few dB the process works OK. Highly
> skilled CW operators are good at doing this mentally. They also know how
> to operate their CW equipment in a manner that helps to get the job
> done. In other words, personal operating skill is a factor.

So now we're back to the "the brain is a magical processor that can do all"
mythology??? And "the operator's skill brings out the advantages or Morse"
(equally false crap ) ... it is undisputable fact that there are many digital
modes
that can perform flawlessly at far faster data rates than humans can do with
ear/hand OOK Morse at signal levels where the very best human OOK Morse
operator in the world would not even be able to detect the *presence* of a
signal, let alone copy it ... but you Morseodists simply refuse to acknowledge
such facts ...

Everyone has the right to their religious beliefs ... even folks such as you
Morseodists who believe things that are demonstrably false ... such cults
even have the absolute right to proselytize and "do missionary work" ...
however in the interests of simple honesty it would be nice if you were to
identify your religious propaganda as such in the future, rather than

attempting to bullshit unsuspecting, technically inastute potential converts
that it is "scientific fact" ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3035. NEED 2KW CERAMIC SWITCH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bccc64$927a0f40$2ec7d8cc@km3g.cts.com>
Source record: 90523
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I need a 15 position or greater 2kw rated ceramic switch for use in a legal limit plus transmatch. A 2kW roller inductor covering 160 meters (28uH?) would also work.

Lane
Kilo Mexico Three Germany
San Diego

# 3036. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bccb9e$164938e0$0100005a@wa6vse>
Source record: 90524

Dennis Erwin Thurlow <geosynq@antispam.trader.com> wrote in article
<342D6529.5646@antispam.trader.com>...
> William E. Sabin wrote:
> >
> > Carl R. Stevenson wrote:
> > >
> > > Please, please, please elaborate on this one, oh sage of wisdom ...
> > > How does one do an "integrate and dump matched filter" for the
> > > (nonexistent) energy of "the spaces-in-between elements" ???
> > > (hint ... all that exists there is noise and/or interference)
> > >
> >
> > It's easy, oh brother of a flea. If there is a gap in the signal, invert
> > the 0 to a 1 with a simple inverter.

Bill is full of crap on this one ... more detail in response to
Bill's attempts to dodge Dennis' astute (and exceedingly polite)
observation to that effect ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

> Even if you don't believe Carl's question was serious, I would like
> a better explanation. You can't invert the 0 if it doesn't _look_
> like a 0 due to noise. What if a long 0 gets truncated by noise?
> --
> Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM
>

# 3037. Re: 465 O-scope problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <342d70fb.533376@news.zippo.com>
Source record: 90525

On Sat, 27 Sep 1997 12:43:36 -0400, Jason G Skalski
<jskalski@acsu.buffalo.edu> wrote:

>Sir Robin wrote:
>
>> My 465 Tektronix oscilloscope went belly up with no sweeps displyed on
>> the tube. Even the 'beam finder' doesn't display anything. I haven't
>> opened it up to have a look yet.
>>
>> Any suggestions or can anyone refer me to an oscilloscope fixing
>> business?
>>
>> Thanks..Rick in Houston, TX.
>
> Try the high voltage supply. It has probably failed. Assuming you
>checked the fuse and panel controls.
>Jim (N2G0)
>

Give Stan, the TEK man a call at w7ni@teleport.com

Steve Carlisle

# 3038. Re: RFI in Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: klocko@toad.net
Message-ID: <875406319.28732@dejanews.com>
Source record: 90526

In article <875372892.3640@dejanews.com>,
kn4ab@home.com wrote:
>
> I have a Heath keyer that is shorting out due to rf
> in shack.. Recommendation was to nuse ferrite cores
> from MFJ over leads. The ant is an inverted vee fed with RG213.
> Would it help to install a current balun where
> it enters the shack? or at the antenna itself?
> TNX 73 George KN4AB
> Clark, N.J.
>

Hi George, You should install a balun right at the feed point of the antenna. See the ARRL Antenna Book for plans for a W2DU choke balun made from ferrite sleeves. You should be able to get some at a hamfest. The ones about an inch long should be less than a dollar apiece. Get enough for a total length of about a foot, and make sure they're rated for 2 to 30 MHz. 73 es GL Bill N3WK

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3039. Re: Batteries (Charging/Circuit)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <342D2F43.16B2@delphi.com>
Source record: 90527

David Toste wrote:
> I would like to get some feed back from anyone with circuit ideas.

Hi David, 12v lead-acid batteries can be charged with no time limit
from a 13.8v power supply. Simply limit the charging current with
a resistor in series with a 13.8v power supply. This won't give
them a full charge but it won't hurt them either.

73, Cecil, W6RCA

# 3040. Re: Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Ed <ecummins@worldnet.att.net>
Message-ID: <342D788A.C3FCD5C@worldnet.att.net>
Source record: 90528
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I think I am missing something here. I thought the SBE-33 was the first
all solid state transceiver, not tube. I believe the SBE-34 was also
all solid state.

--

Ed

# 3041. Morse ident program for AVR 1200

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <Zy6C6LABIXL0EwBe@lfheller.demon.co.uk>
Source record: 90529

If anyone is playing with the new Atmel AVR 1200 microcontroller, I've written a simple Morse callsign ident generation program for it. I can email the source code to anyone who is interested. The AVR 1200 is *much* nicer (and cheaper) than the PICs that are usually used for this sort of thing.

73, Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3042. FS: QRP Xmtr. board, Speedex Key

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: bcdlr@midwest.net
Message-ID: <342c5902.46320962@news.midwest.net>
Source record: 90530
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

For Sale

Ryan Communications SW1 transmitter board, factory built. For 40
meters. Works just fine. Xtal controlled, 1.25 watts @ 12 volts.
$10 + shipping.

Speedex Key, Black Wrinkle base on thin oak board. Nice condition.
This is a model without a shorting bar.
$25 + shipping.

Might trade. Looking for a frequency counter, older model fine,
80-100 Mhz or so....

Dan Reynolds KB9JLO
bcdlr@midwest.net

# 3043. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <342DD721.38BA@delphi.com>
Source record: 90531

klocko@toad.net wrote:
> Cecil, In initial tests of my 4:1 toroid balun, I did use a 200 ohm
> resistive load. Unfortunately, I think this type balun is more tricky
> than it looks, with the wire size, wire spacing, etc., all having an
> effect on the final outcome. Maybe someday I'll sort everyting out and
> try to fix it up. Thanks for the comments. 73, Bill N3WK

Hi Bill, using a 200 ohm resistive load doesn't accomplish anything because the chances of the balun seeing 200 ohms looking up a 450 ohm ladder-line into a non-resonant antenna are infinitesimal. Even if it worked perfectly with a 200 ohm load, it still would not work well in a high SWR situation. The only time the balun would actually see 200 ohms is if the SWR on the 450 ohm ladder-line was 2.25/1 AND one fed the system at a current maximum point on the ladder-line.

73, Cecil, W6RCA

73, Cecil, W6RCA

# 3044. Re: Batteries (Charging/Circuit)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <342DD570.3412@delphi.com>
Source record: 90532

Bob Recny wrote:
> You might want to add a series diode with the current limiting resistor so
> the power supply does not get fried from reverse voltage if it is turned off
> or your power goes out. Bob / N8SQT

Hi Bob, what you say is true. But since 13.8v doesn't give a full charge, knocking off another half volt charges it less. I prefer to just keep an eye on the charging process to avoid the problems you mentioned. Another solution would be to crank the voltage up to 14.3v and use a diode.

73, Cecil, W6RCA

# 3045. KB0YKI's Antenna, Ham Radio and more Page Update

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Aaron D. Schmitz" <aschmitz@marktwain.net>
Message-ID: <342DCC8F.5841@marktwain.net>
Source record: 90533

Attention fellow amateurs:
The KB0YKI Antenna's, Ham Radio and more page has added another section. The newly formed Northeast Missouri Amateur Builders's Association page is now in operation. In order to join the group, simply send by email or snail mail a design or idea for an antenna, tower, or other radio related item you have built or would like others to look at.
Also I have a set of plans for yagis, J poles, Super J Pole, quads, and Collinears. Take a peek and see what you think. Also included are online designers for quads and yagis. Design your own while you are online. 73 and happy building.
http://www.marktwain.net/~aschmitz/home.html

Aaron, KB0YKI
--
---
Aaron Schmitz
KB0YKI
Route 1 Box 31
Ewing, MO 63440
Email:
aschmitz@marktwain.net
aschmitz@culver.edu
Web:
http://www.marktwain.net/~aschmitz/home.html
"Specializing is computer assistance for Macintosh and IBM"

# 3046. Re: Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <342c8191.4011392@news.mnsinc.com>
Source record: 90600
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

There is a guy advertising in this month's issue of ELECTRIC RADIO who
says that he specializes in repair of SBE 33 and SBE 34 xcvrs.

Do you want his address?

Bry AF4K

On 23 Sep 1997 17:51:53 GMT, "H.P. Vermeulen"
<pleun.vermeulen@prive.ordina.nl> wrote:

>I'm looking for any documentation on a very old (tube) HF set: SBE model 33
>(15, 20, 40 and 80 meters). Probably made in USA. The 40 and 80 meter band
>starts at 7.15 and 3.8 MHz, but in Europe it is UP TO these frequencies.
>Want to modify this set to use it as a receiver. Anyone know anything of
>SBE??
>
>I'm also looking for a European adress of the importer of ADI VHF/UHF
>transceiver. As you probably already noticed my call is pd1ADI so I want to
>ask those guys whether they can sponsor me while I'm like a living
>commercial for them (hi).
>
>Any info is welcome!
>
>Thnx
>
>73! PD1ADI
>

(remove the word REMOVE from my e-mail address to respond!)

# 3047. Re: Subscription

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <342c802b.3653006@news.mnsinc.com>
Source record: 90601
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

On Tue, 23 Sep 1997 19:59:19 -0700, "Warren D. Anderson"
<wdaorcda@usinternet.com> wrote:

>Bry wrote:
>>
>> On Mon, 22 Sep 1997 19:53:19 -0700, "Michael D. Chodrick"
>> <chodrick@ix.netcom.com> wrote:
>>
>> >Hi-
>> >My Name is Michael Chodrick. I was told the cost of a subscription, is
>> >$12.00 per year. How do I subscribe?
>> >Thank you-
>> >KQ6JG
>>
>> No, they are NOW charging $20.00 a year.
>> It was $12 about 2 years ago, then he went up to $15 and now $20 with
>> talk of going to $25 according to one person who wrote to me.
>>
>> NOW, with 600+ people sending him $20 each he is not doing too badly
>> at all!
>>
>> Every other LIST is FREE!
>
>Bry, since you are obviously a list expert, would you care to enlighten us on
>what you think it costs to run an operation like Jack runs and how much you
>think the citizens of Tempe are paying to support the "free" lists?
>
>Warren Anderson

Where did you see me claiming to have this information?
Or to being an expert on anything for that matter?!

(remove the word REMOVE from my e-mail address to respond!)

# 3048. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bccad9$ef030dc0$0100005a@wa6vse>
Source record: 90602

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<342BBF31.7F2E@crpl.cedar-rapids.lib.ia.us>...
> Gary Coffman wrote:
> >
> >
> > This
> > would represent a large improvement over conventional OOK Morse
> > signaling (because we could actually pack signals 2.33 Hz apart without
> > adjacent channel interference by using ideal matched filter detection,
> > something we can't do with Morse coding).
>
> Not true. There is a "dot" matched filter, a "dash" matched filter and
> matched filters for the spaces in-between (all of them integrate and
> dump). These can be combined and decoded by algorithms. The code speed
> can be "learned" by the processor.
>
> Bill W0IYH

Please, please, please elaborate on this one, oh sage of wisdom ...
How does one do an "integrate and dump matched filter" for the
(nonexistent)
energy of "the spaces-in-between elements" ???
(hint ... all that exists there is noise and/or interference)

Besides ... the Morseodists all claim that one of the major
advantages of OOK Morse is that "it's the simplest to implement"
(always neglecting the fact that FSK would be at least as simple,
if not simpler in many ways ...)

Your "system" (were it implementable at all) would require at least
5 different types of matched filters (assuming you can describe how
to do an I&D on the problematic non-existent energy during the spaces
between code elements in OOK Morse) ... actually, there would be
"dit," "dah," "element_space," "character_space," and "word_space" ...
three of which contain no signal-related energy at all with which to
operate, therefore, you still have to explain how one does correlation
and/or an integrate and dump matched filter against this absence of
any signal-related energy???

BFSK would require only 2 matched filter types ... and provides energy to
correlate against for both "mark" and "space" tones ... as Gary has pointed
out, this presents distinct advantages relative to OOK Morse ...

--
Carl - wa6vse
wa6vse@fast.net

NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3049. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: P Schaefr <pschaefr99@erols.com>
Message-ID: <342C9EF7.637E@erols.com>
Source record: 90603
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

My Net medic program showed me that even with a 28.8 modem, I am lucky
to average 18-22 KBPS.
--
Please delete "99" from my address to respond.
Ban Spam!!!

## 3050. Batteries (Charging/Circuit)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: David Toste <saturn@interlog.com>
Message-ID: <60iaef$8mh$1@news.interlog.com>
Source record: 90604

I'm hoping someone can help me out here. I was able to get a bunch of batteries from a old
telephone voice mail system.

They are configured in what looks like a six pack of beer (:)). Each cell has the following label on them,
2v 25ah(Lead Acid) each which of course when to you place them in the 6 pack gives you about 12v.
I have about 11 of these 6 packs. I haven't used them and I want to build a charger or something that
will maintain the charge up.

I would like to get some feed back from anyone with circuit ideas.

I also have 2 panisonic 12 35ah batteries as well both have no charge in them they read 0volts. Anyway
I can bring them back to life??

Please post and reply via the e-mail Thanks.

--
David Toste [VE3TOS] Internet - saturn@interlog.com
Brampton, Ontario. SWLOGit - The Ultimate Shortwave Listeners Software
ftp.virginia.edu /pub/swlogit/
http://www.interlog.com/~saturn/SWLOGit.html (SWLOGit Web Page)

# 3051. Will 572b tubes work at 50 mhz???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Stephen Hall <S.A.Hall@btinternet.com>
Message-ID: <01bccb3a$51d3ada0$LocalHost@default>
Source record: 90605

Hi and thanks for reading this.
Can anyone tell me if a pair of 572b tubes will work on the 50 mhz band and
if they will would i have to adjust any voltages (HT , Bias etc.) to suit.
Any help gratefully recieved
please e-mail if you can help.

73's de steve G7EUW

s.a.hall@btinternet.com

# 3052. Adding 2nd antenna to TS850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: cjsterl <cjsterl@ix.netcom.com>
Message-ID: <01bccb55$12b45c80$b7d0b7c7@CJSTERL.IX.NETCOM.COM>
Source record: 90606

Greetings,

Really like my Knwd ts850, but it only provides for a single antenna.

Can anyone help me out with VERY DETAILED plans for adding an add'l antenna that can be used for receive only?

Want to get on the lower bands, have room for TX antenna, but will have to use separate antenna for receive, such as a small magnetic loop ... hence my need for add'l antenna for the 850.

Appreciate any replys, but please be very specific ... not an engineer ... sales and marketing guy!

Thanks,
Craig, AA3MD
Washington, D.C.

# 3053. RFI in Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: kn4ab@home.com
Message-ID: <875372892.3640@dejanews.com>
Source record: 90607

I have a Heath keyer that is shorting out due to rf
in shack.. Recommendation was to nuse ferrite cores
from MFJ over leads. The ant is an inverted vee fed with RG213.
Would it help to install a current balun where
it enters the shack? or at the antenna itself?
TNX 73 George KN4AB
Clark, N.J.

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3054. 440 ht to trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: mike enc <mikel@tir.com>
Message-ID: <01bccb59$8e244200$c555dacd@mikel.tir.com>
Source record: 90608
Cross-posted to:
rec.ham-radio,rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have a HTX-404 440 ht almost new only used a couple of times......
I want to trade e-mail me and tell me what you've got....you mite be
suprised what I will trade it for.......thanks de kb8enc
mikel@tir.com

## 3055. 465 O-scope problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Sir Robin <nexus15@flash.net>
Message-ID: <342D303D.62EC@flash.net>
Source record: 90609

My 465 Tektronix oscilloscope went belly up with no sweeps displyed on the tube. Even the 'beam finder' doesn't display anything. I haven't opened it up to have a look yet.

Any suggestions or can anyone refer me to an oscilloscope fixing business?

Thanks..Rick in Houston, TX.

# 3056. Re: 465 O-scope problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Jason G Skalski <jskalski@acsu.buffalo.edu>
Message-ID: <342D37B8.A8362048@acsu.buffalo.edu>
Source record: 90610

Sir Robin wrote:

> My 465 Tektronix oscilloscope went belly up with no sweeps displyed on
> the tube. Even the 'beam finder' doesn't display anything. I haven't
> opened it up to have a look yet.
>
> Any suggestions or can anyone refer me to an oscilloscope fixing
> business?
>
> Thanks..Rick in Houston, TX.

Try the high voltage supply. It has probably failed. Assuming you
checked the fuse and panel controls.
Jim (N2G0)

# 3057. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <342D62A6.7C96@antispam.trader.com>
Source record: 90611

The future of radio?
I'm interested in these PC bus card radios that use the computer as the front end. This allows the computer to replace not just the front end, but an entire desk of test equipment, all of it running simultaneously in different windows. It would be a quantum leap for teaching RF theory.

The card itself will become cheaper and cheaper as MMIC and DSP technology improve. In fact, once parallel instruction DSP chips can be driven at the speeds CPUs are currently driven at, a single chip will be able to detect, mix, decode, encode, filter, etc.

Then there's the antenna/feed coax/balancer stages. LOTS of room for innovation there. How about a computer controlled, _active_ feed line that would eliminate the need for a balancer? How about a truely cheap az-el system and multiband antennas?

--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3058. Re: Please help identify a Component

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bccb6e$8e34d740$0100005a@wa6vse>
Source record: 90612

Kin <kng@pacbell.net> wrote in article <01bcc663$60005df0$6401aace@kinsnt>...
> I am hoping if someone can help me identify this component for my Sony TV.
>
> The TV's Model is KV-27EXR25, the component number is THP601.
>
> The component is rectangular and looks like a regular relay. But it's only
> got 3 legs and is enclosed in a black plastic case. 2 of the legs connects
> directly to the 2 incoming power leads. The manufacture is TDK. There are
> 2 sets of numbers printed on top. They are:
> 081-23
> 1N02

Just as a WAG, I'd say it sounds like it may be some sort of transient
suppressor or part of an EMI/RFI filter ... I'm betting the 3rd lead goes
to ground, right?

> My TV's symptom is that there is no sound and no picture. I traced the
> power all the way to this component. This component is very hot to the
> touch.

That's a bad sign ... sounds like something inside has broken down
and can no longer withstand the line voltage ... or something downstream
(deeper inside the TV, from the perspective of starting at the ac line cord)
has died and is drawing excessive current *through* the part that is getting
hot ...

> But it's enclosed in a plastic case and there is no heat sink
> attached to it. So I think this component may be the culprit.

I think that's a good guess ...

> If anyone can help me with any info on where I can get the schematic for my
> TV, or where can I get the replacement component, or help me identify what
> it is, I'll appreciate greatly. Thanks in advance.

Have you tried the local Sony service place??? Often high volume consumer
electronics products have proprietary parts in them, with numbers that are hard
to (or impossible to) find outside ...

In any event, this sounds like it could be a fire looking for a place to happen
..
I would recommend you not leave this thing plugged in without direct and
continual supervision ...

--
Carl - wa6vse
wa6vse@fast.net

NCI #1052
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Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3059. Re: lawyers test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-27 00:00:00 UTC
From: kmillerX@flash.net
Message-ID: <342d1667.217147636@news.flash.net>
Source record: 90613
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

On Fri, 26 Sep 1997 22:33:03 -0700, Tom Mills
<"tmills@flash.net"@flash.net> wrote:

>is just that, the total amount of whatever. However, there is no
>correlation between information and intellegence.

"intellegence"??? Did you go to school in Dallas too?
:-)
Kerry Miller
kmillerX@flash.net
(remove the X to reply, I really hate spam)

## 3060. Paralleled power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <aFHFLDA6BZL0EwDa@ifwtech.demon.co.uk>
Source record: 90534

Is it possible to connect two regulated power supplies in parallel to increase the output current capability? Somebody asked me the question, but they don't want to sacrifice two good power supplies to find out :-)

Both units have an external "+sense" input which is normally linked to the + output, so I'd thought about adding a series diode to each unit, joining them together to make a combined output, and then connecting the sense inputs of both supplies to a permanent load resistor across the combined output. With careful adjustment of the voltages this should ensure reasonable current sharing.

Does anybody know from experience if this will work?

(Both units are switch-mode, if that matters.)

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 3061. Re: Will 572b tubes work at 50 mhz???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: George Edwards <gedwards@onramp.net>
Message-ID: <01bccbcd$7a1286e0$12e532ce@708714231>
Source record: 90535

The Svetlana 572B spec sheet states that at freqs above 30MHz plate input power should be reduced according to the following table:

Freq (MHz)

60.................plate voltage and plate input power.....89%
80.................plate voltage and plate input power.....70%
100...............plate voltage and plate input power.....55%

I don't have the spec sheet on any other brands.

73/George/KD5CBC

Stephen Hall <S.A.Hall@btinternet.com> wrote in article <01bccb3a$51d3ada0$LocalHost@default>...
> Hi and thanks for reading this.
> Can anyone tell me if a pair of 572b tubes will work on the 50 mhz band and
> if they will would i have to adjust any voltages (HT , Bias etc.) to suit.
> Any help gratefully recieved
> please e-mail if you can help.
>
> 73's de steve G7EUW
>
> s.a.hall@btinternet.com
>
>

# 3062. Re: Batteries (Charging/Circuit)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <60l20t$j1o$1@news1.teleport.com>
Source record: 90536

In article <60iaef$8mh$1@news.interlog.com>,
"David Toste" <saturn@interlog.com> wrote:
>
>I'm hoping someone can help me out here. I was able to get a bunch of
>batteries from a old
>telephone voice mail system.
>
>They are configured in what looks like a six pack of beer (:)). Each cell
>has the following label on them,
>2v 25ah(Lead Acid) each which of course when to you place them in the 6
pack
>gives you about 12v.
>I have about 11 of these 6 packs. I haven't used them and I want to build
a
>charger or something that
>will maintain the charge up.
>
>I would like to get some feed back from anyone with circuit ideas.
>
>I also have 2 panisonic 12 35ah batteries as well both have no charge in
>them they read 0volts. Anyway
>I can bring them back to life??
>
>Please post and reply via the e-mail Thanks.

Those sound like a pack I bought at Dayton a few years ago. Mine were Gates "Cyclon" batteries, which use a starved-electrolyte system. They're very nice batteries. IF this is what they are (and they should say so), Gates recommends constant-voltage charging at 2.4 - 2.6 volts/cell for cyclic use, or 2.3 - 2.4 volts/cell for float use. There is no limitation on maximum current from the charger. If you let the cells discharge to a level below about 1.85 volts/cell open circuit, the battery may be permanently damaged. They self-discharge very slowly so if they're not used you shouldn't have to top them up more than once or twice a year unless stored where it's very hot. NOTE that if this is NOT the kind of cells you have, the above conditions don't apply. Most other lead-acid batteries have a maximum charge current specification, and the charge voltages may be different.

Roy Lewallen, W7EL

# 3063. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342E387E.7C5F@crpl.cedar-rapids.lib.ia.us>
Source record: 90537
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

Ned Carlson wrote:

> And, geez, where do we find 7360's nowadays?
> Those were tough enough 10 years ago!!!
>

RF Parts has them for $37.50 and Antique Electronics for $44.50. All you
Boat Anchor guys out there get busy.

My Boat Anchor is an HQ129X (1945) that I have modernized pretty much.

Bill W0IYH

# 3064. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342E36F2.64D1@crpl.cedar-rapids.lib.ia.us>
Source record: 90538

Carl R. Stevenson wrote:

>Bill's in
> DEEP (bullshit) here ...
>

Go fly a kite, Carl, and do your bullying somewhere else. Instead of beating up on people, these guys beat up on their keyboards.

Bill W0IYH

# 3065. Re: Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Jim Swenson <newmedia@mail.teleport.com>
Message-ID: <342E5ACE.3A03@mail.teleport.com>
Source record: 90539
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Ed wrote:
>
> I think I am missing something here. I thought the SBE-33 was the first
> all solid state transceiver, not tube. I believe the SBE-34 was also
> all solid state.
>
> --
>
> Ed

The SBE-34 is solid state with a tube final.
Jim W7NJ

# 3066. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <342E84E9.101D@antispam.trader.com>
Source record: 90540

William E. Sabin wrote:
>
> Carl R. Stevenson wrote:
>
> >Bill's in
> > DEEP (bullshit) here ...
> >
>
> Go fly a kite, Carl, and do your bullying somewhere else. Instead of
> beating up on people, these guys beat up on their keyboards.
>
> Bill W0IYH

Now wait a second here. Are you saying _I'm_ one of those people, W0IYH?
_I_ don't beat up on people _or_ keyboards. And I don't see anyone else
in this conversation right now.

I ask you, again, to explain your 5 filter system for cw.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3067. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <60lsd8$4nb$1@gte1.gte.net>
Source record: 90541
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

europa@primenet.com wrote:

> I was seriously thinking of buying an ICOM 775. I asked the sales person
> if I could look at the schematic. I've never seen a schematic that looked
> like that. It was obvious that they were trying to keep the consumer from
> figuring out how the rig worked. Obviously, the designers were embarrassed
> with the design.

Interesting logic. But I doubt that the schematic has been drawn to
intentionally obfuscate.

If you were to obtain the service manual for this rig, and if is done as
well as the IC-781 manual is for instance, you would find a clear
exposition which covers many "sectionalized" schematics which may take
some time to understand, but not because somebody is trying to pull the
wool over your eyes. Its quite too complicated for one small schematic
to give you a clear picture.

Grant/NQ5T

nq5t@gte.net
http://home1.gte.net/nq5t

# 3068. Re: WTB Satellite TV Antenna (Dish)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: davencinNO@SPAMtdl.com
Message-ID: <342e7de6.1138979@news.tdl.com>
Source record: 90542
Cross-posted to: rec.radio.swap,rec.radio.homebrew,rec.ham-radio.swap,rec.radio.misc,sci.electronics.misc,sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

On Thu, 25 Sep 1997 20:47:26 -0700, Norman Franklin
<normanf@pacbell.net> wrote:

>Can any one out there tell me where to pick up new/used dish
>type antennas (CHEAP). Preferably in the San Fransico Bay area.
>To be used for amateur radio telescope. Almost any size will do for
>a start.
>
>Thanks
>
>Norman

I have a six-footer that I no longer use that I'd be willing to part with for $25.00, and I could even probably take it to you (I have a pickup). I believe I still even have all of the mounting hardware for a roof-mounted pipe mount, but I'm not absolutely sure. It was originally used as an SCPC audio receiver, and I believe it's made by Prodelin. I also have a 4 GHz feed and LNA I'll throw in. Let me know if you're interested. It's presently in my backyard in Newark.

Dave Barnett
davencinNO@SPAM TO US PLEASE tdl.com

# 3069. Re: Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <342EA07A.59C0@scan.missouri.org>
Source record: 90543
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Ed wrote:
>
> I think I am missing something here. I thought the SBE-33 was the first
> all solid state transceiver, not tube. I believe the SBE-34 was also
> all solid state.
>
> --
>
> Ed

Both had tube driver and finals.
Dick W0EX

# 3070. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: triodeel@ameritech.net
Message-ID: <342dd2e6.11426102@news.chicago.il.ameritech.net>
Source record: 90544
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

>Gary Coffman wrote:
>>
>> I've seen the 7360 used in SSB balanced modulators, but hadn't considered
>> the possibility of using it in a receiver front end. I can see how it would be
>> a good first mixer.

And, geez, where do we find 7360's nowadays?
Those were tough enough 10 years ago!!!

"William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

> You don't make a receiver better by
>throwing more tubes into it.

Bingo. The more tubes, the more noise,the tougher
it is to align. The idea is to get the max gain
and lowest noise out of the fewest stages.
One of the nicest things about tubes is that they
tend to force people to choose the simplest designs.

>With vacuum tubes, more is not better. With RF integrated circuits the
>exact same thing is true.

I am a tube salesperson, so I cannot comment knowledgebly
re RF IC's.
I will say that the *good* ham & SW gear that was made
back in the old days involved a considerable handwiring
(uggh, check out some Hallicrafters' bandswitches, yikes!),
and could not be duplicated these days for less than
6X to 10X the price. Them ol' National HRO's sold
for $359 new in 1951!

BTW, we have a good deal on Russian 807's
if anyone's interested. Check out:
http://www.triodeel.com/tubes.htm

Ned Carlson, Triode Electronics, Chicago, IL http://www.triodeel.com
Open 12:30-8 PM CT, 12:30-5 PM CT Sat Closed Wed
ph:773-871-7459 fax 773-871-7938 "where da tubes are"
Email catalogs: email our CataBot: catalog@triodeel.com

# 3071. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: MJ <goldenpack@msn.com>
Message-ID: <01bccc4b$871a6a00$60212599@default>
Source record: 90545

test

# 3072. FS: P.A. Blowers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: The Thomas Family <k6kc@lightspeed.net>
Message-ID: <342E1409.353D@lightspeed.net>
Source record: 90546

Amp. Builders: I have some new-in-box surplus centrifugal blowers available. 72c.f.m., 6" squirrel cage. Mil. spec. ball bearing motors by Rotron & Eastern Air Devices, 115vac/60Hz. $15.00 each plus postage. 73, Lowell, K6KC

# 3073. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: "robert c. oliver" <hioptemp@intercall.com>
Message-ID: <342F0FF8.FA15E220@intercall.com>
Source record: 90547
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

A sure sign/advantage of a workhorse device is ubiquitous availability.
So, check several sources for parts (JDR, Mouser, Digikey, All
Electronics, Newark, Allied, etc.) and find those transistors with
characteristics you are interested in such that they appear in as close
to all catalogs as possible.

## 3074. wanted 6 meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: swm332@earthlink.net
Message-ID: <342F392F.1F14@earthlink.net>
Source record: 90548

Looking for a 6 meter amp single 3 500 4 400 etc

no solid state.

Steve WB4EMO

swm332@earthlink.net

423 877 2846 late night eastern time

# 3075. Re: Need *** Zetex FZT600 NPN Darlington Transistors ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: NORMANMO@miavx1.muohio.edu
Message-ID: <342EDE91.3E64@miavx1.muohio.edu>
Source record: 90549

Don't know if they have these, but DigiKey carries quite a few Zetex transistors. 800 344-4539

# 3076. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2809970628190001@wd1v.mv.com>
Source record: 90550
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.marketplace,alt.ham-radio.packet

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John Seney
http://www.mv.com/ipusers/wd1v

# 3077. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342E378B.5B7@crpl.cedar-rapids.lib.ia.us>
Source record: 90551

europa@primenet.com wrote:

>
> I'm sorry, Bill. Please accept my apology.
>
> Sincerely, Rob.

No apology needed. Sometimes communication on the internet is difficult.

Bill W0IYH

# 3078. Attn: K7ON, Brian Short

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <342e6dbc.13744267@news.mnsinc.com>
Source record: 90552
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

To Brian Short:

Via: k7on@qsl.net, k7on@qth.net
CC: webmaster@qsl.net, webmaster@qth.net

Hi Brian - your Web Site is down!

The DNS entry is coming up as "INVALID."

I have tried BOTH
www.qsl.net AND www.qth.net

As far as the Internet is concerned, they no longer exist!

"No DNS ENTRY FOUND"

I was about to set up MORE links to these sites and unfortunately
they seem to have disappeared over the past few days!

Can you or anyone tell me what the heck has happened??

Best regards - Bry, AF4K

(remove the word REMOVE from my e-mail address to respond!)

# 3079. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bccc1c$da22de00$0100005a@wa6vse>
Source record: 90553

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<342E36F2.64D1@crpl.cedar-rapids.lib.ia.us>...
> Carl R. Stevenson wrote:
>
> >Bill's in
> > DEEP (bullshit) here ...
> >
>
> Go fly a kite, Carl, and do your bullying somewhere else. Instead of
> beating up on people, these guys beat up on their keyboards.
>
> Bill W0IYH

AW, poor Bill ... he can't stand being caught not knowing what
the hell he's talking about ...

I seem to recall him bragging about having been involved in
writing sections of "The Radio Amateur's Handbook" ... that
would tend to explain why it's so backward and has omissions
and errors ...

YOU "go fly a kite" Bill ... *you* do the amateur community
a disservice by spreading falsehoods and inaccuracies in
support of religious dogma relative to Morse ...

You're certainly entitled to hold your religious beliefs WRT
Morse's mythical "superiority," but when you confuse and
mis-educate folks by spouting it as "fact" them others have
a right to "call you out on it" ... if you are not prepared to
handle that, that sounds like you've got a personal(ity) problem
to me ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3080. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342E73E5.D86@crpl.cedar-rapids.lib.ia.us>
Source record: 90554

Dennis Erwin Thurlow wrote:
>
> Are you saying _I'm_ one of those people, W0IYH?

No.

Bill W0IYH

# 3081. WWV, Radio Clock

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Kenneth Klimasewski <klimasewski@fccvde.enet.dec.com>
Message-ID: <342E6B68.21B9@fccvde.enet.dec.com>
Source record: 90555

Looking for a circuit to decode the 60KHz WWVB signal.

thanks,
Ken

# 3082. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Chris Terwilliger <aa7wd@primenet.com>
Message-ID: <342F47EF.E1AF5151@primenet.com>
Source record: 90556
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.amateur.boatanchors

Gary Coffman wrote:

> A modern radio often has millions of active devices in it. That allows you
> to produce functions which were simply impractical in the tube days. Yet
> the radio can be much smaller, and consume much less power. If we tried
> to do that with tubes, the reliability would be so poor that it would never
> work, and it would take a dedicated generating station to power it.

Ever seen a WRR-2 (FRR-59)?
Made by National circa 1965
64 tubes, synthesized HFO
2-32 Mhz AM/DSB
200+ lbs
24 inches worth of 19 in rack

The ultimate boatanchor receiver...

Chris, AA7WD
aa7wd@primenet.com

# 3083. Re: Inductance calculations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <342E8D83.77E9@emily.net>
Source record: 90557

Diamond Jim wrote:
>
> I recall, vaguely, seeing a comment in a magazine many years ago (perhaps
> 'ham radio') giving a better formuola for calculating the indcuctance of
> small air wound coils than the 'standard' equation which is very simple.
> Does anyone know of this one? The standard equation (i.e., the one in the
> ARRL handbook) was widely used in the olden days when we all just had slide
> rules. It seems to me that, with modern calculators, one might just as
> well use the more accurate equation.
>
> Thanks,
>
> Jim

Perhaps you're referring to an article by Meyer titled "Accurate Single-Layer Solenoid Inductance Calculations" in the Technical Correspondence section, April 1992 QST, page 76. Corrections appeared in the July 1992 QST on page 73. The calculations get a bit involved. At the time of the QST article, there was a BASIC program available on many ham BBSs called IND.EXE which would perform the calculations for you. I use a program by Brian Beezley called COIL.EXE, which calculates inductance and Q, taking into account wire conductivity as well as losses for several types of coil form materials. A demo version of COIL.EXE used to be available for downloading; registration was only 10 dollars. I believe this program is included in the software package that comes with the newer editions of the ARRL Handbook.

Regards

Lyle

# 3084. Re: [DX] Amateur Radio Site Needs Your Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: hansbrakob@juno.COM
Message-ID: <19970928.112426.9430.1.HansBrakob@juno.com>
Source record: 90558

In response to Erv KB8TNQ, who said:

>
>This message is intended for anyone who wishes to contribute to
>building our Web Site:
>

"http://ourworld.compuserve.com/homepages/k0hb/STARTUP.htm"

# 3085. Re: Attn: K7ON, Brian Short

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Phil Johnston <johnston@christcom.net>
Message-ID: <342EEF79.1C80@christcom.net>
Source record: 90559
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Bry wrote:
>
> To Brian Short:
>
> Hi Brian - your Web Site is down!
>
> The DNS entry is coming up as "INVALID."
> Can you or anyone tell me what the heck has happened??

A message was distributed a few days ago indicating the QSL.NET system would be down for a period of time. No details were given in the message I saw.

Phil
W0ABC

# 3086. Menu Plus DDS VFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-28 00:00:00 UTC
From: Tom Kirksey <tkirksey@bellsouth.net>
Message-ID: <342F1A80.1FBC@bellsouth.net>
Source record: 90560

Has anyone tried the DDS VFO Meun plus makes? They have been advertised in 73 the pas couple of months. If so, pass on your experiences and thoughts.

Tom
KD4FTQ

# 3087. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bccc78$d83009e0$0100005a@wa6vse>
Source record: 90464

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<342E73E5.D86@crpl.cedar-rapids.lib.ia.us>...
> Dennis Erwin Thurlow wrote:
> >
> > Are you saying _I'm_ one of those people, W0IYH?
>
> No.
>
> Bill W0IYH
>

That's nice ... I knew you were only referring to me, Bill ...

BTW ... I'm *still waiting* for your explanation of how you
are going to build "integrate and dump matched filters" for the
non-existent signal energy in the gaps in OOK Morse ... and
please don't give us your "simply invert the 0s to 1s" garbage
again ... that turkey don't fly ...

Also, after you've explained how to make that work (which
should be shortly after Hell freezes over), please explain
(in detail) what would be the advantage of building a far more
complex receiver for an irregular code, when a regular code
will ALWAYS give superior performance???

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3088. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: alucke@juno.com
Message-ID: <342f1192.22413958@news.compuserve.com>
Source record: 90465
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

.
>> > >The US Congress has two bills in front that would ban the
>> manufacturing and use
>> > >and scanning receivers to include amateur equipment. Law
>> enforcement, news media,
>> > >everyone, no one would be exempt. Because of the pressure from
>> large businesses
>> > >such as Motorola, this hints of fascism. Things are not going well
>> here. I wish
>> > >that I was back in Kaiserslautern.
>> >
>> > >Tsch&#65533;s....N9NWO/DA4NWO
>> >
>> > I wish I was back in Vogelweh myself..... :)
>> >
>> > Cheers!
>.
>> Things were not too bad at Hahn !
>>
>> Ray
>
> Nor at Sembach
>Jeep

Sembach was fine but I'm glad to be back here..........btw I wonder
if the "Florida, Sputnik, & Western Club" are still in K-town? Just
wonderin'

Al

# 3089. Re: Call For Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <34321dc3.34501382@news.gv.net>
Source record: 90466
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Steve Ford <sford@arrl.org>
shared these priceless pearls of wisdom:

->We received an outstanding response to our first "call
->for articles," and now it is time to do it again.

If I paid your rates, had "editors" with the technical savvy of Zippy the Pinhead, and butchered articles like your staff, I'd have to do it all over again every other month too.

Jim

# 3090. Re: Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <34311c87.34185252@news.gv.net>
Source record: 90467

"Carl R. Stevenson" <wa6vse@fast.net>
shared these priceless pearls of wisdom:

->Mark J Sandford <sandford@tridsys.com> wrote in article
-><342851B8.51459E9D@tridsys.com>...
->> Is it possible to build a crystal filter with overtone crystals
->> operating in overtone if so how are the crystals made to operate within
->> the filter in the overtone vs. fundemental mode????

It is possible, but it is a royal pain in the ass. The circuit passive components (Ls and Cs) turn out to be so horrendous with overtone parameters that it rapidly becomes a problem more of passives than of the crystal itself.

HOWEVER, having said this, one of my contacts at Jan Crystal in Florida tells me that they are making production quantities of any fundamental rock up to 100 MHz.+ Making the filter from VHF fundamental rocks is a hell of a lot easier than trying to use overtones. If you have trouble finding the right person at Jan, email me and I'll give you the engineer's name.

Jim

# 3091. Re: Any info for a school starting up a radio station?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Les Wilson <nessman@servtech.com>
Message-ID: <342F339F.5DB8@servtech.com>
Source record: 90468
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ian the Grate wrote:
>
> Hi Everybody!
> My highschool seems to have developed an interest in the idea of
> building an on-campus local FM radio station. So I, being a bit of a geek,
> have decided to take it upon myself to attempt to compile all information
> possible on the subject- what equipment is needed, what FCC liscences are
> necessary, where we could possibly look for grants, etc. So, if anyone has
> any useful and valid information on the subject, please reply. Thanks.

AFAIK, the FCC no longer issues Class D FM Broadcast licenses (10 watt
educational FM stations). It's all Class A and above now.

It's not a simple process where you fill out an application, send in a
fee, and buy the equipment off the shelf. It's a complex process that
can take several years to accomplish. You have to apply for the
license, have a comprehensive engineering study done to ensure your
station will not cause interference with ANYBODY, get a construction
permit (when you get the initial OK from the FCC), buy the equipment --
transmitter, antenna, feedline, studio-transmitter link, transmitter
site, Optimod, studio equipment, EBS system, transmitter remote control,
have another engineering study to make sure it all falls within FCC
guidelines, and get the final nod for the operating license. Don't
forget that you also need a Chief Engineer (in your case, a part-time
employee is OK) under some sort of contract and retainer fee to keep
everything running smoothly. We're talking big bucks ($50,000 to
$100,000 neighborhood for a basic set-up) to get up and running.

I couldn't tell you where to start looking for grants. Lots of
research.

> PS Also, what is needed to pass the FCC tech test(age requirements, degrees)?

You just need to pass the FCC Radiotelephone Operator's License test
(what the Chief Engineer must possess). There are no age or educational
requirements.

On air operators (DJ's who run the controls) must have a Restricted
Radiotelephone Operator's Permit (fill out the application and send in
$35) which basically says that you are trained and know how to operate
the transmitter and EBS equipment.

One local high school here could no longer afford to maintain their
station and they shut themselves down. It's expensive to maintain.

Don't even attempt to homebrew an FM station. Fines for running an unauthorized broadcast station are pretty stiff ($20,000 and up).

Hope this helps. I'm not trying to scare you away from building a station. It's a great thing to have. I'm just letting you know what's involved.

--
==========
Les Wilson, Rochester, NY
--
E-mail - Pers: nessman@servtech.com
Work: les.wilson@ccmail.monroe.edu
--
Web Page: http://www.servtech.com/public/nessman
==========

# 3092. need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: mikea@efn.org
Message-ID: <60mu1a$7b0$2@haus.efn.org>
Source record: 90469

I need a good Antenna that will work in a moblehome with metal siding
it need to be low so it is hide so the other home owner can not see
it. I heard that a J-pole would not work up next to metal siding???
I want to use this with the 2meter I have had my call sign for about
two week's & wanting to get on the air when my raido get here
thanks for any help
73 mikea kc7zfp

# 3093. IF Notch Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Stewart Baker <baker@nildram.co.uk>
Message-ID: <27223560897517ntc@nildram.co.uk>
Source record: 90470
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a much modified TS180s and wish to fit a notch filter at the IF.
The audio one I have works well, but strong signals capture the AGC.

I have not found any designs in all the books and mags I have.

The TS180s IF is 8MHz and I will convert this down to 455 or 100kHz. and
do the notch there.

Anyone with ideas/circuits or how it is done on a commercial rig.

Many thanks

Stewart G3RXQ
--

baker@nildram.co.uk

# 3094. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: mdf@vigard.mef.org
Message-ID: <mdf.875516198@vigard.mef.org>
Source record: 90471

Cecil Moore <Cecil_A_Moore@ccm.intel.com> writes:

>William E. Sabin wrote:
>> There is a "dot" matched filter, a "dash" matched filter and
>> matched filters for the spaces in-between (all of them integrate and
>> dump). These can be combined and decoded by algorithms. The code speed
>> can be "learned" by the processor.

The "spaces in-between"?? How can you have a matched filter for the
absence of a signal? The integral of zero is zero. Further, since the
"dot" signal is a proper sub-set of the "dash", exactly when do you "dump"?

In reality, there is only a "dot" filter, and you have to make a more or
less arbitrary choice as to whether there is a signal present or not.
Which is why OOK (be it fixed-width or Morse) is far from optimal.
--
Matthew Francey | VE3RQX | NAD27: 43o40.6617'N 079o18.5171'W +0116.5m

# 3095. FS: Deep discounts on NOS and used tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <60o8nj$e6u$24@ha1.rdc1.occa.home.com>
Source record: 90472

```
NOS Tubes
---------
6AZ8 Philips, $2.75 each
6186W (6AG5WA) $0.10 each
5R4WGB $3.25 each
80 (ST shape) $12.50 each
JAN 5751 GE $4.00 each
JAN 6922 $2.75 each

Used Tubes Untested,
Pulled from Surplus Equipment, sold "as is"
----------------------------------------
6AH6 $0.25 each
6AL5 $0.25 each
6AU6A $0.50 each
12AT7 $1.50 each
5651A $0.50 each
6080 $2.00 each
8068 $7.50 each
6X4 $0.50 each
6CL6 $0.50 each
8136 $0.50 each

Free Shipping in the USA on all of the above, on orders of
$10.00 or over. Orders under $10.00 add $4.00 for shipping.
Sale prices valid until 10-10-97 or while supply lasts.
```

# 3096. Re: Paralleled power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: William W Janssen <billj@calweb.com>
Message-ID: <342FBE88.6764@calweb.com>
Source record: 90473

Norman Hockler wrote:
>
> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> writes:
> >
> > Is it possible to connect two regulated power supplies in parallel to
> > increase the output current capability? Somebody asked me the question,

As others have said use diodes to be sure that no reverse current
can destroy one of the supplies.

Allso if the supplies have Max current limiters go ahead and parallel
them as the worst that can happen is one will go to max outpiut and
the other will pick up the remainder of the current.

Bill K7NOM

# 3097. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342FB5F5.69A2@crpl.cedar-rapids.lib.ia.us>
Source record: 90474

Matthew Francey wrote:
>
> >William E. Sabin wrote:
> >> There is a "dot" matched filter, a "dash" matched filter and
> >> matched filters for the spaces in-between (all of them integrate and
> >> dump). These can be combined and decoded by algorithms. The code speed
> >> can be "learned" by the processor.
>
> In reality, there is only a "dot" filter, and you have to make a more or
> less arbitrary choice as to whether there is a signal present or not.
> Which is why OOK (be it fixed-width or Morse) is far from optimal.

In the first place, I never said that Morse code is "optimal" in any sense. I would appreciate it if you would not ascribe things to me that I have never stated.

There are 5 intervals in Mores code:

1) The dot interval
2) The dash interval
3) The interval between dots and dashes
4) The interval between words
5) The interval between sentences.

In any on-off keying system, we make the following decisions:

1) Is the signal present?
2) Is the signal absent?

In any on-off type signal we assign a threshold level. Above the threshold the signal is presumed to be present. Below the threshold level the signal is presumed to be not present. Digital logic does exactly this all the time.

If the signal is absent the threshold detector can be followed by an inverter that converts a "low" state to a "high" state. This high state can be integrated or timed so that the duration of the "signal absent" interval can be determined.

In Morse code there are 3 "signal not present" intervals. As part of the Morse code translation by a computer we would like to be able to identify these three intervals. They contain valuable information about the Morse signal, especially when it is transmitted from a computer.

We can do this by assigning a matched filter for each of these three intervals (after the logic inversion that I mentioned). These three filters, combined with the dot and dash filters, can then be sorted out

by the computer and decoded, character by character (using a lookup table), word by word and sentence by sentence.

As I have said previously, a major problem is deciding the threshold level that we use to decide "signal present" and "signal not present". It depends on the signal to noise ratio. Computer algorithms are possible that calculate an optimum value for this threshold "on the fly".

Also, the receiver design must be optimized for weak-signal Morse reception. One thing that we can take advantage of is the difference in the spectrum of a single frequency tone in the "signal present" state and the noise that lies in the "signal not present" state. DSP, combined with adaptive filtering and correlation techniques can be used for this. For example, suppose we adjust the receiver for a 500 Hz tone. A special correlator algorithm is then an excellent filter for that 500 Hz tone.

These kinds of methods can greatly *improve* the machine-decoding of Morse code, and I am certain that some of this has been done, but I don't have any references available.

Finally, I want to make a few things clear so that I will not continue to be misquoted, misunderstood and subjected to diatribe:

1) Morse code is not, from a purely technical standpoint an optimal signalling method. On-off keying has a basic limitation regarding the signal to noise ratio and the determination of the threshold level. Also, the determination of the "dot" or "dash" and the three space intervals presents further problems.

2) Nevertheless, I believe that CW operation is a valuable asset for Amateur Radio operations. There is more involved than purely technical merit. These factors involve the following:

a) The long historical interest in CW. This is not the same as stick-in-the-mud refusal to accept change. That kind of diatribe belongs in the garbage can. There are a lot of hams who genuinely like CW, and I think that they have legitimate right also. These people pride themselves on the CW skills that they have acquired through long practice. I don't think that they (I include myself) want the opinions of some highly vocal opposition group shoved down their throats.

b) It is a fact that CW, under weak signal conditions, can get through where others fail. There are two reasons for this. The xmit and rcv bandwidths are narrow, which *reduces* adjacent channel interference. Also, Shannon's equation supports the idea of a very slow message that is sent in a very narrow bandwidth. The SETI folks know all about this idea.

c) There are a lot of low-budget, low-tech QRP types world-wide who want to get started in Amateur Radio with simple gear that they put together. CW is an ideal vehicle for this.

d) Regarding the testing of Morse for licensing: I think it should be retained in some minimal sense, say 5 wpm. Reason: it makes sense for Amateur Radio, for the reasons that I have mentioned. The reason the military has eliminated it is *partly* because of the time and cost of training operators that can copy 25 wpm on a typewriter with no errors. When the person finishes his/her "hitch" they have to do it all over again to a new group. The other reasons are technological and I have no arguments about any of that. It is certainly simpler for an operator to bang the keyboard, then push a button that puts a completely error-free message through.

e) Aside from all of that, I certainly believe that Amateurs should become involved in the more advanced technologies. I am certain that there are many operators who operate data modes and SSB and also enjoy operating CW. Why CW? Because they want to! Isn't that reaon enough? And they don't need to be belittled or bullied for it.

Bill W0IYH

# 3098. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <342fb7d7.92804445@news.atl.bellsouth.net>
Source record: 90475
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.amateur.boatanchors

On 28 Sep 1997 23:18:00 -0700, Chris Terwilliger <aa7wd@primenet.com> wrote:
>Gary Coffman wrote:
>
>> A modern radio often has millions of active devices in it. That allows you
>> to produce functions which were simply impractical in the tube days. Yet
>> the radio can be much smaller, and consume much less power. If we tried
>> to do that with tubes, the reliability would be so poor that it would never
>> work, and it would take a dedicated generating station to power it.
>
>Ever seen a WRR-2 (FRR-59)?
>Made by National circa 1965
>64 tubes, synthesized HFO
>2-32 Mhz AM/DSB
>200+ lbs
>24 inches worth of 19 in rack
>
>The ultimate boatanchor receiver...

I believe I may have *seen* one, but I've never attempted
to *lift* one. The only National I've owned was the NC-190
drift-O-matic. That thing was a horror. I replaced it with a
Drake 1A, and later with a Drake 2B. Now that was a neat
*little* receiver (though Drake wouldn't have recognized it
after I got done modifying it).

I heard that MTBF was very poor on the monster you're
talking about, something on the order of 150 hours as I recall.
I think it drew nearly half a kW too, maybe more, that was a
long time ago. That's quite a contrast to a modern HF receiver
(or even transceiver). Receive draw is on the order of 12 to 25
watts, and MTBF is on the order of 20,000 hours (after infant
mortality). Some are even more thrifty.

I suppose those old monsters have a certain charm, like an
old steam locomotive, but I'm just as glad we have things
that work better now. I will admit to still owning a B&W 6100
though. That was the first amateur synthesized (crystalplexed)
SSB transmitter, and the first store-bought radio I ever had..

I used it on RTTY up until about 15 years ago when I got talked
out of the 2B by a neophyte wanting a receiver for code practice
and broke up the station. (I had upgraded to a used pair of Drake
Twins for my voice rig, but they couldn't handle the guff of the long
keydown times of RTTY, sissy sweep tube finals.) I tried to give away

the Mod 15, but no one would take it, so it wound up as landfill.

The B&W needs new filter capacitors now, and I might get around
to putting some in someday. It is rather impressive, in an early 60s sort
of way, but I doubt I'll ever put it back on the air. My now almost ancient
IC-735 does yeoman duty for my HF digital operations today. That thing
is a rock, it just won't quit.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3099. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <60oe0t$10u$1@news.interlog.com>
Source record: 90476
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

In sci.electronics.design Quentin J. Lewis <bigqueue@tiac.net> wrote:
: I am sorry if this is a stupid/simple question, but it I guess I just
: skipped a part of my life.

: I was wondering if there are "industry workhorse" P-Channel and
: P-Channel FETs, like there are NPN and PNP transistors.

2N7000 is cheap (US0.10 in quantity) and ubiquitous. Specs are not
so impressive.

XXXX3055 seems to be popular for power N-channel, kind of a marketing ploy
giving it a number like that but it seems a fine device. Eg. Motorola.

--
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
Spehro Pefhany "The Journey is the reward"
speff@interlog.com
Fax:(905) 332-4270 (small micro system devt hw/sw + mfg)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=

# 3100. KING OF MODULATORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "Anthony D. Schneider" <Daveschneider@worldnet.att.net>
Message-ID: <01bcccf5$68e938e0$5ebf440c@worldnet.worldnet.att.net>
Source record: 90477
Body handling: Inline uuencoded payload not displayed: King of modulators.nws

```
DATA IN FILE ATTACHMENT

[Inline uuencoded payload not displayed: King of modulators.nws]
```

# 3101. Re: mc68ch11 based morse code/pc interfacing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Don Ward <don@kay-dee.demon.co.uk>
Message-ID: <qbCYZGAfo7L0EwEX@kay-dee.demon.co.uk>
Source record: 90478
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

I have a Morse Code tutor that sends the code to the internal PC speaker from the keyboard. It also decodes morse from a straight key or Paddle key conected to a com port. It is written in Power Basic and you are welcome to the code if you want it. The program itself DMORSE.EXE is available from my web page at kay-dee.demon.co.uk if you want to see how it performs. Let me know if you would like the code.
--
Don Ward G0MDO/AA1FU

# 3102. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: vrticlvice@aol.com
Message-ID: <19970929154001.LAA25062@ladder01.news.aol.com>
Source record: 90479

"William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us wrote:

>Cecil Moore wrote:
>> Hi Mike, why not deal directly with Amidon?
>>

>I have had nothing but success dealing with Amidon. They are an
>excellent company.

Would someone please post a snail mail or e-mail address for Amidon. I have been looking but I haven't found an advertisement for them.

Thanks,

John Henley

# 3103. Re: IF Notch Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "Anthony D. Schneider" <Daveschneider@worldnet.att.net>
Message-ID: <01bcccf5$bd1d5040$5ebf440c@worldnet.worldnet.att.net>
Source record: 90480
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

yes look at the hq 180 receiver or if not contact me
DaveSchneider@worldnet.att.net

Stewart Baker <baker@nildram.co.uk> wrote in article
<27223560897517ntc@nildram.co.uk>...
> I have a much modified TS180s and wish to fit a notch filter at the IF.
> The audio one I have works well, but strong signals capture the AGC.
>
> I have not found any designs in all the books and mags I have.
>
> The TS180s IF is 8MHz and I will convert this down to 455 or 100kHz. and
> do the notch there.
>
> Anyone with ideas/circuits or how it is done on a commercial rig.
>
> Many thanks
>
> Stewart G3RXQ
> --
>
> baker@nildram.co.uk
>
>

# 3104. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <342FD8DF.128C@crpl.cedar-rapids.lib.ia.us>
Source record: 90481

VrticlVice wrote:
>
> "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us wrote:
>
> >Cecil Moore wrote:
> >> Hi Mike, why not deal directly with Amidon?
> >>
>
> >I have had nothing but success dealing with Amidon. They are an
> >excellent company.
>
> Would someone please post a snail mail or e-mail address for Amidon. I
> have been looking but I haven't found an advertisement for them.
>
> Thanks,
>
> John Henley

Bytemark (Amidon distributor) http://www.bytemark.com/amidon/index.htm

or

Amidon in Los Angeles 714-850-4660 Ask for the complete manual. Use
Master Card etc.

Bill W0IYH

# 3105. Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: kmccoy@stetson.edu
Message-ID: <60mur3$l68$1@beret.stetson.edu>
Source record: 90482
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Pardon the cross-posting. I am having some trouble while transmitting on my vintage Swan 400 (all tube). It seems to arc once the tubes in transmit circuit heat up; the lack of visual evidence around sockets and solid state components leads me to believe it is in a tube somewhere. I have tested and replaced all tubes except the finals, since the setting instructions are confusing to me, calling for an external ampmeter to further adjust the bias to 55 ma (even though the adjustment knob only goes to 50 ma)...

Anyway, the real reason for my post is that the tubes currently in the final amplifier stage are 6146. The schematics and manual call for 6HF5. The compatibility of these separate types is unknown to me; the settings on my Heathkit TT1 tube tester differ greatly.

Does anyone know whether these tube types are compatible, or should I consider trying to acquire the original tube type called for in the manual? I don't *think* there has been any modification to the circuitry.

Please reply here or email me directly at kmccoy@stetson.edu

Thanks much,

Ken KF4BQF

# 3106. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <342fd2be.99692107@news.atl.bellsouth.net>
Source record: 90483

On 29 Sep 1997 00:50:50 GMT, mikea@efn.org (Mike L Abrams) wrote:
>I need a good Antenna that will work in a moblehome with metal siding
> it need to be low so it is hide so the other home owner can not see
>it. I heard that a J-pole would not work up next to metal siding???
>I want to use this with the 2meter I have had my call sign for about
>two week's & wanting to get on the air when my raido get here

No antenna works properly when masked by metal. But any vertical mounted on your roof can take advantage of the metal and use it as a groundplane. So you want the antenna on the roof in full view of the world. This conflicts with your desire to have a hidden antenna, but there's a way out of this. That's to make the antenna *look like something else*.

Ok, how do we do that? Well first lets ask ourselves, what do we normally see on a roof? One of the things we are likely to see is a *vent pipe*. These are normally PVC pipe today. So there is your solution. Put an ordinary 2m antenna inside a piece of PVC and put it on the roof. It looks like a vent pipe, and your neighbors will think that it *is* a vent pipe and not an antenna.

So how do you mount it, and what do you do with the coax? The best way to mount it is to slip it over a *real* vent pipe. And run the coax down *inside* the vent pipe. There's a company which can supply this sort of antenna to you ready made, the antenna is called a Ventenna. Or you can use a bit of ingenuity and make your own.

Now a 54 inch pipe to hold a J-pole is probably a bit much, but a 19 inch pipe to hold an ordinary quarterwave worked against the metal roof as a groundplane, is just about right. It won't look out of place at all. If for some reason you can't slip this over a real vent, you can use a magmount quarterwave contained in the PVC pipe and just stick it on the roof. You'll have to do a bit of camouflaging of the coax, but RG-58 can be hidden with a bead of caulk.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 3107. WE-SAt receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: matjoao@ci.ua.pt
Message-ID: <60op9d$ee6$3@news.ua.pt>
Source record: 90484

Hi...

Anyone have schematics for WE-sat 137MHz APT homebrew receiver?

Tks.

--

Oo.
----- -----
\ / Joao Martins at Universidade de Aveiro
\ / Searching for the TRUTH
The X Files
/ \ Internet: matjoao@ua.pt
/ \ URL: http://sweet.ua.pt/~matjoao
----- ----- Phone: +351936548593

## 3108. Norcal 40-9er

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: dwayne rich <drichff@worldnet.att.net>
Message-ID: <342FF934.53E4@worldnet.att.net>
Source record: 90485

I know this kit is no longer produced but I was wondering if anyone had
a copy of the schematics and parts list available? I have the kit (i
had forgot that I had it) and would like to assemble it but need the
schematic,parts list and tuning instructions. I would be willing
to pay any copying costs.

Dwayne
KC4ADW

# 3109. Re: WE-SAt receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3430269D.FA1@antispam.trader.com>
Source record: 90486

> Anyone have schematics for WE-sat 137MHz APT homebrew receiver?

Anyone have a glossary with APT in it? I see it here all the time, but can't find a definition anywhere.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

## 3110. FS: test equipment, meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <60mrod$1n6c$1@newssvr03-int.news.prodigy.com>
Source record: 90487

FOR SALE: ELECTRONIC EQUIP
REVISED 9/28/97
Shipping NOT included in price.
**********
-HP- 5245A 500MHz (solid state) counter w/time/period
and frequency plugins; universal counter/timer, $150

25#
-HP- 302A wave analyzer, 10 Hz - 50 KHz, 10 Hz bandwidth,
phase-lockable; voltmeter ranges 100 uV to 300 V.
All solid state, w/manual repro: $150
40#
-HP- 302A manual repro only: (Postpaid in USA) $20

Sybex Model 601 digital oscilloscope memory unit; digi-
tizes and stores signal, converts it back to analog
signal on command. Time scaling greater than 100,000:1
possible. Converts analog oscilloscope to digital
storage opscilloscope. With manual; like new. $100
6#
Global Specialties MAX-250 frequency counter. Reliable
to over 500 MHz; can be operated 9VDC. Like new, with
manual..... $50

Measurements Corp. 65B AM signal generator w/ modulation,
01 uV to 2.0V, 75 KHz to 30 MHz $65
40#
John Fluke 801BR differential voltmeter, 5-digit,
working: $35
25#
John Fluke 801BR differential voltmeter, 5-digit,
as is: (not tested) $10
25#

Both of them: $40
45#
**********
Panel meters

*NEW* GE "Horizon Line" 3" X 4" rectangular, 80 VDC FS,
1000 ohms/volt ( 1 mADC FS) in original unopened boxes;
36 in lot: $100 all, shipping included. Easily rescaled.
**********
MUSEUM PIECES - working

Weston Model 45 standard voltmeter, 1/2% 150-300-750 VDC,
wooden case: $20
15#
Weston Model 341 "High Frequency Voltmeter", 1/4%
accuracy to 1 KHz; 30, 75 V F/S, wooden case: $20
15#

**********

# 3111. FS: Fluxgate magnetometers (correction)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <60mrn9$jdg$1@newssvr03-int.news.prodigy.com>
Source record: 90488

Sorry! A slip of the mouse.MAGNETIC SURVEY INSTRUMENTATION

Prices include shipping in Lower 48.

MEDA uMAG-02WB Handheld, battery-operated digital
fluxgate magnetometer. Sensitivity: +/- 0 - 20.00 - 200.0 -
2000 milliGauss F/S, DC-400 Hz (-3dB @ 400 Hz ref to DC).
Analog output +/- 2.000 V F/S. Linearity .02% or better.
Absolute accuracy +/- 0.5% or better, traceable to NIST.
With 10 meter cable and transverse probe, 6 spare batteries
in storage case, multiple-battery harness for up to 8
batteries (approximately 12 days continuous operation),
analog output cable w/BNC (to oscilloscope input), manual,
calibration certificate, transit case. In new condition.
Current price from manufacturer is $900. Sell at $450.
Three available: all three, $1300 including 3-channel
chart recorder (see below).

LEEDS & NORTHRUP SERVO RECORDER 136-304-304-304-00-00-00-
L0088-L0088-L0088-6-BV-000. Three-channel servo recorder,
modified for potential inputs. Can be internally adjusted
from +/- 1 millivolt F/S to +/- 2V F/S. Set at +/- 1V F/S.
Chart speed @ 60 Hz 2cm/hr or 2 cm/minute (at 50 Hz = 1.67
cm/min or 1.67 cm/hr). Internal line voltage selection for
100/120 V, 220 V or 240 V. Power burden: 27 VA. Power input;
3-wire IEC connector. (Uses standard IEC cords). With 2 sets
spare pens, 2 boxes charts, NEMA line cord, a few spare parts,
carrying case; Used, good condition; $100.

# 3112. help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "Randie Ohtsji [4555]" <rohtsji@glenayre.com>
Message-ID: <34301317.41C67EA6@glenayre.com>
Source record: 90489
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello,

Does anybody out there know a good unidirection antenna design for
transmission purposes (as opposed to receive). I basically
need to transmit in front of me, none to the rear and very litte
to the sides. Is there also some way to vary the angle of how
much is transmitted to the sides? I need to transmit a 433MHz
signal into a 50 ohm unidirectional antenna.

Any help/suggestions/comments would be appreciated.

Thanks in advance!

-Randie Ohtsji
rohtsji@glenayre.com

# 3113. TUBE SOCKET FOR 8890

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: GBENKO@prodigy.net
Message-ID: <01bccc6b$0802cee0$1b22edcc@default>
Source record: 90490

Hi,

Anyone have a tube socket for the RCA 8890 tube. It is RCA number J15283
or Jettron Products Inc. CD89 085.

Please respond via email...

73,

George, K8BRW

# 3114. Re: balun(need info)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: klocko@toad.net
Message-ID: <875573572.25148@dejanews.com>
Source record: 90491

In article <342DD721.38BA@delphi.com>,
"Cecil A. Moore" <cecilmoore@delphi.com> wrote:
>
> klocko@toad.net wrote:
> > Cecil, In initial tests of my 4:1 toroid balun, I did use a 200 ohm
> > resistive load. Unfortunately, I think this type balun is more tricky
> > than it looks, with the wire size, wire spacing, etc., all having an
> > effect on the final outcome. Maybe someday I'll sort everyting out and
> > try to fix it up. Thanks for the comments. 73, Bill N3WK
>
> Hi Bill, using a 200 ohm resistive load doesn't accomplish anything
> because the chances of the balun seeing 200 ohms looking up a 450
> ohm ladder-line into a non-resonant antenna are infinitesimal. Even if
> it worked perfectly with a 200 ohm load, it still would not work well
> in a high SWR situation. The only time the balun would actually see
> 200 ohms is if the SWR on the 450 ohm ladder-line was 2.25/1 AND one
> fed the system at a current maximum point on the ladder-line.
>

Cecil, Let me just say that I was experimenting with building and using a canned toroid design. If I had been successful with the 4:1 design, I would have tried a more-complicated 9:1 design. With either one, I still would have used an antenna tuner back at the shack to take care of any impedance mismatch. However, I gave up on the toroid balun because I did not consider such messy variables as wire diameter, wire spacing, insulation type, etc., that need to be included in the design process. The bottom line: toroid baluns are not worth the trouble. 73, Bill N3WK

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 3115. Adjusting for Signal to Noise Ratio ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Anthony Levand <alevand@FoxValley.net>
Message-ID: <01bccd2a$d62b1740$50bae3cf@default>
Source record: 90492

I have a Yeasu 2 meter radio with a dual gate MOSFET rf amplifier. I can adjust the first tuned tranfomer for maximum gain, how would I find the optimum setting for best signal to noise ratio? I can see the signal and the noise riding on top in the osciloscope. Can I replace the mosfet with a gasfet for better sensitivity?

Tony, AA9CC

# 3116. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: dmcnutt@macnauchtan.com
Message-ID: <dmcnutt.1225932183G@news-2.sni.net>
Source record: 90493
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In Article <34301317.41C67EA6@glenayre.com>, "Randie Ohtsji [4555]"
<rohtsji@glenayre.com> wrote:
>Hello,
>
>Does anybody out there know a good unidirection antenna design for
>transmission purposes (as opposed to receive). I basically
>need to transmit in front of me, none to the rear and very litte
>to the sides. Is there also some way to vary the angle of how
>much is transmitted to the sides? I need to transmit a 433MHz
>signal into a 50 ohm unidirectional antenna.

The modern way is to build an array of dipoles each including a digital
phase shifter. You then calculate and adjust each phase to get the beam you
want. And, by the way, you can place a very sharp null in the direction of
an interfering source that way.

The other way is to get a copy of the ARRL Antenna Book and pick a model
that suits your needs. You'll have to scale it from one of the ham bands.
That's the Amateur Radio Relay League.

You are probably going to wind up with a Yagi which is a buzzword you can
search on.

-> From the USA. The only socialist country that refuses to admit it. <-

# 3117. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: conover@tiac.net
Message-ID: <60pbs9$fbe@news-central.tiac.net>
Source record: 90494
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Randie Ohtsji [4555] (rohtsji@glenayre.com) wrote:
: Hello,
:
: Does anybody out there know a good unidirection antenna design for
: transmission purposes (as opposed to receive). I basically
: need to transmit in front of me, none to the rear and very litte
: to the sides. Is there also some way to vary the angle of how
: much is transmitted to the sides? I need to transmit a 433MHz
: signal into a 50 ohm unidirectional antenna.

Typically, this is handled by the use a a Yagi array. Check any
antenna book for details.

Harry C.

# 3118. Re: Attn: K7ON, Brian Short

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <342FCA53.6BEF@primenet.com>
Source record: 90495
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Unfortunately, there was an unplanned change of
IP numbers for the systems and the DNS entries
take time to propagate. You can get in to some
degree using the IP number as shown below.

Everything will be back to normal (except new IP
address) as soon as things get updated around the
world...

QSL/QTH.Net are up and healthy, just not as easy
to access as desired.

-Brian

>It is taking some time for the new DNS entry
>to propagate, but you *CAN* access QSL.Net as:
>209.60.242.81
>
>And QTH.Net as: 209.60.242.87
>
>Just enter:
>http://209.60.242.81/
>
>It may be a few days before the IP number gets
>associated with the QSL/QTH domains.
>
>-Brian shortckt@primenet.com

> Hi Brian - your Web Site is down!
>
> The DNS entry is coming up as "INVALID."
>
> I have tried BOTH
> www.qsl.net AND www.qth.net
>
> As far as the Internet is concerned, they no longer exist!
>
> "No DNS ENTRY FOUND"
>
> I was about to set up MORE links to these sites and unfortunately
> they seem to have disappeared over the past few days!
>
> Can you or anyone tell me what the heck has happened??
>
> Best regards - Bry, AF4K

## 3119. looking for schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Dana Yeomans <dana@randomc.Com>
Message-ID: <Pine.GSO.3.96.970929223101.25489Q-100000@randomc.com>
Source record: 90496
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

need owners manual and schematic for mcKay dymek
model :c: dr33if anyone has one out there somewhere e-mail back. take
care

random access internet shell account
standard disclaimers apply.

## 3120. QSL/QTH Status

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "Short, B.K." <shortckt@primenet.com>
Message-ID: <342FCA94.48A@primenet.com>
Source record: 90497
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Unfortunately, there was an unplanned change of
IP numbers for the systems and the DNS entries
take time to propagate. You can get in to some
degree using the IP number as shown below.

Everything will be back to normal (except new IP
address) as soon as things get updated around the
world...

QSL/QTH.Net are up and healthy, just not as easy
to access as desired.

-Brian

>It is taking some time for the new DNS entry
>to propagate, but you *CAN* access QSL.Net as:
>209.60.242.81
>
>And QTH.Net as: 209.60.242.87
>
>Just enter:
>http://209.60.242.81/
>
>It may be a few days before the IP number gets
>associated with the QSL/QTH domains.
>
>-Brian shortckt@primenet.com

> Hi Brian - your Web Site is down!
>
> The DNS entry is coming up as "INVALID."
>
> I have tried BOTH
> www.qsl.net AND www.qth.net
>
> As far as the Internet is concerned, they no longer exist!
>
> "No DNS ENTRY FOUND"
>
> I was about to set up MORE links to these sites and unfortunately
> they seem to have disappeared over the past few days!
>
> Can you or anyone tell me what the heck has happened??
>
> Best regards - Bry, AF4K

Phil Johnston wrote:
>
> Bry wrote:
> >
> > To Brian Short:
> >
> > Hi Brian - your Web Site is down!
> >
> > The DNS entry is coming up as "INVALID."
> > Can you or anyone tell me what the heck has happened??
>
> A message was distributed a few days ago indicating the QSL.NET system
> would be down for a period of time. No details were given in the
> message I saw.
>
> Phil
> W0ABC

# 3121. WTB: Teletype ASR-33

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: "Richmond L. Armstrong" <richa@insync.net>
Message-ID: <60p6n9$n8l$1@synthemesc.insync.net>
Source record: 90498
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.rtty,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap

Looking for fully functional model with stand. Would prefer one with a 20ma current loop or RS-232, but I'll consider another interface. Unless you're real close to Spring, TX, I would probably need you to ship it as well. I know that's real pain for something this big, but I'm willing to pay shipping costs as well. It might be easiest to ship it in two pieces if that's possible. :)

Thanks,
Rich Armstrong
--
richa@insync.net

# 3122. Re: WE-SAt receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Tom Kirksey <tkirksey@bellsouth.net>
Message-ID: <34306DA2.535D@bellsouth.net>
Source record: 90499

You may not know but Ramsey sells a 130 - 180mhz FM receiver kit. It should tune in the WeSat frequencies. The I-F may have to be widened. I may try that. They only cost about $35. By the way APT stands for "Automatic Picture Transmission" (I looked it up).

Tom
KD4FTQ

# 3123. Re: Source for Ferrite Beads & Torroid Cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <60p618$rdp$1@rosenews.rose.hp.com>
Source record: 90500

: Bytemark (Amidon distributor) http://www.bytemark.com/amidon/index.htm

I tried calling them several times one day looking for torroidal
forms for a project.

I ended up contacting Palomar Engineers down San Diego way
and got my stuff from them.

I guess when you snooze, you loose.

# 3124. Re: Paralleled power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: Norman Hockler <norsan@bright.net>
Message-ID: <60mscj$qsp@cletus.bright.net>
Source record: 90561

"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> writes:
>
> Is it possible to connect two regulated power supplies in parallel to
> increase the output current capability? Somebody asked me the question,
> but they don't want to sacrifice two good power supplies to find out
> :-)
>
> Both units have an external "+sense" input which is normally linked to
> the + output, so I'd thought about adding a series diode to each unit,
> joining them together to make a combined output, and then connecting the
> sense inputs of both supplies to a permanent load resistor across the
> combined output. With careful adjustment of the voltages this should
> ensure reasonable current sharing.
>
> Does anybody know from experience if this will work?
>
> (Both units are switch-mode, if that matters.)
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.demon.co.uk/g3sek

Ian. Connect the sense lead from one unit only. That unit will adjust its
output to the value of the other supplys output and both units
will be happy

de Norm N8RGR

# 3125. FS: meters, CT's, timers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <60mrk2$19s4$1@newssvr03-int.news.prodigy.com>
Source record: 90562

FOR SALE: ELECTRICAL
Prices reduced 9/27/97
5 GROUPS FOLLOW:

**********

FOR SALE: 270 degree panelboard meters
NEW: EACH

(1) Yokogawa 5AAC $75

USED:

(1) GE 15VDC $20
(1) GE 2AAC F/S: scale
unnumbered but divided $20
(1) GE 150 VAC $20
(1) GE 5AAC, 0-25 scale $20
(2) GE 10AAC, 0-25 scale $20
(1) SqD 600VAC; needs
outer bezel $15
(1) W'hse 5AAC, 0-200 scale $20

All 9 to the same address: $200

Shipping included in USA
**********

Used current transformers

Electromagnetic Industries Inc

(3) 50:5 P/N 2N-500 $7.50 ea
(1) 60:5 P/N 2N-600 $7.50

All 4 to the same address: $25.00

Shipping included in USA

**********

INDUSTRIAL CONTROL TIMERS

NEW in original box:

(5) ATC "Shawnee II" universal timer,
.01-99.99 sec, .1-999.9 sec,
.01-99.99 min or .1-999.9 min;
120V/60Hz: $50.00 ea

5/$225.00*

NEW, shelf-worn:

Eagle "Cycl-Flex" (120V/60Hz)

(3) HP515A6 0-10 sec w/shell $40.00 ea
(8) HP50A6 0-30 sec w/shell $40.00 ea
(1) HP50A6 0-30 sec no shell $30.00
(1) HP701A6 0-60 sec w/shell $40.00
(2) HP55A607 0-30 min w/shell $40.00 ea
(1) HP55A607 0-30 min no shell $30.00
all 16/$500.00*

Agastat electropneumatic timing relay: (120V/60Hz)

(1) 70-2AC 1.5-15 sec DPDT on delay $50.00

Agastat solid-state timing relays, 120 V AC/DC

(1) SSC226NA 1-30 sec DPDT off delay $25.00

Agastat DPDT solid-state timing relays, 24V AC/DC

(1) STARX022XSEBXA .5-15 sec off delay $25.00
(1) STARX022XSEFXN 6-180 sec off delay $25.00
(1) STARX022XSEMXA .5-15 min off delay $25.00
(1) STARX022XSERXA 2-48 hr off delay $25.00
(1) STARX012XSEAXA .1-3 sec on delay $25.00
(1) STARX012XSEIXA 2-60 min on delay $25.00
(2) STARX012XSERXA 2-48 hr on delay $25.00 ea

Agastat Timing Relay Socket, 10A, Screw terminals

(40) BT5A11SC 11-pole, flat blade type, $3.00 ea
similar to P/B 27E893 all/$100.00*

Eagle - G/W DPDT solid-state timing relays, 120V 50/60 Hz

(4) CG30A6 5-30 sec on delay $20.00 ea
(1) CG510A6 1.5-10 sec on delay $20.00

TEC Timing Relay, 120V 50/60 Hz, DPDT

(1) ER-2 130S 0-30 sec on delay $20.00

Shipping included in USA

ENTIRE LOT TO ONE ADDRESS: $1000.00*

**********
ENCLOSURES & PANELS

1 GE TM2010C load center w/ 100 A main,
NEW in original carton..... $35

3 Hoffman A-16P10 panel, NEW ..... $ 5

2 Hoffman A-16106CH NEMA-12 enclosure, NEW $15

Shipping extra

**********

TERMS: Payment with order. Checks will be held 10 business days. Money orders clear in 1 day. COD AVAILABLE (CASH ONLY!!) add $5.00. All items subject to prior sale. E-mail for information or to confirm interest.

# 3126. FS: Fluxgate magnetometers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <60mrl9$2c4m$1@newssvr03-int.news.prodigy.com>
Source record: 90563

FOR SALE:

3 factory-sealed packages #4625 Metalphoto, 25 sheets per pkg, 10" X 12" X.008", 1 side satin: $35/pkg, $100 all

3 packages (25 sht/package) double-sided adhesive, 10-1/4" X 12-1/2": $12.50/pkg, $35 all

1 - #7575 sealer (powder to make 5 gal) $7.50

1 gal. tray developer & 1 gal. tray fixer ..... $10.00

Metalphoto Manual ..... $20.00

Everything: ..... $150

# 3127. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Greg Anders <anders@autopsy.corp>
Message-ID: <34310D6E.2781@autopsy.corp>
Source record: 90414
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Steve Robertson wrote:
>
> Ken McCoy wrote:
> >
> > Pardon the cross-posting. I am having some trouble while transmitting
> > on my vintage Swan 400 (all tube). It seems to arc once the tubes in
> > transmit circuit heat up; the lack of visual evidence around sockets
> > and solid state components leads me to believe it is in a tube
> > somewhere. I have tested and replaced all tubes except the finals,
> > since the setting instructions are confusing to me, calling for an
> > external ampmeter to further adjust the bias to 55 ma (even though the
> > adjustment knob only goes to 50 ma)...
> >
> > Anyway, the real reason for my post is that the tubes currently in the
> > final amplifier stage are 6146. The schematics and manual call for
> > 6HF5. The compatibility of these separate types is unknown to me; the
> > settings on my Heathkit TT1 tube tester differ greatly.
> >
> > Does anyone know whether these tube types are compatible, or should I
> > consider trying to acquire the original tube type called for in the
> > manual? I don't *think* there has been any modification to the
> > circuitry.
> >
> > Please reply here or email me directly at kmccoy@stetson.edu
> >
> > Thanks much,
> >
> > Ken KF4BQF
>
> YIKES!! No wonder you are having problems! The 6146 is a "real"
> tranmitting tube, while the 6HF5 is a color television sweep tube. The
> 6146 was made to go all day and night without complaining at medium
> power (about 180 watts CW input for a pair). Sweep tubes, however, are
> great for *INTERMITTANT* service at high power. Doing a replacement
> without circuit changes is really asking for trouble. The power supply
> for the Swan probably delivers voltage too high for the 6146 and that is
> causing the problem.
>
> Get the tubes that are supposed to be in there. (I don't know offhand if
> the tube pinouts are the same, so be real sure that no mods were made to
> the set before replacing the tubes). BTW, they won't be cheap!
>
> 73 de Steve, KE4OH

> --
> To get my real e-mail address, remove the characters ".xxx" at the end
> of my address.

--
>>>>>>>>>>If nothing has been modified then 6146s would be a poor
substitution to say the least. FYI, the last time I checked
about a month ago 6HF5s at Antique Electronics were CHEAPER
then new 6146s, something like $10.00 ea... The 6LQ6s used
in later Swans are the expensive ones...

Greg Anders

"If at first you don't succeed......then skydiving is not for you"

anders@autopsy.sgi.com
KG6YV

# 3128. Re: Attn: K7ON, Brian Short

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: tait@primeline.net
Message-ID: <60pua1$ehc$2@nr1.toronto.istar.net>
Source record: 90415
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Different situation here, for the past few days,I haven't recieved messages
from mailing lists originating from qth.net.

In article <342e6dbc.13744267@news.mnsinc.com>,
bry@REMOVE.mnsinc.com (Bry) wrote:
#To Brian Short:
#
#Via: k7on@qsl.net, k7on@qth.net
#CC: webmaster@qsl.net, webmaster@qth.net
#
#Hi Brian - your Web Site is down!
#
#The DNS entry is coming up as "INVALID."
#
#I have tried BOTH
#www.qsl.net AND www.qth.net
#
#As far as the Internet is concerned, they no longer exist!
#
#"No DNS ENTRY FOUND"
#
#I was about to set up MORE links to these sites and unfortunately
#they seem to have disappeared over the past few days!
#
#Can you or anyone tell me what the heck has happened??
#
#Best regards - Bry, AF4K
#
#
#(remove the word REMOVE from my e-mail address to respond!)

Gary Tait,VE3VBF

# 3129. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34311a31.183532153@news.atl.bellsouth.net>
Source record: 90416
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 29 Sep 1997 13:44:07 -0700, "Randie Ohtsji [4555]"
<rohtsji@glenayre.com> wrote:
>Does anybody out there know a good unidirection antenna design for
>transmission purposes (as opposed to receive). I basically
>need to transmit in front of me, none to the rear and very litte
>to the sides. Is there also some way to vary the angle of how
>much is transmitted to the sides? I need to transmit a 433MHz
>signal into a 50 ohm unidirectional antenna.

The none to the rear part means you need a parabolic or spherical
dish, or a large planar reflector behind the driven element. If you
can tolerate a small amount of signal to the rear, you could also
consider a yagi or a phased array. To vary the transmission angle,
you'll want to physically point the antenna. (You can do a degree
of beam steering by offseting the feed of a dish, but that level of
complication shouldn't be required unless you need a *lot* of
forward gain, and thus have a dish too large to mechanically orient.)

One of the ARRL books had plans for an 18 foot stressed parabolic
dish which should meet your requirements. You might also consider
an axial mode helix in front of a large screen reflector. Plans for that
are also in ARRL publications.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 3130. Help needed with amp..

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Bob Gross <RPGross@worldnet.att.net>
Message-ID: <60r882$ngo@bgtnsc03.worldnet.att.net>
Source record: 90417

Hi, Thanks for reading this post.
I need a schematic or service manual for a solid state linear amp.
RF Power Labs inc.
Model A1000X

So far help from either the maunfacturer or Sams

Thanks again.
Bob KD4LGW

# 3131. Re: Source for Crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: wrcms@primenet.com
Message-ID: <3430fc9a.3362319@news.primenet.com>
Source record: 90418

On Tue, 30 Sep 1997 12:23:12 GMT, acatalan@pipeline.com (Anthony G. Catalano) wrote:

>jcarey@csn.net (Joe Carey) wrote:
>
>>Hello All,
>
>>I am looking for a 10.700 MHz crystal for testing
>>the IF stage of a homebrew receiver. Any ideas
>>where I could find one of these? I'd really like
>>parallel resonant and an accuracy of a few tens
>>of ppm, but I'll compromise on those. Obviously,
>>this being a homebrew project, cost is a concern.
>
>>Thanks for any input,
>
>>Joe

JDR Microdevices carries a 10.738635 MHz crystal for $1.09
The part number is the same as the crystal freq.

JDR Microdevices
1850 South 10th St.
San Jose, CA. 95112-9941
1-800-538-5000

>I have seen 10.695 crystals used in many 10.7 IFs because they are
>used in a transmit along with 10.240 to mix down 10.695 signal to
>455khz.
>- tony ww2w
>http://www.pipeline.com/~acatalan/
>
>
>

# 3132. Re: IF Notch Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <34313379.2678472@news.online.no>
Source record: 90419

On 30 Sep 1997 03:09:22 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>>> I have a much modified TS180s and wish to fit a notch filter at the IF.
>>> The audio one I have works well, but strong signals capture the AGC.
>>>
>>> I have not found any designs in all the books and mags I have.
>>>
>>> The TS180s IF is 8MHz and I will convert this down to 455 or 100kHz. and
>>> do the notch there.
>>>
>>> Anyone with ideas/circuits or how it is done on a commercial rig.
>>>
>
>You can also do it by adding a single crystal at the IF frequency in shunt
>with the IF to ground. Tune it with a varicap and you can "move" the series
>resonant frequency through the passband. The old FT-901/902 series did that
>with 40-50 dB of notch available. Awfully good for the simplicity. Works
>best of course, at a point of relatively high feed impedance.
>
>W4ZCB

I use FT-902
I am not much convinced about the truth of what you refer to!
FT-news (borrowed from DK3UZ) shows many attempts to improve the lousy
notch filter for FT-901 (and FT-902). With the original s-meter
circuit one might have another feeling about the notchfilter, I use
MC3356 logarithmic s-meter circuit

73

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3133. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <34302440.3627631@news.online.no>
Source record: 90420
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,alt.engineering.electrical

On 29 Sep 1997 14:29:49 GMT, Spehro Pefhany <speff@interlog.com>
wrote:

>In sci.electronics.design Quentin J. Lewis <bigqueue@tiac.net> wrote:
>: I am sorry if this is a stupid/simple question, but it I guess I just
>: skipped a part of my life.
>
>: I was wondering if there are "industry workhorse" P-Channel and
>: P-Channel FETs, like there are NPN and PNP transistors.
>
>2N7000 is cheap (US0.10 in quantity) and ubiquitous. Specs are not
>so impressive.
(2N7006) I got 1000 items from a friend, used about 100. They seem
reliable - not damaged as easy as VN10KM and VN2222, problem/advantage
- as one sees it is the dil package, easy for dead-bug mounting.
VN10KM will work ufb for 80m QRP, while 2N7006 does not operate on HF
or in quasi linear mode at all, nor does BUZ11.
>

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3134. HELP!!! Need H.P. Power Cord

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: rod7rg@aol.com
Message-ID: <19970930020700.WAA16026@ladder02.news.aol.com>
Source record: 90421

Hello all
i recently acquired a Hewlett Packard 5245L Freq Counter but it has no power cord with it. I would prefer not to have to "butcher" the rear of the cabinet to get power to the machine, so if anyone out there has a spare power cord or three prong connector or knows of how I might be able to buy one, please email me.

Thanks for reading.

Rod
KL7RG/8@aol.com

# 3135. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3431324e.2379131@news.online.no>
Source record: 90422
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

On Thu, 25 Sep 1997 13:33:24 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>Gary Coffman wrote:
>>
>>
>> I wouldn't exactly call the old rigs the ultimate in quality, though some
>> of the gear intended for the military did use top quality parts. Most of
>> the stuff intended for the amateur market, however, suffered from
>> serious corner cutting.
>
>One problem with vacuum tube HF ham receivers was the noise figure
>mania. Hams thought that if an HF receiver didn't have a 5 dB noise
>figure it was not very good and would not buy it. As a result, strong
>signal performance suffered because of vac tube limitations. Special
>tubes like the 7360 beam deflection tube (Squires-Sanders SS-1) showed
>up just as the transistor age began to take over, but by then it was too
>late.
>
>Bill W0IYH

You don't need 5dB NF on HF, but somewhere in the region of 8-10dB on
10m, on the other bands it is less critical.
Drake 2-B works satisfactorily while not every R-4C are good. Some
have a noisy third mixer.....
3dB noise figure is possible on 2m with low cost valves like E88CC,
E189CC. We believed transistors were so good, but often they worked
not as good as they could have done in our 2m gear.

I would be interesting if somebody cared to note all particularities
in design of old radio sets, some engineers may still exist. Many
clubs seems to care for keeping old radio's but just too often they
are more interested in polishing wood boxes than trying to understand
the technique behind it.

We learned that a popular valve portable receiver had some positive
feedback in the IF, an IF xfmr had an extra winding for this, but this
could not be seen on the circuit diagram. (Radionette Kurer).
I am sure engineers will be glad to tell us some gimmicks they had to
use to make the sets ready for production. Racal RA17 is another
receiver which would never have reached the production line without
certain gimmicks made by a hacksaw on chassis!

73
Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3136. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Don Wall <d.wall@nunet.neu.edu>
Message-ID: <34315BC2.4D78@nunet.neu.edu>
Source record: 90423
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.amateur.boatanchors

Chris Terwilliger wrote:

WRR-2 (FRR-59)?
> Made by National circa 1965
> 64 tubes, synthesized HFO
> 2-32 Mhz AM/DSB
> 200+ lbs
> 24 inches worth of 19 in rack
>

And just four years later, in 1969, we at National were building the MD-777/FRT, 2-30 Mhz synthesized, fully solid-state, motorized final tuning, Ledex switches on the front panel to allow for remote control of frequency selection, designed to work with transmitters up to (I think) 200KW, maybe 12 inches of 19" rack, don't remember the weight.

Don Wall

# 3137. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <343064ea.7341605@news.mnsinc.com>
Source record: 90424
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

On Fri, 26 Sep 1997 08:45:12 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>Gary Coffman wrote:
>>
>> I've seen the 7360 used in SSB balanced modulators, but hadn't considered
>> the possibility of using it in a receiver front end. I can see how it would be
>> a good first mixer.
>
>>
>> But the real problem with the old designs is the limited number of active
>> devices which could practically be used.
>
>I don't agree with that at all. Some excellent receivers were designed
>using a limited number of tubes. You don't make a receiver better by
>throwing more tubes into it. You make a better receiver by choosing the
>tube types carefully and then using them in an optimal manner in a
>carefully designed block diagram. This was a highly developed
>technology.
>
>With vacuum tubes, more is not better. With RF integrated circuits the
>exact same thing is true.
>
>Bill W0IYH

Right - I was always amused with how the hams in Cuba and Russia (and
a few other countries) used to put on their QSL card:

Transmitter - 40 watts (or 200 watts)

Receiver - 19 tubes

Like.... the QUANTITY of tubes they used somehow made it better???

(remove the word REMOVE from my e-mail address to respond!)

# 3138. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Gray Frierson Haertig <gfh@haertig.com>
Message-ID: <343166FF.4590@haertig.com>
Source record: 90425
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Gary Coffman wrote:
>
> On Mon, 29 Sep 1997 13:44:07 -0700, "Randie Ohtsji [4555]"
> <rohtsji@glenayre.com> wrote:
> >Does anybody out there know a good unidirection antenna design for
> >transmission purposes (as opposed to receive). I basically
> >need to transmit in front of me, none to the rear and very litte
> >to the sides. Is there also some way to vary the angle of how
> >much is transmitted to the sides? I need to transmit a 433MHz
> >signal into a 50 ohm unidirectional antenna.
>
> The none to the rear part means you need a parabolic or spherical
> dish, or a large planar reflector behind the driven element. If you
> can tolerate a small amount of signal to the rear, you could also
> consider a yagi or a phased array. To vary the transmission angle,
> you'll want to physically point the antenna. (You can do a degree
> of beam steering by offseting the feed of a dish, but that level of
> complication shouldn't be required unless you need a *lot* of
> forward gain, and thus have a dish too large to mechanically orient.)
>
> One of the ARRL books had plans for an 18 foot stressed parabolic
> dish which should meet your requirements. You might also consider
> an axial mode helix in front of a large screen reflector. Plans for that
> are also in ARRL publications.
>
> Gary
> Gary Coffman KE4ZV | You Make It | Email:
> Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
> 534 Shannon Way | Guaranteed | or
> Lawrenceville, GA 30244 | | ke4zv@radio.org

Log periodics are also pretty good about rearward radiation with the
advantage that they only take up a lot of room in one plane.

Gray

--
Telecommunications Engineering
Gray Frierson Haertig & Assoc.
820 North River Street, Suite 100
Portland, Oregon 97227
503-282-2989
503-282-3181 FAX

gfh@haertig.com
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# 3139. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <343064ae.7280912@news.mnsinc.com>
Source record: 90426
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

On 25 Sep 1997 15:24:00 -0700, europa@primenet.com wrote:

>
>:You can still call up the manufacturer and talk to the designer(s). But
>:it may be an international call, and it helps if you speak Japanese.
>:(Don't bother calling the US reps with technical questions, they're just
>:sales droids.). I've had occasion to consult the Japanese manufacturers
>:about various equipments, both professional and amateur equipment.
>:I've found them to be uniformly friendly and helpful if you can overcome
>:the language barrier. I have an in there. One of our staff speaks fluent
>:Japanese, and can act as translator. I've even had them return my
>:calls, on their nickel. Like design engineers anywhere, they just love
>:to talk shop.
>:
>:Gary
>
>
>Gary, your experience has been much different than mine.

His often is!

>(repeated from another NG)
>
>I was seriously thinking of buying an ICOM 775. I asked the sales person
>if I could look at the schematic. I've never seen a schematic that looked
>like that. It was obvious that they were trying to keep the consumer from
>figuring out how the rig worked. Obviously, the designers were embarrassed
>with the design. Any designer worth his salt will go to great lengths to
>make it readable, so that the design inovations were more apparent. Not in
>this rig. Garbage, pure and simple.
>
>Now, even though the US manufacturers cut corners, etc in those old rigs,
>the new Japanese rigs still pale in comparison. After all, there is no
>rec.radio.amateur.japanese newsgroup, now is there??
>
>Rob

WELL PUT, Rob!

(remove the word REMOVE from my e-mail address to respond!)

# 3140. Re: In bad need of printed circuit board for 1or2 trans 6mtr linear amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <3430658a.7501491@news.mnsinc.com>
Source record: 90427

On Wed, 24 Sep 1997 17:38:43 GMT, bogus@fake.com (Donnie kf4jzh)
wrote:

>Gentlemen,
> In bad need of printed curcuit board for a 1 or 2 transistor 6 mtr
>linear amplifier, will accept all plans or boards in the 100w to 300w
>range. wanting to homebrew a transistor box but I need a board,
>or a board layout i can trace on copper clad. please help this lowly,
>extra class cber. A>K>A> no-code tech. 73
> emailat:
>kf4jzh@mindspring.com
>Donnie Smith

There is a company in OHIO that sells such boards and plans.
I forget the name, but you can find them listed at either:

http://www.mnsinc.com/bry/mega/partsupp.htm
http://www.mnsinc.com/bry/mega/megakits.htm

OR

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

Enjoy!

(remove the word REMOVE from my e-mail address to respond!)

# 3141. Re: WE-SAt receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEHBwuL.Joq@netcom.com>
Source record: 90428

In article <3430269D.FA1@antispam.trader.com>,
Dennis Erwin Thurlow <geosynq@antispam.trader.com> wrote:
>> Anyone have schematics for WE-sat 137MHz APT homebrew receiver?
>
>Anyone have a glossary with APT in it? I see it here all the time, but can't
>find a definition anywhere.

The "Weather Satellite Handbook", by Dr. Ralph Taggart, published by
the ARRL, defines APT as "Automatic Picture Transmission".

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 3142. Re: WE-SAt receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: matjoao@ci.ua.pt
Message-ID: <60rbdt$mv6$1@news.ua.pt>
Source record: 90429

Dennis Erwin Thurlow (geosynq@antispam.trader.com) wrote:
: > Anyone have schematics for WE-sat 137MHz APT homebrew receiver?

: Anyone have a glossary with APT in it? I see it here all the time, but can't
: find a definition anywhere.
: --
: Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
: Elder - Westminster Presbyterian
: TRA #2693
: N9VEM

Hi...

Well.. I had found a Very Low cost circuit at
ftp://ftp.esrac.ele.tue.nl/pub/ham/wefaxreceiver-kit
but don't work so well.. so I'm trying to get another one that simply works.

Tks.

--

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~Oo.
----- -----
\ / Joao Martins at Universidade de Aveiro
\ / Searching for the TRUTH
The X Files
/ \ Internet: matjoao@ua.pt
/ \ URL: http://sweet.ua.pt/~matjoao
----- ----- Phone: +351936548593
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

# 3143. WTB:FIL. XFMR FOR 872A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Michael Mysliwiec <myz@deltapc.net>
Message-ID: <01bcc7ca$437518c0$6e9951d1@michaelm>
Source record: 90430

LOOKING FOR FILAMENT XFMR FOR A FULL WAVE BRIDGE RECTIFIER USING 872A.
NEED: 5V AT 20A, 5V AT 10A AND 5V AT 10A. ALL MUST BE 10KV RATED.
ONE XFMR OR THREE.
THANKS!
MYZ@DELTAPC.NET

# 3144. Cat home brew!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Dave@omen.softnet.co.uk
Message-ID: <N.093097.230302.31@swhjz003>
Source record: 90431
Cross-posted to: alt.radio.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Thanks for reading,
I am looking for any info i can get such as diagrams component list
to home brew a cat system to suit my Yaesu Ft890?
any info or pointers in the right direction would be a great help
best 73s DE Dave gw7pny.....

--
it,s good to drink !!

# 3145. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <343149DB.59FD@scan.missouri.org>
Source record: 90432
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

6146 tubes require an entirely different socket than the 6HF5. If your
radio has 6146's, the sockets HAVE been changed and other changes would
have to have been made, possibly unsuccessfully since it is not working.
Sorry, this problem may be a tough one to solve.
Dick W0EX

# 3146. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: "Roger D. Placer" <rogerp@lucent.com.NOSPAM>
Message-ID: <rogerp-3009971513590001@esoterica.pez.bell-labs.com>
Source record: 90433

> How come your call sign does not match your name, according to
> Buckmaster? KC7ZFP has been licensed since 1994 and you just got your
> call sign two weeks ago? What am I missing?

Perhaps what you're missing is that those CD's tend to be outdated
about two minutes after the stamps are licked and they're sent out
to you. Try www.qrz.com, updated daily:

Callsign: KC7ZFP
Name: MIKE L ABRAMS
Addr1: 1199 N TERRY ST
Addr2: EUGENE OR 97402
Country: USA
Class: Technician
Effective: 20 Sep 1997
Expires: 20 Sep 2007
Location: 44.058 N 123.188 W���Lane County
Email: [unknown]

Roger D. Placer, KA2Z Lucent Technologies
rogerp AT lucent DOT com Bell Labs
==========================================
Hear my CD, "The Happiness Of Pursuit"
http://www.thoprecords.com

# 3147. Re: Inductance calculations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <60s78l$7h8@nntp02.primenet.com>
Source record: 90434

Diamond Jim <koehler@mars.ark.com> wrote:
: I recall, vaguely, seeing a comment in a magazine many years ago (perhaps
: 'ham radio') giving a better formuola for calculating the indcuctance of
: small air wound coils than the 'standard' equation which is very simple.
: Does anyone know of this one? The standard equation (i.e., the one in the
: ARRL handbook) was widely used in the olden days when we all just had slide
: rules. It seems to me that, with modern calculators, one might just as
: well use the more accurate equation.

If you look at my homepage at:

http://www.primenet.com/~ctrask

you'll find a large bibliography on inductors and ferrites.

,----------------------. Circuit Design for the
/ What's all this \ RF Impaired
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ ATG Design Services
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ Technical Editor,
. ( ) \ QRP Quarterly
'-| )__| :. \ QRP ARCI 9464
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com
http://www.primenet.com/~ctrask

Graphics by Loek Frederiks

# 3148. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Robert Fanfant <fanfant@ix.netcom.com>
Message-ID: <01bccde2$a5c315e0$3f5d369d@robfan>
Source record: 90435

Think Buckmaster is wrong. QRZ shows that kc7zfp was issued 20 Sep 1997 to
Mike L. Abrams.

-rob

codeman@gj.net wrote in article <34306e38.0@news.gj.net>...
> mikea@efn.org (Mike L Abrams) wrote:
>
> >I need a good Antenna that will work in a moblehome with metal siding
> > it need to be low so it is hide so the other home owner can not see
> >it. I heard that a J-pole would not work up next to metal siding???
> >I want to use this with the 2meter I have had my call sign for about
> >two week's & wanting to get on the air when my raido get here
> > thanks for any help
> > 73 mikea kc7zfp
>
> How come your call sign does not match your name, according to
> Buckmaster? KC7ZFP has been licensed since 1994 and you just got your
> call sign two weeks ago? What am I missing?
>
> Ross
> N7VWX
>
>

# 3149. Re: KING OF MODULATORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: bry@REMOVE.mnsinc.com
Message-ID: <34306665.7720038@news.mnsinc.com>
Source record: 90436

On 29 Sep 1997 16:35:07 GMT, "Anthony D. Schneider"
<Daveschneider@worldnet.att.net> wrote:

>M=&AO;GD@("!$+B!38VAN96ED97(B(#Q$879E<V-H;F5I9&5R0'=O<FQD;F5T
>M+F%T="YN970^#0I.97=S9W)O=7!S.B!R96,N<F%D:6\N86UA=&5U<BYB;V%T
>M86YC:&]R<PT*4W5B:F5C=#H@2VEN9R!O9B!M;V1U;&%T;W)S#0I$871E.B R
>M.2!397 @,3DY-R Q-#HU,3HU."!'350-"D]R9V%N:7IA=&EO;CH@050F5"!7

QRM there OM, PLEASE TRY AGAIN, YOUR MODULATION is not coming through!

(remove the word REMOVE from my e-mail address to respond!)

# 3150. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: frogger@megsinet.net
Message-ID: <343125a3.2544400@megsnews.megsinet.net>
Source record: 90437
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Mon, 29 Sep 1997 01:03:27 GMT, kmccoy@stetson.edu (Ken McCoy) wrote: Ken: 6hf5 tubes are the type of "TV sweep tubes" you should use. 6146 tubes are used in more modern rigs and probably are screwing things up in the SWAN. I have a SWAN 350 and it is like yours. I use 6hf5 tubes, and it is a real performer. Visit the old remaining TV repair shops and make an offer to get their 6hf5 tubes! Or you could peruse the YELLOW SHEETS or QST to find a tube guy or maybe even RF PARTS Co. will still sell some 6hf5's in matched pairs.

Good Luck! SWANs are cool.

Paul, N9GTQ

>Pardon the cross-posting. I am having some trouble while transmitting
>on my vintage Swan 400 (all tube). It seems to arc once the tubes in
>transmit circuit heat up; the lack of visual evidence around sockets
>and solid state components leads me to believe it is in a tube
>somewhere. I have tested and replaced all tubes except the finals,
>since the setting instructions are confusing to me, calling for an
>external ampmeter to further adjust the bias to 55 ma (even though the
>adjustment knob only goes to 50 ma)...
>
>Anyway, the real reason for my post is that the tubes currently in the
>final amplifier stage are 6146. The schematics and manual call for
>6HF5. The compatibility of these separate types is unknown to me; the
>settings on my Heathkit TT1 tube tester differ greatly.
>
>Does anyone know whether these tube types are compatible, or should I
>consider trying to acquire the original tube type called for in the
>manual? I don't *think* there has been any modification to the
>circuitry.
>
>Please reply here or email me directly at kmccoy@stetson.edu
>
>Thanks much,
>
>Ken KF4BQF
>
>
>

# 3151. WTB:FILAMENT XFMR FOR 872A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Michael Mysliwiec <myz@deltapc.net>
Message-ID: <01bcc7c8$7c327740$6e9951d1@michaelm>
Source record: 90438

LOOKING FOR A FIL. XFMR FOR 872A, CAN BE THREE SEPERATE OR ONE WITH THE
THREE 5V @20A, 5V@10A, 5V@ 10A.
THANKS , MIKE KF8OD

# 3152. FS Motorola R.F. PWR.Tranistsors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: r.e.marsh@juno.com
Message-ID: <60rm45$ev5$1@moe.thenet.net>
Source record: 90439

```
TYPE FREQ. PWR. Vcc

MRF 327 400 mhz 80w 28 $35
MRF 245 170.mhz 80w 12 $20
2N6084 170mhz 40w 12 $10

2N6082 170mhz 20w 12 $10
2N6081 170mhz 10w 12 $10

All transistors are MOTOROLA and are new unused condition.
please use this email address remarsh@juno.com
```

## 3153. FS Frequency References

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <runsbLAwtLM0Ewey@ddwyer.demon.co.uk>
Source record: 90440

16.384MHz latest technology SC cut crystal oscillators very low aging
better than 0.1ppm stability per year typical 0.00001ppm/second, pre
calibrated to 0.1ppm . 76X31X50mm hermetic pcb mounting,
use directly to set up counter standard or devide by simple external
prescaler to 1, 2, 4, 8 kHz etc. for freq synth reference . $90 to
almost anywhere email for more detailed spec.

Douglas Dwyer

# 3154. Looking for schem. PACE Landmaster II VHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: KF6BBL@qualcomm.com
Message-ID: <60pv05$ru8$1@thefuture.qualcomm.com>
Source record: 90441
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

This Pace Landmaster II is about 20 years old and has diodes for setting the PLL frequencies. Any data on this is helpful, and I would prefer to get a complete schematic if available.
Thanks
-BP

---

Bill Paul KF6BBL San Diego, CA KF6BBL@qualcomm.com
Cinematronics Home Page ----> http://www.concentric.net/~Zonn/
Bill's Home page ----------> http://people.qualcomm.com/wpaul/
Disclaimer:
The above post is the opinion of Bill Paul, not Qualcomm Inc.
---

# 3155. W1FB, SK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bccd40$baefa5c0$5b1c10d1@dale>
Source record: 90501

I received the following in the e-mail today...

I am sure there are many on this newsgroup who grew up reading Doug's articles and books. I know I did and I owe a lot to him for helping me learn
a lot and to keep learning.

SB QST @ ARL $ARLB057
ARLB057 Doug DeMaw, W1FB, SK

ZCZC AG57
QST de W1AW
ARRL Bulletin 57 ARLB057
From ARRL Headquarters
Newington CT September 29, 1997
To all radio amateurs

SB QST ARL ARLB057
ARLB057 Doug DeMaw, W1FB, SK

Acclaimed ham radio icon Milton F. ''Doug'' DeMaw, W1FB, died September 28. He was 71. One of the most widely published technical writers in Amateur Radio, DeMaw was diagnosed with leukemia earlier this year and had been in failing health in recent weeks.

DeMaw was first licensed in 1950 as W8HHS. An electrical engineer, he was a member of the ARRL Headquarters staff for 18 years--from 1965 to 1983--and served as Technical Department Manager and Senior Technical Editor from 1970 to 1983. During his tenure at HQ, DeMaw served as editor of The ARRL Handbook. In 1970, he engineered the shift in emphasis toward solid-state design in QST and the Handbook. He has hundreds of articles in QST and other publications to his credit. DeMaw also was founder and publisher of VHFer Magazine. (His wife, Jean, W1CKK, also worked on the Headquarters staff.) DeMaw was a life member of the ARRL and a senior member of the IEEE.

After retiring to the family farm in Luther, Michigan, he was elected chairman of the Lake County Board of Commissioners and continued to write books and articles. He also tried his hand in the Amateur Radio business as proprietor of Oak Hills Research. Among his other books, DeMaw wrote W1FB's Design Notebook, W1FB's QRP Notebook, W1FB's Antenna Notebook, and The ARRL Electronics Data Book, which remain popular. In recent years, DeMaw also penned a regular column for CQ magazine.

A former ARRL colleague, Membership Services Manager Chuck Hutchinson, K8CH, counted DeMaw among his friends. ''Doug loved to

experiment with circuits and antennas. He also loved to encourage others to try their hand at building,'' he recalled. Hutchinson said DeMaw not only wrote prolifically about ham radio but also about gardening, another of his avocations. ''He was an avid gardener and cook,'' he said. DeMaw also was an outdoorsman and hunter. ''He loved to hunt with bow and rifle--both modern and muzzle loader. He was very good at throwing a knife or hatchet,'' Hutchinson said. Paul Pagel, N1FB, also was one DeMaw's colleagues during his days at ARRL HQ. ''Amateur Radio benefited greatly from his work,'' Pagel said. ''He was a multifaceted man. I doubt there was anything he couldn't do if he set his mind to it.'' Jerry Hall, K1TD, who also worked with DeMaw during his years at HQ, called DeMaw a writer of ''uncanny'' ability. ''Doug could write it once, and it was done,'' he recalled.

Survivors include DeMaw's wife, Jean, and a son, David, N8HLE, a technical writer who lives in Connecticut.
NNNN
/EX

Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

# 3156. Re: Adjusting for Signal to Noise Ratio ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: "Anthony D. Schneider" <Daveschneider@worldnet.att.net>
Message-ID: <60pmq8$9kq@bgtnsc02.worldnet.att.net>
Source record: 90502

you will need to use a vtvm and measure the noise with out carrier , then insert a carrier at about .2 to about 1 microvolt and measure where the "quieting " is 20 db below the noise level without carrier. a level of .3 uv for 20 db quieting is good......adjust the tuned circuits for the best quieting

Anthony Levand <alevand@FoxValley.net> wrote in article <01bccd2a$d62b1740$50bae3cf@default>...
> I have a Yeasu 2 meter radio with a dual gate MOSFET rf amplifier. I can
> adjust the first tuned tranfomer for maximum gain, how would I find the
> optimum setting for best signal to noise ratio? I can see the signal and
> the noise riding on top in the osciloscope. Can I replace the mosfet with a
> gasfet for better sensitivity?
>
> Tony, AA9CC
>

# 3157. Re: HELP!!! Need H.P. Power Cord

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970930031300.XAA21957@ladder02.news.aol.com>
Source record: 90503

>Hello all
>i recently acquired a Hewlett Packard 5245L Freq Counter but it has no
>power cord with it. I would prefer not to have to "butcher" the rear of
>the cabinet to get power to the machine, so if anyone out there has a spare
>power cord or three prong connector or knows of how I might be able to buy
>one, please email me.
>
>Thanks for reading.
>
>Go to your nearest Singer Sewing machine store. Their power plug is the
same thing.

W4ZCB

# 3158. Re: IF Notch Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970930030901.XAA21593@ladder02.news.aol.com>
Source record: 90504

>> I have a much modified TS180s and wish to fit a notch filter at the IF.
>> The audio one I have works well, but strong signals capture the AGC.
>>
>> I have not found any designs in all the books and mags I have.
>>
>> The TS180s IF is 8MHz and I will convert this down to 455 or 100kHz. and
>> do the notch there.
>>
>> Anyone with ideas/circuits or how it is done on a commercial rig.
>>

You can also do it by adding a single crystal at the IF frequency in shunt with the IF to ground. Tune it with a varicap and you can "move" the series resonant frequency through the passband. The old FT-901/902 series did that with 40-50 dB of notch available. Awfully good for the simplicity. Works best of course, at a point of relatively high feed impedance.

W4ZCB

# 3159. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: rfwilson@intergate.bc.ca
Message-ID: <60pshu$920$4@discovery.intergate.bc.ca>
Source record: 90505
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <34301317.41C67EA6@glenayre.com>, rohtsji@glenayre.com writes...
>
>Hello,
>
>Does anybody out there know a good unidirection antenna design for
>transmission purposes (as opposed to receive).

You are not clear on the concept. All antennas are bidirectional. If they
have high receive gain, they have high transmit gain.

> I basically
>need to transmit in front of me, none to the rear and very litte
>to the sides. Is there also some way to vary the angle of how
>much is transmitted to the sides? I need to transmit a 433MHz
>signal into a 50 ohm unidirectional antenna.

Try a Yagi. But any antenna Except perhaps a microwave dish) will have some
rear radiation. In the case of the Yagi, the rear is significantly less than
the front, but not totally absent.

Varying the "angle" means varying the antenna gain. I don't think so unless
you want to change its construction on the fly.

Bob.

# 3160. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: codeman@gj.net
Message-ID: <34306e38.0@news.gj.net>
Source record: 90506

mikea@efn.org (Mike L Abrams) wrote:

>I need a good Antenna that will work in a moblehome with metal siding
> it need to be low so it is hide so the other home owner can not see
>it. I heard that a J-pole would not work up next to metal siding???
>I want to use this with the 2meter I have had my call sign for about
>two week's & wanting to get on the air when my raido get here
> thanks for any help
> 73 mikea kc7zfp

How come your call sign does not match your name, according to Buckmaster? KC7ZFP has been licensed since 1994 and you just got your call sign two weeks ago? What am I missing?

Ross
N7VWX

# 3161. Circuits Galore

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Harry Lythall <rharris@arcturus.net>
Message-ID: <3430B5AC.5488@arcturus.net>
Source record: 90507

Circuits Galore

Hi all, I'm back!!

Two weeks abstenance has meant little work on my homepages. I have replaced the counter to another that works. During the last two weeks the pages have had '0' visitors although 130 of those have sent me E-mail. Strange!!

PMS OTA
Just before the holiday, my old PC-jurassic blew itself to bits so my packet PMS, with all the radio, circuits is off the air but Ron, G0TLA, is still holding strong.

VALVE (tube) RX
The 'valve receiver' has seen a little more work done to it and the tracking across the lower MW band is much improved. With the new coil winding data the LO/RF tracking is almost perfect. Far better than expected.

OSCILLOSCOPE
Loads of comments about the basic oscilloscope information. The general opinion so-far is that it is not so basic, what do you think? Have I forgotten anything?

SYNTHESIZED RECEIVER
The ORIGINAL circuit diagram for the 'Synthesized Receiver' project was 100% accurate. The VCO and Phase Detector chips are NOT CMOS. Thanks to E-mail, I have now been spared the laborious task of taking my own synthesizer to bits to get the information for the homepage. I will now be updating the project hopefuly before Friday. Many thanks to the kind soul who took the 'time and trouble' to sort out my cryptic mess for me and provide the information.

REQUESTS
I have had requests for VHF and UHF RX preamps Not being so interested in VHF they will have to wait a couple of weeks, but it sounds like a good idea to me.

SOON
Coming soon is an AM TX for the MW band so that old vintage radios may again 'beat' to the rythm of Perry Como, or Dave Brubek.

DC RC HITS VLF
My Direct conversion RX was sucesfuly used on the VLF bands

from 15KHz upwards, I am awaiting a response from the gent concerned so that I may add the details to the homepage.

NOT AGAIN!!!
Finally if I get just one more request for circuit diagrams to locate lost model aircraft I will scream!!!! I the best method is to write your name, address, and telephone number on the wing. You could also offer an 'unspecified' reward for its return. Readers Digest are always giving away their 'valuable' pocket calendars, printed on genuine paper.

URLS
Ok then nothing else of interest to add so here is the URL, just in case you have not bookmarked the page. You will not be dissapointed.

http://user.tninet.se/~acz732k/ Main site
http://hem2.passagen.se/sm0vpo Mirror site

Have fun with radio Homebrew / QRP / Hamradio / Wireless.
Best regards from Harry, Upplands V�sby, Sweden.

PS Several E-mail massages have begun "I am not a licensed Radio Amateur, but ... ...". My page is not exclusively dedicated to HamRadio, QRP, but includes ALL aspects of homebrewing (including the booze - Hic!) and electronic construction.

# 3162. Re: Circuits Galore

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3430c79c.82698869@news.erols.com>
Source record: 90508

On Tue, 30 Sep 1997 09:17:48 +0100, Harry wrote:

>Circuits Galore
>
>Hi all, I'm back!!
>
FB Harry! I really enjoy your pages. You are doing good work for
Ham Radio! Keep it up. Soldering irons around the world are being
kept warm by your efforts!
73 Bill N2CQR

# 3163. Re: IF Notch Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Birdman <sammy89@hotmail.com>
Message-ID: <3430E125.7F31@hotmail.com>
Source record: 90509
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Anthony D. Schneider wrote:
>
> yes look at the hq 180 receiver or if not contact me
> DaveSchneider@worldnet.att.net
>
> Stewart Baker <baker@nildram.co.uk> wrote in article
> <27223560897517ntc@nildram.co.uk>...
> > I have a much modified TS180s and wish to fit a notch filter at the IF.
> > The audio one I have works well, but strong signals capture the AGC.
> >
> > I have not found any designs in all the books and mags I have.
> >
> > The TS180s IF is 8MHz and I will convert this down to 455 or 100kHz. and
> > do the notch there.
> >
> > Anyone with ideas/circuits or how it is done on a commercial rig.
> >
> > Many thanks
> >
> > Stewart G3RXQ
> > --
> >
> > baker@nildram.co.uk
> >
> >

I have heard that QST will be doing a review in the near future. They
are really impressed with the noval approach that this radio has.
Birdman

# 3164. Re: Source for Crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <60qr1u$6fp@camel1.mindspring.com>
Source record: 90510

jcarey@csn.net (Joe Carey) wrote:

>Hello All,

>I am looking for a 10.700 MHz crystal for testing
>the IF stage of a homebrew receiver. Any ideas
>where I could find one of these? I'd really like
>parallel resonant and an accuracy of a few tens
>of ppm, but I'll compromise on those. Obviously,
>this being a homebrew project, cost is a concern.

>Thanks for any input,

>Joe
I have seen 10.695 crystals used in many 10.7 IFs because they are
used in a transmit along with 10.240 to mix down 10.695 signal to
455khz.
- tony ww2w
http://www.pipeline.com/~acatalan/

# 3165. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: Steve Robertson <stephen.h.robertson@cpmx.saic.com.xxx>
Message-ID: <3430EE4C.351D@cpmx.saic.com.xxx>
Source record: 90511
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ken McCoy wrote:
>
> Pardon the cross-posting. I am having some trouble while transmitting
> on my vintage Swan 400 (all tube). It seems to arc once the tubes in
> transmit circuit heat up; the lack of visual evidence around sockets
> and solid state components leads me to believe it is in a tube
> somewhere. I have tested and replaced all tubes except the finals,
> since the setting instructions are confusing to me, calling for an
> external ampmeter to further adjust the bias to 55 ma (even though the
> adjustment knob only goes to 50 ma)...
>
> Anyway, the real reason for my post is that the tubes currently in the
> final amplifier stage are 6146. The schematics and manual call for
> 6HF5. The compatibility of these separate types is unknown to me; the
> settings on my Heathkit TT1 tube tester differ greatly.
>
> Does anyone know whether these tube types are compatible, or should I
> consider trying to acquire the original tube type called for in the
> manual? I don't *think* there has been any modification to the
> circuitry.
>
> Please reply here or email me directly at kmccoy@stetson.edu
>
> Thanks much,
>
> Ken KF4BQF

YIKES!! No wonder you are having problems! The 6146 is a "real"
tranmitting tube, while the 6HF5 is a color television sweep tube. The
6146 was made to go all day and night without complaining at medium
power (about 180 watts CW input for a pair). Sweep tubes, however, are
great for *INTERMITTANT* service at high power. Doing a replacement
without circuit changes is really asking for trouble. The power supply
for the Swan probably delivers voltage too high for the 6146 and that is
causing the problem.

Get the tubes that are supposed to be in there. (I don't know offhand if
the tube pinouts are the same, so be real sure that no mods were made to
the set before replacing the tubes). BTW, they won't be cheap!

73 de Steve, KE4OH
--
To get my real e-mail address, remove the characters ".xxx" at the end
of my address.

# 3166. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <3430fea4.217579198@news.pipeline.com>
Source record: 90512

>On 29 Sep 1997 00:50:50 GMT, mikea@efn.org (Mike L Abrams) wrote:

>>I need a good Antenna that will work in a moblehome with metal siding
>> it need to be low so it is hide so the other home owner can not see
>>it. I heard that a J-pole would not work up next to metal siding???
>>I want to use this with the 2meter I have had my call sign for about
>>two week's & wanting to get on the air when my raido get here
>
Make a DDRR. for 2 M, that should be about a foot across, and 6 inches
high, and you can cover it with something thet looks like a cake box.
Make up your won excuse for neighbors, like super scream fire alarm.

ciao.
Lou
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 3167. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-09-30 00:00:00 UTC
From: triodeel@ameritech.net
Message-ID: <343055d4.3285558@news.chicago.il.ameritech.net>
Source record: 90513
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

"William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>RF Parts has them for $37.50 and Antique Electronics for $44.50. All you
>Boat Anchor guys out there get busy.

That's actually cheaper than I remember seeing them previously.

>
>My Boat Anchor is an HQ129X (1945) that I have modernized pretty much.

Mine's a HQ-145X. Nice unit.

Ned Carlson, Triode Electronics, Chicago, IL http://www.triodeel.com
Open 12:30-8 PM CT, 12:30-5 PM CT Sat Closed Wed
ph:773-871-7459 fax 773-871-7938 "where da tubes are"
Email catalogs: email our CataBot: catalog@triodeel.com

# 3168. Looking for mods for Mizuho DC-7X

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: five13@aol.com
Message-ID: <19971001234000.TAA14324@ladder01.news.aol.com>
Source record: 90364

Mizuho DC-7X 40meter CW transceiver has an active component for direct conversion receiving. It is almost useless for night time in the US eastcoast because of the AM broadcasts.

I'd like to modify it to double-balalanced DC receiver. I have some idea how to
do it, but if anyone has done so, I would like to hear it before cutting the PC board.

WB1Y
Yuki Fujita
Five13@aol.com
http://member.aol.com/WB1Yuki/index.html

# 3169. Info requested for a 2N3375

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <60snnt$rc2@news.Hawaii.Edu>
Source record: 90365
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I've got a couple 2N3375 transistors (TO-60 case) but can't find any
data on them in my '91 Handbook. If these are RF power xsistors
could someone provide the P-in, P-out, Gain, Vcc, and freq'y range?

Thank-you in advance,
Jeff KH2PZ \ KH6

# 3170. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Karl Nielsen <nielsen@flash.net>
Message-ID: <3432E58B.6D32@flash.net>
Source record: 90366

codeman@gj.net wrote:
>
> mikea@efn.org (Mike L Abrams) wrote:
>
> >I need a good Antenna that will work in a moblehome with metal siding
> > > it need to be low so it is hide so the other home owner can not see
> > >it. I heard that a J-pole would not work up next to metal siding???
> > >I want to use this with the 2meter I have had my call sign for about
> > >two week's & wanting to get on the air when my raido get here
> > > thanks for any help
> > > 73 mikea kc7zfp
>
> How come your call sign does not match your name, according to
> Buckmaster? KC7ZFP has been licensed since 1994 and you just got your
> call sign two weeks ago? What am I missing?
>
> Ross
> N7VWX

That's interesting. QRZ says kc7zfp is Mike Abrams and he's been
licensed since 20 Sep 1997, just like he said...

I couldn't see how kc7zfp could have been licensed since 1994 since
I'm kc7lvv (an earlier call sign) and I've only been licensed since
1995.

- Karl Nielsen - kc7lvv -

# 3171. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: "Richard A. Miles" <rmiles@oz.net>
Message-ID: <343308E3.E45A18BD@oz.net>
Source record: 90367
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Randie:
Look into the corner reflector antenna as it provides a better fron to back ratio that anything except a dish. Expect about 10db gain from it. Antennas are reciprocal in their performance so expect the same performance whether transmitting or receiving.

73's...Dick, K7RNZ

>
> >

# 3172. AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <343335E9.1F55@flash.net>
Source record: 90368

I have an AD7008 DDS chip and have some questions for those who are in the know.

Is the output of this chip strong enough that you could hear it on a receiver or does it need to be amplified?

I have software to run the chip from a parallel port but there are too many variables that I don't understand, can someone explain what pins I need to tie to gnd and +5 to get this puppy moving?

I have the eval board with the 50Mhz clock.

Thanks, Tim

# 3173. |||| $8.65 1yr CQ (RADIO AMATEUR'S JOURNAL) ||||

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: nospam@prodigy.net
Message-ID: <60uo70$l06$1@newssvr07-int.news.prodigy.com>
Source record: 90369
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

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TOPIC: Other Titles
(Search: CQ)

# 3174. Re: looking for advice/ flamers (not)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000110972359070001@news.primenet.com>
Source record: 90370

In article <342b0db8.14133380@news.sprynet.com>, lar01@sprynet.com (larry) wrote:

:greetings
:I have been an amateur since the mid 60's. I have been involved in
:most of the popular modes since they came into conception, eg 2 meter
:fm early 70's, packet mid 80's, ssb 68ish, etc.
:I am now trying to figure out where this hobby is going. I know that
:spread spectrum is, more or less, just around the corner but I don't
:think it will really arrive until the next decade.
:Any ideas on what the next major new mode is going to be and where?
:Larry ve3fxq

[What? A flame war on rec.radio.amateur.homebrew? This will look cute on DejaNews in a year or two. Remember that when you're running for ARRL director]

Back to the original question... Perhaps you are looking at it. I will always love DX, but for technical discourse (excepting the original thread :) the internet seems to be superior to ham radio. I'd love to use my dual band handheld for talking tech stuff with local hams. Tried it. Dead silence. I have heard some good stuff on HF, but mainly relating to antennas and boatanchors. The times they have changed.

Rather than questions like which new mode will prevail, I'm more interested in issues like "How can we regain the spirit of comradery of the past?" I suppose that ham radio has degenerated like the rest of society. The lack of fraternity is the main reason I have lost interest in operating HF- and living in an apartment the secondary reason.

I'm at a loss for a solution also. I've tried to interest my nephew in radio and electronics, but he's only interested in computer games. Getting kids interested in science is not easy nowadays. Why would a kid be interested in radio when cellphones can communicate across the globe? or when they can use the internet? or when they can ask me why I don't use a radio to talk to hams, and instead use email or this NG

Rob.

# 3175. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: five13@aol.com
Message-ID: <19971001010701.VAA28020@ladder01.news.aol.com>
Source record: 90442

What would happen if two x-tals in different frequencies, say
7.04 and 7.10 Mhz?

WB1Y
Yuki Fujita
Five13@aol.com
http://member.aol.com/WB1Yuki/index.html

## 3176. mods forTS-680S Kenwood Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: jamesa@terra.net.au
Message-ID: <3431a6c0.6470787@news.terra.net.au>
Source record: 90443

I need instructions to convert the TS-680S to all transmit.
Jim. jamesa@terra.net.au

# 3177. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: 1RealHope <davidc@bit-net.com>
Message-ID: <01bcce06$b86b59e0$308a92d0@bit-net.bit-net.com>
Source record: 90444
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There is a site in Maryland that repairs Swans. They have government contracts that pay the bills and do the Swan stuff for giggles - really, I had them do some work and the prices were amazingly cheap!
There is a 40 Meter net at lunchtime weekdays where Swan affectionados gather to talk about such things and the guy who runs the Swan piece of that shop is often on. He's a real nice guy. Forget his call.
If you absolutely cannot find them let me know and I'll try to run the info down here somewhere.
Guaranteed they will restore it for real short money - and do a nice job of it. DavidC AA1FA

## 3178. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19971001001100.UAA22930@ladder01.news.aol.com>
Source record: 90445

In article <34306e38.0@news.gj.net>, codeman@gj.net writes:

>
>How come your call sign does not match your name, according to
>Buckmaster? KC7ZFP has been licensed since 1994 and you just got your
>call sign two weeks ago? What am I missing?
>
>

Ross, that's strange because I get the following when I check at UALR,
Not only does the name match, but his date of issuance matches what
he claimed just about too. Suggest you try the UALR site in the
future.

CALL "KC7ZFP" NAME "" CITY "" STATE "" ZIP "" LIMIT "0100"

Program v1.3 - 8 March 1997 -- Last database update 1997-09-29 11:02

KC7ZFP ABRAMS, MIKE L LIC ISU 20-SEP-1997
TECH 1199 N TERRY ST LIC EXP 20-SEP-2007
EUGENE OR 97402 LST UPD 20-SEP-1997

Returned 1 records.
-art clemons-

# 3179. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: codeman@gj.net
Message-ID: <3431bd77.0@news.gj.net>
Source record: 90446

n8blk@aol.com (N8BLK) wrote:

>In article <34306e38.0@news.gj.net>, codeman@gj.net writes:

>>
>>How come your call sign does not match your name, according to
>>Buckmaster? KC7ZFP has been licensed since 1994 and you just got your
>>call sign two weeks ago? What am I missing?
>>
>>

>Ross, that's strange because I get the following when I check at UALR,
>Not only does the name match, but his date of issuance matches what
>he claimed just about too. Suggest you try the UALR site in the
>future.

>CALL "KC7ZFP" NAME "" CITY "" STATE "" ZIP "" LIMIT "0100"

>Program v1.3 - 8 March 1997 -- Last database update 1997-09-29 11:02

Thanks everyone, I will discontinue using Buckmaster to look up Call
sign vs Name.. Sorry for any discomfort.

Ross
N7VWX

>KC7ZFP ABRAMS, MIKE L LIC ISU 20-SEP-1997
>TECH 1199 N TERRY ST LIC EXP 20-SEP-2007
> EUGENE OR 97402 LST UPD 20-SEP-1997

>Returned 1 records.
>-art clemons-

# 3180. fs- TWO NEW 872A's $25 shipped

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19971001012900.VAA29811@ladder01.news.aol.com>
Source record: 90447

```
Hi;
For Sale;
TWO NEW 872A's, nos JAN...$25-shipped Conus!
Thanks es 73..........RICH RLUCCH2098@aol.com
```

# 3181. Re: Mirage Amplifiers NEW ! discounted!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: xyzdavew@cruzio.com
Message-ID: <60san0$i7g_001@tofu143.cruzio.com>
Source record: 90448
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

In article <342C3C56.71576899@ccm.ch.intel.com>,
John Zaleska <john_s_zaleska@ccm.ch.intel.com> wrote:
>I just purchased their dual band hand held amp. Quality of workmanship
>was extremely poor. All cover screws were stripped out!
>
>Dan W7RF wrote:
>
>> Here's the Mirage line of amplifers I promised to post.
>>
>> Very limited quantites, buy now and save big!!
>>
>> Visit my web site to see it all !!!
>>
>> Visit often, much more to come!!
>>
>> 73, Dan W7RF
>>
>> --
>> Dan Magro W7RF/Portable Clinic (Ham since 1972)
>> Two way radio sales/service/rentals (since 1982) **
>> Ham & Two way used radios/acessories **
>> http://home.earthlink.net/~radiodan/
>> Classic & Modern Ham Equipment
>> MFJ/Ramsey Kits "closeout" see my web page ! **
>
>
>

They are probably refurbed returns.

Dave

David Wells KD6TO (KD6 Teletype Operator)
FCC GROL with Radar and GMDSS
INTERNET: davew@cruzio.com (remove the xyz)
OPINIONS EXPRESSED ARE MY PERSONAL ONES AND
DO NOT REPRESENT THOSE OF MY EMPLOYER

# 3182. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <34321D1C.3A1@hp.com>
Source record: 90449
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

Gary Coffman wrote:
>
> I've seen the 7360 used in SSB balanced modulators, but hadn't considered
> the possibility of using it in a receiver front end. I can see how it would be
> a good first mixer.
>

Find an RSGB handbook of late 1960s or 1970s vintage and look for
Peter Martin G3PDM's high performance receiver.

Single conversion, preselected, no RF amp, 7360 mixer, IF at 1.6 MHz(If
I remember rightly) with lattice crystal filters distributed down the IF
strip. Mixed thermionic and semiconductor design, and a phase-locked
summing loop for the local oscillator. I reprinted his very low drift
Vackar VFO in the ARRL handbook oscillators chapter, but the rest of
this receiver is well worth tracking down. Periodically, I wonder about
looking for a few 7360's and building one.

> A modern radio often has millions of active devices in it. That allows you
> to produce functions which were simply impractical in the tube days. Yet
> the radio can be much smaller, and consume much less power. If we tried
> to do that with tubes, the reliability would be so poor that it would never
> work, and it would take a dedicated generating station to power it.
>

I understand your point, but I think that the logic works in both
directions.
Can it not also be argued that in some ancient thermionic radios, every
stage ran
quite high power, and so had a fairly high TOI simply because the only
available devices that worked at the necessary frequencies ran at those
power levels?

Simple receivers without frequency synthesisers or counters may
suffer in the frequency precision and stability stakes, but this can be
counterracted by the operator having to keep readjusting things. A weak
receiver that suffers overload effects cannot be similarly compensated
for its failings. Quantity of devices is not a complete substitute for
all performance parameters.

The classic structure with narrow, tracking RF selectivity, and
having the prime selectivity distributed down a multi-stage IF amplifier
is much closer to being optimised for dynamic range than the now more
usual block filter and block gain approach.

The designers of all the HF radios from the "Big 3" in Japan, have all assumed that distortion in the IF and AF stages after the main IF filter is unimportant, and so we have a few generations of radios which do not produce audio as clear as the HRO, AR88, and BRT400 of yesteryear. Conversely, there is the tendency of all of us to look back and remember things as being somewhat better than they really were, besides, things have also got a lot more congested than in the '60s.

Find the descriptions (by Pat Hawker, G3VA) of the work done by Colin Horrabin on high dynamic range receiver building blocks. With things like these SD5000 based mixers, the performance of the 7360 can be more than threatened. Medium power RF transistors in feedback configurations offer marvellously linear gain. The current limitation is the non-linearity of the actual quartz in crystal filters. None of these things are particularly recent. Rafuse's paper in the mid 1960s showed the use of DMOS devices in switching mixers, David Norton's patents on transformer feedback amplifiers have been around for some time. Peter Martin's receiver design was shockingly revolutionary at the time it appeared, but despite being overlooked by just about everyone (including me), it has sat there on many people's bookshelves, silently pointing the way to the architecture of very high performance receivers for the last 25+ years. I'm ashamed of how long it took me to realise what I'd overlooked.

Anyone with a kitchen table and a spirit of adventure can build a receiver that cannot be matched by anything they could buy, ancient or modern.

Cheers
David GM4ZNX

# 3183. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <pi3aXAAhZiM0EwOf@southwestuk.demon.co.uk>
Source record: 90450
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

>Gary Coffman wrote:
>>
>> I've seen the 7360 used in SSB balanced modulators, but hadn't considered
>> the possibility of using it in a receiver front end. I can see how it would be
>> a good first mixer.
This is purely from memory of the review as I have never owned one, but
I believe the FT102 had a 7360 double balanced mixer.
Trev G3ZYY ...-.-
--
Trevor Day

# 3184. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Stein Olav Lund <stein@iet.hist.no>
Message-ID: <3432C570.7F56@iet.hist.no>
Source record: 90451
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

Trevor Day wrote:
>
> >Gary Coffman wrote:
> >>
> >>
> This is purely from memory of the review as I have never owned one, but
> I believe the FT102 had a 7360 double balanced mixer.
> Trev G3ZYY ...-.-
> --
The FT102's four tubes are in the transmitter section:
Driver (12BY7A), Finals (6146B x 3)

--
**Stein-Olav Lund, engineer **
**Sor-Trondelag College, Institute of Electronics **
**TRONDHEIM, NORWAY **
** Collector of Old Radios E-:-) LA9QV **

# 3185. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <343259C2.2BC8@umich.edu>
Source record: 90452

codeman@gj.net wrote:
>
> mikea@efn.org (Mike L Abrams) wrote:
>
> >I need a good Antenna that will work in a moblehome with metal siding
> > > it need to be low so it is hide so the other home owner can not see
> > >it. I heard that a J-pole would not work up next to metal siding???
> > >I want to use this with the 2meter I have had my call sign for about
> > >two week's & wanting to get on the air when my raido get here
> > > thanks for any help
> > > 73 mikea kc7zfp
>
> How come your call sign does not match your name, according to
> Buckmaster? KC7ZFP has been licensed since 1994 and you just got your
> call sign two weeks ago? What am I missing?
>
> Ross
> N7VWX

According to the QRZ website, his callsign was issued on 20-Sept-97.

Bob, KI8AB

# 3186. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Jan Allbright <jan.allbright.NOSPAM@usa.net>
Message-ID: <34325290.AB44FA46@usa.net>
Source record: 90453
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Harry H Conover wrote:

> Randie Ohtsji [4555] (rohtsji@glenayre.com) wrote:
> : Hello,
> :
> : Does anybody out there know a good unidirection antenna design for
> : transmission purposes (as opposed to receive). I basically
> : need to transmit in front of me, none to the rear and very litte
> : to the sides. Is there also some way to vary the angle of how
> : much is transmitted to the sides? I need to transmit a 433MHz
> : signal into a 50 ohm unidirectional antenna.
>
> Typically, this is handled by the use a a Yagi array. Check any
> antenna book for details.
>
> Harry C.

Quicker ...

Type "yagi design" into alta vista..
There are about 5 pages out there that show you how to build yagis.
The Antenna Elmer page has a nice little 3-element you can make out of
1/4 inch conduit

--
Jan Allbright - "14-91" - Calhan Volunteer Fire Department
-- KC0BUY -- 146.970(-) <100hzPL> -- Colorado Springs --
_real_ mail response needs to remove NOSPAM from email

# 3187. Re: Industry Workhorse FETs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19971001133801.JAA10444@ladder02.news.aol.com>
Source record: 90454

Hi--

The "workhorses" I like to use are the 2N5486 for RF (similar to the MPF-102 only better specs), and the 2N7000 for low-power switching (under 1A). Both are cheap and easy to get, and both are available in through-hole or SMD.

73

Rick K1BQT

# 3188. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <61EuiAAsKIM0EwcS@southwestuk.demon.co.uk>
Source record: 90455
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

In article <3432C570.7F56@iet.hist.no>, Stein Olav Lund
<stein@iet.hist.no> writes

>The FT102's four tubes are in the transmitter section:
>Driver (12BY7A), Finals (6146B x 3)

Thanks for putting me straight Stein-Olav, I have been searching through
some of my paperwork to discover which rig it was that used the 7360 as
a rx mixer but no joy yet.
73 Trev G3ZYY ...-.-

--
Trevor Day

# 3189. Re: WTB: Teletype ASR-33

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <60tknd$aeu$1@news1.rmi.net>
Source record: 90456
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.rtty,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap

Richmond L. Armstrong (richa@insync.net) wrote:
: Looking for fully functional model with stand. Would prefer one with a 20ma
: current loop or RS-232, but I'll consider another interface. Unless you're
: real close to Spring, TX, I would probably need you to ship it as well. I
: know that's real pain for something this big, but I'm willing to pay
: shipping costs as well. It might be easiest to ship it in two pieces if
: that's possible. :)

Well, I have an ASR-35 in Very Good condition. It's available for free
(partial doc's, too), but I want no part of having to ship it.

I also have, if memory serves me, a few large (24") reels of 1" paper
tape.

Come on out for a ski trip (Crested Butte) and I'll help load it into
your truck. <g>

73
Jonesy W3DHJ

--
Marvin Jones jonz<AT>rmi.net
Gunnison, Colorado

# 3190. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000110970843290001@news.primenet.com>
Source record: 90457
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

I guess I'm disturbed the most by how people have grown so accustomed to mediocrity in everything they buy.

If you pay $3000 to $5000 for anything like a radio, you should expect to get a service manual. After all, we are hams. But then again, maybe the Japanese are making an accurate estimate of the technical abilities of the average modern ham.

For anyone who can help, I am looking for a schematic for the Rohde and Schwartz
EK07 tube receiver, which despite using all tubes, achieved a very high third order intercept.

I spent quite a bit of time with my R4-C, experimenting with tubes and various mixer and RF amp circuits, and have not been able to boost the IMD performance, with one exception- bypassing the RF amp. In that case you get 10db higher dynamic range, but inadequate sensitivity on 20M and up. So I'm interested in seeing what Rohde and Schwartz were doing to get such high performance.
(I tried the Rohde and Schwartz web site and their posted email addresses are not valid)

Lastly, on tube designs- the old color TV's from the late 60's and early 70's are still, I believe, some of the most elegant circuit designs ever made. With 10-20 tubes their picture is no worse than the modern set using millions of transistors.

Rob.

# 3191. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: burrell <marty@fia.net>
Message-ID: <34327F51.5724@fia.net>
Source record: 90458

audio

# 3192. Re: mods forTS-680S Kenwood Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: "R.L. Bo Thompson, KB5CNG" <thompson@ionet.net>
Message-ID: <3432A813.1A2A@ionet.net>
Source record: 90459

james aldridge wrote:
>
> I need instructions to convert the TS-680S to all transmit.
> Jim. jamesa@terra.net.au

Try the Boston Amateur Radio Club FTP archive section for mods on
most any radio.

http://www.barc.org/barc/

Use the info at your own risk etc.

73 de Bo KB5CNG

## 3193. crazy(!) duplexer question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: skoone@mindspring.com
Message-ID: <3432c783.531914@news.mindspring.com>
Source record: 90460

Hi! I need a 1200 Mhz duplexer for a repeater. I have available a
Wacom 4 cavity 450 duplexer. What are my chances of being able to hack
this thing up and make it work on 1200???? Does anyone out there on
this vast planet of ours have any modifications to do such a thing?

Thanks...

73,
Steve

# 3194. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3432b051.0@newshost.pcug.org.au>
Source record: 90461

five13@aol.com (Five13) wrote:
>What would happen if two x-tals in different frequencies, say
>7.04 and 7.10 Mhz?
>

I think the oscillator would get a little confused! ;)

But, seriously, has anyone tried it?

--


Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

# 3195. Re: crazy(!) duplexer question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3432CFA6.5116@onramp.net>
Source record: 90462

sk wrote:
>
> Hi! I need a 1200 Mhz duplexer for a repeater. I have available a
> Wacom 4 cavity 450 duplexer. What are my chances of being able to hack
> this thing up and make it work on 1200???? Does anyone out there on
> this vast planet of ours have any modifications to do such a thing?
>
> Thanks...
>
> 73,
> Steve

If you can figure out how to make them appx 1/3 of the length they are
now, change the feed loops to 1/3 amd make the interconnecting cables
1/3 then there you go. Sorta in the ballpark. That's why 1.2g cans are
tiny. Seriously you would be better off buying some and selling the
450's.
--
Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 3196. Need SMT 7808

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-01 00:00:00 UTC
From: Phil Heaton <ke4krt@mindspring.com>
Message-ID: <3432D8BA.24091FD@mindspring.com>
Source record: 90463

I need a 78M08T if anyone knows where I can get one...

Phil
--
Phil Heaton, ke4krt@mindspring.com
president@whitehouse.gov,root@127.0.0.1
net-abuse@nocs.insp.irs.gov,rchong@fcc.gov

# 3197. Re: Info requested for a 2N3375

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971002011700.VAA22567@ladder01.news.aol.com>
Source record: 90371

>
>I've got a couple 2N3375 transistors (TO-60 case) but can't find any
>data on them in my '91 Handbook. If these are RF power xsistors
>could someone provide the P-in, P-out, Gain, Vcc, and freq'y range?
>
>

Very nice obsolescent device. Nice because the stud is isolated from the collector.

28 volt NPN 400 MHz device
Vceo 40 volts
Vcb 65 volts
Ic 1.5 amperes

I use it as an amplifier for my 2 tone test gear for intermod tests at 14 MHz, just because of the stud isolation. (EVERYTHING is quadruple shielded and that helps) At that frequency, I get 19 dB of gain. At 100 MHz, minimum gain is rated at 8.5 dB.

Holding it face to you, with the center pin on top, collector is to the right, emitter to left, and the one on top is the base.

W4ZCB

## 3198. ttl to rs232 or rs232 to ttl cable schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: Public Safety <publicsafety@earthlink.net>
Message-ID: <01bcced2$11ac74a0$b37a2599@jeremy.EGAN>
Source record: 90372

If anyone has or knows of a source for a schematic of a rs232 to ttl cable
please contact me at publicsafety@earthlink.net

# 3199. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: Rugrat <"tallbrian@notsoHotmail.com">
Message-ID: <60v016$l0m$1@garfield.iaxs.net>
Source record: 90373
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

europa@primenet.com writes:
>
> I guess I'm disturbed the most by how people have grown so accustomed to
> mediocrity in everything they buy.
>
> snip
As for your observation to the "modern"electronic junk that is floating out there you are RIGHT
on the fact that the late 60 and early 70's TV recevers are some of the best out there. I have a
RCA New Vista Color 23" recever in the entertainment system that uses mostly tubes. The only
transister that I can find in there is the UHF tuner mixer and osc. That thing looks BETTER than
my later model Sony Trinitron! So much for fancy widgets! I have to say that I like tubes better
(lets try a PENTIUM with a pile of 12AX7's) than transisters. As for my radios....Philco 48-1264
fully restored and the RCA with a NEW picture tube!
Keep'em glowing! 73's to the group
KBOMNT Brad

# 3200. www.potg.com = Free comedy radio, Unique and Award-Winning

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19971002033000.XAA04580@ladder01.news.aol.com>
Source record: 90374

www.potg.com = Free comedy radio, Unique and Award-Winning

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 3201. Re: Source for Crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: VE7TBP <poustie@concentric.net>
Message-ID: <01bccee8$1686d180$1ad2adce@user>
Source record: 90375

In Vancouver, Com-West communications has a whole box of them, surplus, on the shelf. I bought a couple the other day for .50 each. www.com-west.com
73 de VE7TBP Tim

Anthony G. Catalano <acatalan@pipeline.com> wrote in article <60qr1u$6fp@camel1.mindspring.com>...
> jcarey@csn.net (Joe Carey) wrote:
>
> >Hello All,
>
> >I am looking for a 10.700 MHz crystal for testing
> >the IF stage of a homebrew receiver. Any ideas
>

# 3202. Re: crazy(!) duplexer question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <34447a62.794591692@news.sci.fi>
Source record: 90376

skoone@mindspring.com (sk) wrote:

>Hi! I need a 1200 Mhz duplexer for a repeater. I have available a
>Wacom 4 cavity 450 duplexer. What are my chances of being able to hack
>this thing up and make it work on 1200???? Does anyone out there on
>this vast planet of ours have any modifications to do such a thing?
>
>Thanks...
>
>73,
>Steve

Connect it to a circuit analyzer and have look were the notches are at around 1.3 GHz :-).

Usually at 450 MHz the cavity is a 1/4 wavelength resonator, however, it will also have resonances at 3/4, 5/4 etc. wavelengths. The resonances are not at exactly 3 or 5 times the fundamental frequency due to the tunning capacitance, so there are great chances that the 3rd harmonic is near the frequency you want.

Looking at a Sinclabs data sheet, they have two duplexers with identical external dimensions, the one for 445 MHz (SD445-4) is 1/4 wavelength and the one for 1270 MHz (SD1270-4) is three quarter wavelengths. As 3/4 wavelength resonators are used in commercial designs, I guess that you might have some success with your Wacom 450 MHz duplexer.

Paul OH3LWR

## 3203. Telemetry Node???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: Ted Maczulat <tmacz@arrowsmith.net>
Message-ID: <60vf6b$h2f$1@cameron.arrowsmith.net>
Source record: 90377

Hi and thanks for reading this.

I am looking for a telemetry node. Kantronics used to make one.

It is a normal TNC running network firmware. It also has 8 analog
inputs to measure stuff at the site.

I also have hears that someone was working on a kit for a standard
TAPR2 tnc that would add telemetry measuring capability.

Kantronics' new tnc have A/D conversion built in but for only
2 analog channels.

I need this to track conditions and power supply state at our clubs
mountain top repeater site.

Thank you.

Ted Maczulat, VE7TFM
Email tmacz@arrowsmith.net

# 3204. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971002083501.EAA19927@ladder01.news.aol.com>
Source record: 90378

>
>I have an AD7008 DDS chip and have some questions for those who are in the
know.
>
>Is the output of this chip strong enough that you could hear it on a receiver
or does it need to be amplified?

The max output is one volt peak to peak, ought to be able to hear it in a very
poor receiver. The output level is adjustable with resistor from Fs to ground
(Pin 3) . Put a 50 ohm load on the output pin, (Along with a low pass
filter), and all the bypasses ought to be chips to keep the digital trash out
of the output.

Depending on what you want to do with it, all the pins from 7 to 18 can go to
ground except 16 and 17 which go to 5 volts. 18 thru 29 go to ground with the
exception of 27 and 28 which go to 5 volts. 31, 32 and 33 go to ground.

You ought to call Analog's Fax on demand service and dump their 7008 data sheet
if you haven't already got it.

800-446-6212

The fax code for the 7006 is 1240

W4ZCB
>
>I have software to run the chip from a parallel port but there are too
>many variables that I don't understand, can someone explain what pins I
>need to tie to gnd and +5 to get this puppy moving?
>
>I have the eval board with the 50Mhz clock.
>
>

# 3205. Need schematic for HW-8

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: Nicholas R Kennedy <nkenned@entergy.com>
Message-ID: <34338E0E.3571@entergy.com>
Source record: 90379

Hello--

I'm trying to troubleshoot an HW-8 for a friend. He has the assembly manual, but there was a separate "illustrations manual" which contained the schematic which we don't have.

I'd appreciate a copy and will of course pay copying and mailing. I hope this is the appropriate group. It seems that many homebrewers are also QRPers ...

73,

Nick, WA5BDU

## 3206. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: NORMANMO@miavx1.muohio.edu
Message-ID: <3432E84A.3F50@miavx1.muohio.edu>
Source record: 90380

I'll take you up on joining No Code international - I'm all for
anything that could help it to survive well into the 21st century.

## 3207. Yaesu FT-227rb

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: joe d <jedentz@c-com.net>
Message-ID: <34339C5C.656E@c-com.net>
Source record: 90381

Have just been given a Yeasu FT-227 RB two meter transceiver with no manual. Need to know the pin-out of the ACC port on the back. Could someone please fill me in? Am willing to buy service/operators manuals from anyone who's willing to part with them. Haven't tried Yaesu USA yet. Just haven't had time.
Thanks joe d ARS K5ZCX

## 3208. Vacuum Variable: UCSL-100?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: jmaass@freenet.columbus.oh.us
Message-ID: <6106uv$a00@login.freenet.columbus.oh.us>
Source record: 90382

I have obtained a motorized Jennings vacuum variable that appears to be labelled UCSL-100. My ancient (1968) Jennings catalog doesn't list a UCSL-100 (but does list the UCSL-250, UCSL-500, etc.).

The label on the capacitor leaves open the possibility that a digit might have been lost (i.e., perhaps UCSL-1000?), although I doubt it.

Does Jennings have a presence on the Web?

This device appears to be a 'pull' from military or commercial equipment. The vacuum appears to be intact, although one of the ceramic stand-offs is cracked. I haven't identified the control requirements yet, other than it has a 28V motor, much step-down gearing, and a DB-15 (or so: haven't counted the pins yet!) male connector all mounted on a brass base.

My plan is to use this to remotely-tune my 1nverted-L for 160M.

Any information welcomed!
73,
--
Jeff Maass (jmaass@freenet.columbus.oh.us) Amateur Radio K8ND
USPSA/IPSC # L-1192 NROI/CRO NW of Columbus Ohio
25000 Members in 2000!

# 3209. WANTED: VMP-4 FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <610e6k$s5s$1@ncar.ucar.edu>
Source record: 90383

I'm looking for 3 or 4 pieces of the VMP-4 FET. If anyone
has a few to sell please let me know.

Thanks!
Chip Owens, NW0O
owens@stout.atd.ucar.edu

--
Chip Owens NW0O, (owens@stout.atd.ucar.edu)

# 3210. Re: Vacuum Variable: UCSL-100?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971002172101.NAA16624@ladder02.news.aol.com>
Source record: 90384

>
>I have obtained a motorized Jennings vacuum variable that appears to be
>labelled UCSL-100. My ancient (1968) Jennings catalog doesn't list a
>UCSL-100 (but does list the UCSL-250, UCSL-500, etc.).
>
>

I'm pretty sure that you have a UCSL-1000. In addition to being stenciled on the glass, it's etched in the berylium on the inside. Take a look for it. The one I think it is was used in several military antenna tuners, the one with the big gear reduction and the limit switches was an RCA tuner, the one with the fork that was gear driven vertically and pulled a piece of music wire was a Collins product.

W4ZCB

# 3211. Re: crazy(!) duplexer question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3433e7d2.366303079@news.atl.bellsouth.net>
Source record: 90385

On Wed, 01 Oct 1997 17:33:10 -0500, Clif <avvid@onramp.net> wrote:
>sk wrote:
>>
>> Hi! I need a 1200 Mhz duplexer for a repeater. I have available a
>> Wacom 4 cavity 450 duplexer. What are my chances of being able to hack
>> this thing up and make it work on 1200???? Does anyone out there on
>> this vast planet of ours have any modifications to do such a thing?
>>
>> Thanks...
>>
>> 73,
>> Steve
>
>If you can figure out how to make them appx 1/3 of the length they are
>now, change the feed loops to 1/3 amd make the interconnecting cables
>1/3 then there you go. Sorta in the ballpark. That's why 1.2g cans are
>tiny. Seriously you would be better off buying some and selling the
>450's.

Well now, Steve's idea isn't as crazy as it seems. Realize that a
1/4-wave cavity at 432 MHz is a 3/4-wave cavity at 1296 MHz.
That'll look the same to the signals. The harness has to be redone,
but if you can tune the cavities *low* enough, they'll work just
fine.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3212. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3433cbf1.359164875@news.atl.bellsouth.net>
Source record: 90386

On Mon, 29 Sep 1997 09:06:45 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Matthew Francey wrote:
>>
>> >William E. Sabin wrote:
>> >> There is a "dot" matched filter, a "dash" matched filter and
>> >> matched filters for the spaces in-between (all of them integrate and
>> >> dump). These can be combined and decoded by algorithms. The code speed
>> >> can be "learned" by the processor.
>>
>> In reality, there is only a "dot" filter, and you have to make a more or
>> less arbitrary choice as to whether there is a signal present or not.
>> Which is why OOK (be it fixed-width or Morse) is far from optimal.
>
>In the first place, I never said that Morse code is "optimal" in any
>sense. I would appreciate it if you would not ascribe things to me that
>I have never stated.

Keep this in mind later on in this post.

>There are 5 intervals in Mores code:
>
>1) The dot interval
>2) The dash interval
>3) The interval between dots and dashes
>4) The interval between words
>5) The interval between sentences.

Actually, the five Morse elements are:

1) the dot element
2) the dash element
3) the intracharacter space element
4) the intercharacter space element
5 the interword space element

When using OOK modulation, the latter three elements
are unvoiced, IE they are represented by no signal energy.

>In any on-off keying system, we make the following decisions:
>
>1) Is the signal present?
>2) Is the signal absent?
>
>In any on-off type signal we assign a threshold level. Above the
>threshold the signal is presumed to be present. Below the threshold

>level the signal is presumed to be not present. Digital logic does
>exactly this all the time.
>
>If the signal is absent the threshold detector can be followed by an
>inverter that converts a "low" state to a "high" state. This high state
>can be integrated or timed so that the duration of the "signal absent"
>interval can be determined.

This is *not* matched filtering. A matched filter has an impulse
response which matches the impulse of the element. If we integrate
the signal energy from such a filter, we get an amplitude maximum
at the end of the element period. If we set our slicer to make the
decision at this point, we will have extracted the most usable
information about the element from the system. We *do not*
slice then filter.

But a zero energy element has no impulse around which we can
form a filter, and no energy to integrate to form the amplitude
peak to slice. Nor, with variable element length coding do we have
a clocking reference to decide when the element interval is over so
that we can perform the slice function at the proper time.

>In Morse code there are 3 "signal not present" intervals. As part of the
>Morse code translation by a computer we would like to be able to
>identify these three intervals. They contain valuable information about
>the Morse signal, especially when it is transmitted from a computer.

The space elements are essential parts of the code. Regardless of whether
a computer is involved or not, we must determine the presence or absence
of these elements in order to decode the message. But they are unvoiced,
we can't do matched filtering for them or integrate and dump the energy
representing them, since there is none.

Instead, we must *infer* their presence by the (apparent) lack of one of
the voiced elements, IE the dot or the dash. Thus 3/5ths of the information
necessary for Morse Code decoding must be regenerated from the (apparent)
absence of the other 2/5ths of the elements. This costs us a *minimum* decoding
penalty of 10*log(2/5)= 3.979 db compared to a modulation and coding which
voices energy for every element. The penalty is actually larger because we
*still* can't be sure which of the three unvoiced elements is implied by the
absence of one of the voiced elements until we *do* receive another voiced
element. Since Morse is not a synchronous code, this delay could be any
arbitrary length.

>We can do this by assigning a matched filter for each of these three
>intervals (after the logic inversion that I mentioned). These three
>filters, combined with the dot and dash filters, can then be sorted out
>by the computer and decoded, character by character (using a lookup
>table), word by word and sentence by sentence.

As noted above, we *cannot* assign a matched filter to the unvoiced
elements, there is no impulse to match.

>As I have said previously, a major problem is deciding the threshold
>level that we use to decide "signal present" and "signal not present".
>It depends on the signal to noise ratio. Computer algorithms are
>possible that calculate an optimum value for this threshold "on the
>fly".

The use of a matched filter maximizes the Hamming distance in signal space between the element and the background noise. But since we can't match filter Morse, we are left to assign an arbitrary slice value. Depending on the channel filter bandwidth we are using, this slice level can be very far from optimum, and we can't improve it in any systematic way.

>Also, the receiver design must be optimized for weak-signal Morse
>reception. One thing that we can take advantage of is the difference in
>the spectrum of a single frequency tone in the "signal present" state
>and the noise that lies in the "signal not present" state. DSP, combined
>with adaptive filtering and correlation techniques can be used for this.
>For example, suppose we adjust the receiver for a 500 Hz tone. A special
>correlator algorithm is then an excellent filter for that 500 Hz tone.

What we want is a channel filter which is the concatenation of the matched filter impulse responses for the code elements. This gives us the optimum filter assumed by the Shannon relation. But we can't do it, because we can't form matched filters for 3 of the 5 elements of Morse. Note that the highest modulating frequency for 20 WPM Morse is 8.33 Hz. Any filter wider than that will degrade SNR for the dot element, but even a filter that narrow is still too wide for the dash element, which has a maximum modulating frequency of 2.777 Hz. In actual mixed element transmission, the average frequency will be even lower than these maximum values. So using a 8.33 Hz channel filter will result in degraded SNR for all transmissions except endless strings of dots.

Note that the 500 Hz mentioned above is an *Intermediate Frequency*, it is *not* demodulated OOK Morse. As noted, the highest frequeny you get from demodulating 20 WPM OOK Morse is 8.33 Hz. Since humans can't hear frequencies that low very well, we've trained ourselves to make sense of the (AM) modulated carrier *directly* rather than demodulating the signal and listening to the modulation, as we would for analog voice for example. This costs us yet another 3 db because we must copy the double sided PSD rather than the single sided PSD since we're listening to the AM modulated carrier rather than to the modulation itself.

>Finally, I want to make a few things clear so that I will not continue
>to be misquoted, misunderstood and subjected to diatribe:
>
>1) Morse code is not, from a purely technical standpoint an optimal
>signalling method. On-off keying has a basic limitation regarding the
>signal to noise ratio and the determination of the threshold level.
>Also, the determination of the "dot" or "dash" and the three space
>intervals presents further problems.

Indeed that's true. What is also true is that your statement that we can form matched filters for the 5 Morse elements is false. We cannot, and that is one of the basic limitations which plague Morse as a weak signal method. Morse is always at a disadvantage to a uniform code because of this inability to match filter the signals.

>2) Nevertheless, I believe that CW operation is a valuable asset for
>Amateur Radio operations. There is more involved than purely technical
>merit. These factors involve the following:
>
>a) The long historical interest in CW. This is not the same as
>stick-in-the-mud refusal to accept change. That kind of diatribe belongs
>in the garbage can. There are a lot of hams who genuinely like CW, and I
>think that they have legitimate right also. These people pride
>themselves on the CW skills that they have acquired through long
>practice. I don't think that they (I include myself) want the opinions
>of some highly vocal opposition group shoved down their throats.

And most definitely vice versa. No one is saying you can't use Morse, only that you can't claim advantages for Morse that it does not possess. People routinely use even worse methods, analog voice for example, and few complain about that. It isn't *usage* of Morse which is an issue. It is the undeserved pedestal on which it has been placed that is at issue, particularly with regard to license examinations.

>b) It is a fact that CW, under weak signal conditions, can get through
>where others fail. There are two reasons for this. The xmit and rcv
>bandwidths are narrow, which *reduces* adjacent channel interference.
>Also, Shannon's equation supports the idea of a very slow message that
>is sent in a very narrow bandwidth. The SETI folks know all about this
>idea.

But Shannon's equation also tells us something else, and that is we can use a *larger* signal bandwidth to work in even weaker conditions. In fact, Shannon's relation tells us that if we desire to work at the theoretical minimum possible signal level, we have to employ signals of infinite bandwidth. But Shannon's relation *assumes* we are using a matched filter response, and thus a code which *allows* us to obtain a matched filter response. Morse doesn't, so Morse cannot even approach the Shannon limit. Thus your false statement about CW getting through where others fail is the crux of this matter. You yourself admitted above that OOK Morse is suboptimal, yet you persist in this false claim about its abilities. Sure, Morse can beat *some* other methods, but just as surely, it is soundly beaten by other methods.

>c) There are a lot of low-budget, low-tech QRP types world-wide who want
>to get started in Amateur Radio with simple gear that they put together.
>CW is an ideal vehicle for this.

I wouldn't call it ideal, certainly a FSK system is only a transistor and capacitor (or a varactor) across the frequency determining element away from OOK, yet it offers a 6 db improvement in information transfer over OOK. Using a code with uniform elements adds at least another 3.979 db

to that. Such uniform FSK codes *can* be decoded by ear provided they are sent slowly enough, IE at speeds comparable to typical Morse speeds. No one bothers to do it because machine decoders can do it so much faster, but one *could* do it if you wanted a minimalist QRP setup which would outperform OOK Morse.

>d) Regarding the testing of Morse for licensing: I think it should be
>retained in some minimal sense, say 5 wpm. Reason: it makes sense for
>Amateur Radio, for the reasons that I have mentioned.

You have given reasons why one might want to *use* OOK Morse, even though there are better alternatives, but you haven't given *any* reason why there needs to be a Morse speed test as part of a licensing exam. Usage of any modulation or coding is strictly optional for an amateur. The government recognizes that. And there are no speed tests as separate pass/fail elements for any other modulation technique or text encoding method. Only Morse is on this special pedestal. But there is no justification for it occupying that position in law. It serves no legitimate government licensing purpose anymore. (It once did, when amateurs were intermingled with government and commercial life safety stations who needed a way to tell amateurs to cease interfering with them, and only had Morse by which to do so. But that day is long gone.)

>The reason the
>military has eliminated it is *partly* because of the time and cost of
>training operators that can copy 25 wpm on a typewriter with no errors.
>When the person finishes his/her "hitch" they have to do it all over
>again to a new group. The other reasons are technological and I have no
>arguments about any of that. It is certainly simpler for an operator to
>bang the keyboard, then push a button that puts a completely error-free
>message through.

It is simpler, but more importantly, it can be faster, error free, and can operate in conditions where OOK Morse fails. It may also have LPI and jam resistance which OOK Morse cannot offer.

>e) Aside from all of that, I certainly believe that Amateurs should
>become involved in the more advanced technologies. I am certain that
>there are many operators who operate data modes and SSB and also enjoy
>operating CW. Why CW? Because they want to! Isn't that reaon enough? And
>they don't need to be belittled or bullied for it.

But the vice is definitely versa here too, Bill. Constantly repeating the Morse Myths, belittling the operators who have chosen not to use Morse for sound technical reasons, bullying amateurs and prospective amateurs to pass faster and faster Morse speed tests, etc, is why you have the sort of thread your comment generated. As long as the Morse Myths continue to be propagated as the dominant amateur belief, what would lead amateurs to try more advanced methods? Their elders are telling them that Morse gets through where all else fails. That's patently false, of course, but it takes a strong will to buck the dominant religious

belief, especially when it is backed by government force via the testing system. Thus it serves as a strong damper on technological progress, and sound technological education, in amateur radio.

Note carefully I'm saying nothing about *usage* of Morse. The only reason you need for that is because you want to, that's the very same reason someone may give for using AM phone, or running SSTV, or doing ATV, etc. But note very carefully that none of those activities has a burdening mythology, or separate pass/fail government tests associated with it. Use or non-use of any of those other techniques has no bearing on whether a license will be granted. Only Morse Code holds that unique position. But there is no good reason why it should.

Gary

Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3213. UK Web Page Directory

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: kama@zetnet.co.uk
Message-ID: <3433f206.7793088@news>
Source record: 90387

Looking for a UK based amateur radio web page?

Then visit the G7KPF UK Amateur Radio Quick Links page at

http://www.users.zetnet.co.uk/kama/hamlinks.htm

With over 600 UK links, including clubs, societies, individual ham's pages and
various commercial sites, you are sure to find what you're looking for.

You can also vote for your favourite UK AR site in the G7KPF Top Ten survey.

Looking forward to your visit....

73

Andy G7KPF

# 3214. Help PC Interface for IC-706Mk II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: evincent@mediom.qc.ca
Message-ID: <611798$6hl$3@wagner.videotron.net>
Source record: 90388

Any body have the pin out of IC-706MkII to connect the computer interface to the radio.

Where can I found the software to programm the IC-706MkII, original or sherware will be appreciate.

Thank you.
Eric VE2VXT Quebec City.

Conctact me via e-mail.

## 3215. WEFAX on a MJF interface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: albloc@aol.com
Message-ID: <19971002151501.LAA03698@ladder01.news.aol.com>
Source record: 90389

does anyone know what the start and stop frequencies are for the WEFAX satellites on 136-138MHz? i have recently bought a MFJ interface(1214PC) and i'm always receiving pictures that are leaning on there side, they also look as if they have fallen backwards on the screen. has anyone have any pointers or advice i should know about? i appreciate your help.

Austin Block(17)-soon to be a licensed amateur
Albloc@aol.com

## 3216. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34343272.5BE3@crpl.cedar-rapids.lib.ia.us>
Source record: 90390

Gary Coffman said:

> When using OOK modulation, the latter three elements
> are unvoiced, IE they are represented by no signal energy.

I did not say that they contained energy. I said they contain information. There is as much information in the interval between signals as there is in the signal itself. The "zero" is as important as the "one". You *must* try to remember that, if possible, in your zeal to promote your anti-CW agenda, which I'm not sure that I fully appreciate.

> This is *not* matched filtering.

If you invert a "zero" to a "one" you can make a matched filter for that interval. The idea of a time domain matched filter in this case is to estimate the *duration* of the zero in the presence of noise. This is one well known application of a certain kind of matched filter.

> Nor, with variable element length coding do we have
> a clocking reference to decide when the element interval is over so
> that we can perform the slice function at the proper time.

One function of the processor is to determine the clock, just as in many kinds of serial data tranmission in a noisy channel.

Sabin said >>:

>>In Morse code there are 3 "signal not present" intervals. As part of >>the
>>Morse code translation by a computer we would like to be able to
>>identify these three intervals. They contain valuable information about
>>the Morse signal, especially when it is transmitted from a computer.

>The space elements are essential parts of the code. Regardless of >whether
>a computer is involved or not, we must determine the presence or absence
>of these elements in order to decode the message. But they are unvoiced,
>we can't do matched filtering for them or integrate and dump the energy
>representing them, since there is none.

Nobody said they were "voiced". But they are important pieces of information. The "energy", to use the word loosely, is in the inverse of the "no signal" state. You are absolutely off-base in this matter.

>Since Morse is not a synchronous code, this delay could be any
>arbitrary length.

Morse sent by computer is synchronized at the sending end. It can be synched at the receiver adaptively. You are wrong about that also. Coherent CW is one example that uses accurate clocks at both end. The

receive clock is synchronized by the noisy signal.

>>We can do this by assigning a matched filter for each of these three
>>intervals (after the logic inversion that I mentioned). These three
>>filters, combined with the dot and dash filters, can then be sorted out
>>by the computer and decoded, character by character (using a lookup
>>table), word by word and sentence by sentence.

>As noted above, we *cannot* assign a matched filter to the unvoiced
>elements, there is no impulse to match.

Once more, the "impulse" is the inverted "no-signal" interval.

>>As I have said previously, a major problem is deciding the threshold
>>level that we use to decide "signal present" and "signal not present".
>>It depends on the signal to noise ratio. Computer algorithms are
>>possible that calculate an optimum value for this threshold "on the
>>fly".

>The use of a matched filter maximizes the Hamming distance in signal >space
>between the element and the background noise.

I know as much about matched filters as you do. In fact, I'm beginning
to think maybe I know a lot more. There are applications that use
sophisticated algorithms for estimating time durations in the presence
of noise. These systems synch a clock from the noisy signal.

My previous remarks on this subject are correct. You are absolutely
wrong in saying that Morse cannot be match filtered. Your understanding
of this subject is not as encyclopedic as you think it is.

>>Also, the receiver design must be optimized for weak-signal Morse
>>reception. One thing that we can take advantage of is the difference in
>>the spectrum of a single frequency tone in the "signal present" state
>>and the noise that lies in the "signal not present" state. DSP, combined
>>with adaptive filtering and correlation techniques can be used for this.
>>For example, suppose we adjust the receiver for a 500 Hz tone. A special
>>correlator algorithm is then an excellent filter for that 500 Hz tone.

>What we want is a channel filter which is the concatenation of the >matched
>filter impulse responses for the code elements. This gives us the >optimum
>filter assumed by the Shannon relation. But we can't do it, because we
>can't form matched filters for 3 of the 5 elements of Morse.

More of the same baloney. We want the best estimate of the time duration
of *all* of the various intervals, as corrupted by noise. The noise
power is the same, "signal present" or "signal not present".

> Note that
>the highest modulating frequency for 20 WPM Morse is 8.33 Hz. Any
>filter wider than that will degrade SNR for the dot element, but even a
>filter that narrow is still too wide for the dash element, which has a
>maximum modulating frequency of 2.777 Hz. In actual mixed element
>transmission, the average frequency will be even lower than these

>maximum values. So using a 8.33 Hz channel filter will result in >degraded
>SNR for all transmissions except endless strings of dots.

The filters are software filters that are adapted to the code rate. The ensemble of filters is for the ensemble of time durations and also for the determination of "signal present" and "signal not present". An adaptive threshold detection is also important.

>Note that the 500 Hz mentioned above is an *Intermediate Frequency*,
>it is *not* demodulated OOK Morse.

More baloney. It is not an "intermediate" frequency. A software correlator can detect a weak 500 Hz tone in the presence of noise in the output of a *product detector* which, by the way, is an excellent detector for a Morse signal.

>As noted, the highest frequeny
>you get from demodulating 20 WPM OOK Morse is 8.33 Hz.

What kind of nonsense is this? No one listens to these frequencies, they listen to the beat note from a product detector. A computer can do the same thing, monitor the audio beat note out of a receiver.

>>Finally, I want to make a few things clear so that I will not continue
>>to be misquoted, misunderstood and subjected to diatribe:
>
>>1) Morse code is not, from a purely technical standpoint an optimal
>>signalling method. On-off keying has a basic limitation regarding the
>>signal to noise ratio and the determination of the threshold level.
>>Also, the determination of the "dot" or "dash" and the three space
>>intervals presents further problems.

>Indeed that's true. What is also true is that your statement that we
>can form matched filters for the 5 Morse elements is false.

More baloney. It is not false.

> that is one of the basic limitations which plague Morse
>as a weak signal method. Morse is always at a disadvantage to a
>uniform code because of this inability to match filter the signals.

More baloney. A set of different matched filters can be sorted out by the processor by means of "voting", which is a common technique for separating intervals of different duration. Try to remember that the main exercise is two things:

1) Is the signal present or not present?
2) What are the durations of the constituents of the signal?

>>2) Nevertheless, I believe that CW operation is a valuable asset for
>>Amateur Radio operations. There is more involved than purely technical
>>merit. These factors involve the following:
>>
>>a) The long historical interest in CW. This is not the same as

>>stick-in-the-mud refusal to accept change. That kind of diatribe >>belongs
>>in the garbage can. There are a lot of hams who genuinely like CW, and >>I
>>think that they have legitimate right also. These people pride
>>themselves on the CW skills that they have acquired through long
>>practice. I don't think that they (I include myself) want the opinions
>>of some highly vocal opposition group shoved down their throats.

>And most definitely vice versa.

I do get a little tired of guys like you who keep bellyaching about the
problems with Morse code and refuse to see its utility in the practical
world of Amateur Radio communication. The attitude is that if it isn't
technologically wonderful, it is useless and has to be thrown out. Bull!

As a matter of fact, the superiority of data modes requires a processor
of some kind. But you like to compare this with a human Morse operator.
Put the processor to work on Morse and ***SOME*** of the difference
disappears.

>No one is saying you can't use Morse,

Gee, thanks. That's big of you.

>only that you can't claim advantages for Morse that it does not >possess.

Find one statement of mine where I claimed any technical advantage. Just
one.

It is the undeserved pedestal on which it has been placed that
is at issue, particularly with regard to license examinations.

The "pedestal" is your creation. Did I say anything about a pedestal? I
do believe in Morse for licensing, say 5 wpm. To repeat, I think it is
*right* for ***AMATEUR RADIO***.

>>b) It is a fact that CW, under weak signal conditions, can get through
>>where others fail. There are two reasons for this. The xmit and rcv
>>bandwidths are narrow, which *reduces* adjacent channel interference.
>>Also, Shannon's equation supports the idea of a very slow message that
>>is sent in a very narrow bandwidth. The SETI folks know all about this
>>idea.

>But Shannon's equation also tells us something else, and that is we can
>use a *larger* signal bandwidth to work in even weaker conditions.

I don't need any condescending lectures from you about Shannon. I know
as much about that subject as you do. Probably more.

>>c) There are a lot of low-budget, low-tech QRP types world-wide who >>want
>>to get started in Amateur Radio with simple gear that they put >>together.
>>CW is an ideal vehicle for this.

>I wouldn't call it ideal,

I don't care what you call it, from a technical perspective. My statement was that under the conditions in the above paragraph it is an ideal way to get a leg up on beginner-level radio communication. As usual, you want to twist it around and try to make it look like I said something else.

>>d) Regarding the testing of Morse for licensing: I think it should be >>retained in some minimal sense, say 5 wpm. Reason: it makes sense for >>Amateur Radio, for the reasons that I have mentioned.

>>e) Aside from all of that, I certainly believe that Amateurs should >>become involved in the more advanced technologies. I am certain that >>there are many operators who operate data modes and SSB and also enjoy >>operating CW. Why CW? Because they want to! Isn't that reaon enough? >>And >>they don't need to be belittled or bullied for it.

Let me make one thing clear. I never made any claims about CW being ideal, or anything close to that. But I do get fed up with this kind of condescending, patronizing and mindlessly faultfinding lecturing. I am not impressed with your "superior" knowledge on this topic. For example, you keep saying over and over that the duration of a "no signal present" state cannot be estimated in an optimal manner. You just simply do not know what you are talking about. Also, you deliberately twist and misinterpret my carefully balanced and impartial statements to suit your own narrow point of view. That is your privilege, I guess. It is still a free country and you can do just about anything you like. I really don't care, except that I don't appreciate the "smear job" whose main purpose is to discredit by any means that can be concocted.

Bill W0IYH

# 3217. Circuit for Xtal Osc with Divider ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bccf80$363d93e0$7bdc24ca@not-applicable>
Source record: 90391

I am working on a special project where I need a crystal (or similar highly stable) osc which divides down to give me a usable voltage change precisely once per minute. Has anyone got a simple circuit?
Garth ZL4PY

# 3218. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: ssouva@killspam.dreamscape.com
Message-ID: <3433c305.16868318@news.dreamscape.com>
Source record: 90392

On Wed, 01 Oct 1997 03:52:26 GMT, codeman@gj.net wrote:

<big snip>
>>Ross, that's strange because I get the following when I check at UALR,
>>Not only does the name match, but his date of issuance matches what
>>he claimed just about too. Suggest you try the UALR site in the
>>future.
>
>>CALL "KC7ZFP" NAME "" CITY "" STATE "" ZIP "" LIMIT "0100"
>
>>Program v1.3 - 8 March 1997 -- Last database update 1997-09-29 11:02
>
>
>Thanks everyone, I will discontinue using Buckmaster to look up Call
>sign vs Name.. Sorry for any discomfort.

That is odd. I find this database to be quite old. It is behind
despite what it tells you is the last update to the database (Last
database update 1997-10-01 11:07). For instance, I upgraded to
Amateur Extra on 03 Jun 1997 and it still shows me as an Advanced.

My time is spent on QRZ. Check them out at: www.qrz.com

Scott Souva
KG2GT

# 3219. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <3433C7D8.73723531@direct.ca>
Source record: 90393

You can also get the data sheet in PDF from Analog's web site (www.analog.com). This is a neat chip, but you're not going to get very far without the information on it...

...laura

# 3220. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000210972223520001@news.primenet.com>
Source record: 90394

Has anyone else had the interest to interface this chip to a Mac serial or printer or ethernet port? I'm not thrilled about doing it myself since I have a lot of other stuff going on. Never have seen anything in QEX or other sources about use with Mac.

Hardware plus C source code routines would be the goal.

Rob.

# 3221. VHF Communications Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: Michael J Wooding <g6iqm@g6iqm.demon.co.uk>
Message-ID: <xJAJsDATT$M0Ewer@g6iqm.demon.co.uk>
Source record: 90395
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

VHF Communications 3/1997 has now been shipped to all current subscribers.

For more information on the contents of this issue, or for subscription information take a look at:

http://www.vhfcomm.co.uk

Regards ... Mike

--
Michael J Wooding G6IQM email: michael.j@vhfcomm.co.uk
World Wide Web site http://www.vhfcomm.co.uk
KM Publications, 5 Ware Orchard, Barby, Nr.Rugby, CV23 8UF, UK
Tel: (0)1788 890365 Fax: (0)1788 891883
VHF Communications Magazine - Especially covering VHF, UHF and Microwaves

## 3222. Need e-mail Addr for Amplifiers Reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: k3ky@juno.COM
Message-ID: <19971002.054850.11894.1.k3ky@juno.com>
Source record: 90396

I tried recently to subscribe to this one, but no response
so far. I must have the address or the syntax of the
subscribe message wrong. Sent to amps-request@
contesting.com with the word "subscribe" in text body
and no subject line. Any other ideas? Maybe one that
starts out with "majordomo" or "listserv"? Thanks, 73

David Sinclair K3KY
e-mail: k3ky@juno.com

## 3223. TRX data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: maurizio.CHalp@ocwi.COM
Message-ID: <c=IT%a=master400%p=olivetti%l=OPCO01S01-971002132528Z-7374@opco01s01.ocwi.com>
Source record: 90397

I would appreciate it if you could give the data of the
parameter (MSD, Local oscillator noise, Blocking, Dinamic range)
mesured on the news HF rtx or rx.

Thanks in advance

73 de IW1DZD

Maurizio Chalp

e-mail address: maurizio.chalp@ocwi.com

# 3224. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34344E4F.2034@pop.removethistomailme.net>
Source record: 90398

laura halliday wrote:
>
> You can also get the data sheet in PDF from Analog's web
> site (www.analog.com). This is a neat chip...
>

No kidding. I wish I'd known about the 7008 before I hand-wired a 68-pin Qualcomm PLCC to a surface-mount Harris 12-bit DAC. :-( Had no idea they were making integrated DAC/DDS chips!

Anybody want to buy 4 Q2334-50's in prime condition (had to buy 5 to meet Qualcomm's $150 minimum order)?

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

## 3225. [???] six-list listserv

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-02 00:00:00 UTC
From: az736@freenet.uchsc.edu
Message-ID: <6112j8$5ih@tali.UCHSC.edu>
Source record: 90399

Did something happen to the six-list listserv?

I get nothing in from it anymore, and a posting
to it was bounced.

Is it dead? -- like the band itself.... <g>

73
Jonesy W3DHJ

--
Marvin L Jones | Denver, Colo: az736<AT>freenet.uchsc.edu
Jonesy | Gunnison, Colo: jonz<AT>rmi.net
W3DHJ DM68mn | CompuServe: 72103,443
| snail-mail: 81230-1371

# 3226. Re: Adjusting for Signal to Noise Ratio ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: la8ak@online.no
Message-ID: <34352be1.1165124@news.online.no>
Source record: 90314

On 30 Sep 1997 02:06:00 GMT, "Anthony D. Schneider"
<Daveschneider@worldnet.att.net> wrote:

>you will need to use a vtvm and measure the noise with out carrier , then
>insert a carrier at about .2 to about 1 microvolt and measure where the
>"quieting " is 20 db below the noise level without carrier. a level of .3
>uv for 20 db quieting is good......adjust the tuned circuits for the best
>quieting
>
>Anthony Levand <alevand@FoxValley.net> wrote in article
><01bccd2a$d62b1740$50bae3cf@default>...
>> I have a Yeasu 2 meter radio with a dual gate MOSFET rf amplifier. I can
>> adjust the first tuned tranfomer for maximum gain, how would I find the
>> optimum setting for best signal to noise ratio? I can see the signal and
>> the noise riding on top in the osciloscope. Can I replace the mosfet with
>a
>> gasfet for better sensitivity?
>>
>> Tony, AA9CC
>>
"WRONG"
Connect a signal generator and adust the level to somewhere the audio
noise increases fast when generator output level is reduced. Some
technicians prefer to use some weak tone modulation, 500Hz tone and
0.5kHz deviation.
It is very easy to TUNE the receiver RF stages and reduce signal
generator level as signal to noise is improved.

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3227. Re: Info requested for a 2N3375

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971003192900.PAA07036@ladder01.news.aol.com>
Source record: 90315

>>
>>Very nice obsolescent device. Nice because the stud is isolated from the
>> collector.
>I would rather say:
>very nice because the stud is isolated from emitter.
>>

Feel free, say anything you want. I can ground an emitter and let it's stud stick outside of the shielding for cooling and still keep the RF inside the shield. When the stud is connected to the collector, as so many devices are, it's tougher.

Is there some particular reason you keep doing this?

W4ZCB

# 3228. Re: Intrepid Homebrewer!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <343556fd.0@newshost.pcug.org.au>
Source record: 90316

wmeara@erols.com (Bill Meara ) wrote:
>My fellow solder melters:
>
>Lately I've been looking through a large pile of old ham radio
>magazines, looking for interesting homebrew projects.
>
>The November 1963 QST has an article that caught my eye. Timothy
>Hulick, W9MIJ, described a very neat little solid state 7 mc.
>homebrew Handi-Talkie. Superhet rx with a 455 kc if. Very nice job.
>

I also have a copy of that article and found it interesting. However these days I wouldn't be inclined to build an AM hand held rig with a superhet receiver. Instead, I'd go for a direct conversion job with a DSB transmitter included. This would make it more compatible with modern equipment and allow much further distances to be covered.

As for the frequency control, either a JA-style wide-swing "Super VXO" or a 3.58 Mhz ceramic resonator VXO multiplied by two would be the simplest approach.

I wonder if anyone has tried building hand held DSB/SSB gear for 7 MHz and the results achieved. I remember seeing advertisements for commercial handheld rigs covering 40 metres (Mizuho, Tokyo Hy-power?) in one of the American magazines.

Certainly the ideal project to be thinking about right now would be a handheld DSB rig for 10 metres - the antenna could be made fairly efficient, and long distance QSOs should be possible. Also, it should be easy to cover at least a 100kHz tuning range if using a VXO multiplied up from a lower frequency.

73,

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

# 3229. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <3434D391.117A@taxes.net>
Source record: 90317

I'd be interested if you've got a working reference design.

I've been pretty much out of touch with the popular amateur literature
for nearly a decade, and don't have a good library I can visit.
So I'd need a little hand-holding, at least in terms of finding
a schematic and software.

Jim N6OTQ

# 3230. Re: Info requested for a 2N3375

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: la8ak@online.no
Message-ID: <34352d7b.1574974@news.online.no>
Source record: 90318

On 2 Oct 1997 01:17:46 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>>
>>I've got a couple 2N3375 transistors (TO-60 case) but can't find any
>>data on them in my '91 Handbook. If these are RF power xsistors
>>could someone provide the P-in, P-out, Gain, Vcc, and freq'y range?
>>
>>
>
>Very nice obsolescent device. Nice because the stud is isolated from the
> collector.
I would rather say:
very nice because the stud is isolated from emitter.
>
>28 volt NPN 400 MHz device
>Vceo 40 volts
>Vcb 65 volts
>Ic 1.5 amperes
>
>I use it as an amplifier for my 2 tone test gear for intermod tests at 14 MHz,
> just because of the stud isolation. (EVERYTHING is quadruple shielded and that
> helps) At that frequency, I get 19 dB of gain. At 100 MHz, minimum gain is
> rated at 8.5 dB.
>
>Holding it face to you, with the center pin on top, collector is to the right,
> emitter to left, and the one on top is the base.
>
>W4ZCB

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3231. Re: Need schematic for HW-8: RECEIVED, THANKS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Nicholas R Kennedy <nkenned@entergy.com>
Message-ID: <34356629.3740@entergy.com>
Source record: 90319

Received a couple of helpful responses in short order and now have the schematic. Thanks.

Nick, WA5BDU

## 3232. WJ-8718

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: "Larry L. Limle" <larry_l_limle@aud.alcatel.com>
Message-ID: <3434FC75.2@aud.alcatel.com>
Source record: 90320

Need service manual

Larry Limle KC5IRX

# 3233. Re: Need Plans for Homebrew BA Xmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Radio Randy <rjones@plix.com>
Message-ID: <3435D21D.362@plix.com>
Source record: 90321
Cross-posted to: rec.radio.amateur.boatanchors;,rec.radio.amateur.homebrew

Steve Robertson wrote:
>
> Hi,
>
> I want to build a boatanchor CW transmitter. Medium power (25 - 150
> watts) maybe an oscillator and a 6DQ6 or a 6146 or a pair of 6L6s or
> 807s, crystal control, pi-network output, and doesn't need coil forms
> that I can't get. Nothing too fancy. I've got the power supply iron.
>
> I'm sure there have been plans for many such transmitters but can
> someone point me to a URL for a good one? Or point me to a book that is
> still available or to an old QST/73/CQ article?
>
> Thanks in advance!!
> 73 de Steve, KE4OH
> --
> To get my real e-mail address, remove the characters ".xxx" at the end
> of my address.

Contact the ARRL and see if they have any 50-60's QST View CD-ROM's
available, yet. I imagine you will find pictures and construction plans
in one of them.

73, Radio Randy

# 3234. Re: WEFAX on a MJF interface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: matjoao@ci.ua.pt
Message-ID: <6137vj$oj5$3@news.ua.pt>
Source record: 90322

Albloc (albloc@aol.com) wrote:
: does anyone know what the start and stop frequencies are for the WEFAX
: satellites on 136-138MHz? i have recently bought a MFJ interface(1214PC) and

Try this link:

http://ourworld.compuserve.com/homepages/HFFAX/

Tons of information on WXSATELITTE link.

--

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~Oo.
----- -----
\ / Joao Martins at Universidade de Aveiro
\ / Searching for the TRUTH
The X Files
/ \ Internet: matjoao@ua.pt
/ \ URL: http://sweet.ua.pt/~matjoao
----- ----- Phone: +351936548593
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

# 3235. Re: WE-SAt receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: matjoao@ci.ua.pt
Message-ID: <6139b7$pon$1@news.ua.pt>
Source record: 90323

Dennis Erwin Thurlow (geosynq@antispam.trader.com) wrote:
: > Anyone have schematics for WE-sat 137MHz APT homebrew receiver?

: Anyone have a glossary with APT in it? I see it here all the time, but can't
: find a definition anywhere.
: --
: Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
: Elder - Westminster Presbyterian
: TRA #2693
: N9VEM

Just look at this link:

http://ourworld.compuserve.com/homepages/HFFAX/

--

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~Oo.
----- -----
\ / Joao Martins at Universidade de Aveiro
\ / Searching for the TRUTH
The X Files
/ \ Internet: matjoao@ua.pt
/ \ URL: http://sweet.ua.pt/~matjoao
----- ----- Phone: +351936548593
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

# 3236. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <343512A6.1D43@pop.removethistomailme.net>
Source record: 90324

Tim wrote:
>
> John Miles wrote:
>
> > No kidding. I wish I'd known about the 7008 before I hand-wired a
> > 68-pin Qualcomm PLCC to a surface-mount Harris 12-bit DAC. :-( Had no
> > idea they were making integrated DAC/DDS chips!
> >
> > Anybody want to buy 4 Q2334-50's in prime condition (had to buy 5 to
> > meet Qualcomm's $150 minimum order)?
>
> John, I might take one, wasn't that the chip used in the 73 Article
> "Techno Wizzy" DDS?
>
> Tim, ka8ddz

Not sure, I never saw that article. I ordered them for an experimental project. I wouldn't recommend the Q2334 for any new designs; it works great and is easy enough to get running, but the AD7008 would be *much* easier to use due to its integrated DAC.

If you like, give me your addr, and I'll drop one in the snail mail to you gratis. I definitely don't need 4 spares of a chip I have no intention of using in anything else.

-- jm (de KE5FX)

---
Note: My E-mail address has been altered to avoid spam
---

## 3237. Serial port demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: kc8wf <b757@concentric.net>
Message-ID: <01bcd038$322a24e0$84869bcf@crc3.concentric.net>
Source record: 90325

Can someone help me figure out how a serial demodulator works. This demodulator is a simple device which plugs into the serial port. Its made using a OP-AMP (see - www.accessone.com/~tmayhan/schem.htmand - for schematic), and apparently takes the audio input signal from the radio, changes it into a varying square wave, and outputs it to pin 6 of the serial port .

My question is how does the software pull out the information, and how is it that the software can monitor pin 6 and not use the normal input pins of the serial port, to receive data?

Many thanks,
Simon (KC8WF)

# 3238. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd055$458b83e0$0100005a@wa6vse>
Source record: 90326

John Miles <jmiles@pop.removethistomailme.net> wrote in article
<343512A6.1D43@pop.removethistomailme.net>...
> Tim wrote:
> >
> > John Miles wrote:
> >
> > > No kidding. I wish I'd known about the 7008 before I hand-wired a
> > > 68-pin Qualcomm PLCC to a surface-mount Harris 12-bit DAC. :-( Had no
> > > idea they were making integrated DAC/DDS chips!
> > >
> > > Anybody want to buy 4 Q2334-50's in prime condition (had to buy 5 to
> > > meet Qualcomm's $150 minimum order)?
> >
> > John, I might take one, wasn't that the chip used in the 73 Article
> > "Techno Wizzy" DDS?
> >
> > Tim, ka8ddz
>
> Not sure, I never saw that article. I ordered them for an experimental
> project. I wouldn't recommend the Q2334 for any new designs; it works
> great and is easy enough to get running, but the AD7008 would be *much*
> easier to use due to its integrated DAC.
>
> If you like, give me your addr, and I'll drop one in the snail mail to
> you gratis. I definitely don't need 4 spares of a chip I have no
> intention of using in anything else.
>
> -- jm (de KE5FX)
>
> ----------------------------------------------------
> Note: My E-mail address has been altered to avoid spam
> ----------------------------------------------------

Analog Devices has some newer, more power-efficient DDS chips
with integrated DACs ... check their web page ... the 7008 is a bit
on the elderly and power hungry side compared to the new ones.

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3239. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Patrick Keogh <keogh@netnet.net>
Message-ID: <613p5b$h9c$1@news.inc.net>
Source record: 90327
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Wow...why do people do things like replacing sweep tubes with 6146's!

I just purchased a new-old-stock matched pair of Sylvania 6HF5's from Antique Electronic Supply of Tempe, Az. Seems that they have lots of already matched pairs in warehouse bins...they did not charge me extra for matching (I asked the salesman over the phone if he could check stock to see if he had Sylvania...these were the matched pairs). Price was $34.00 with shipping. Not bad considering real 6146B's are twenty bucks each.

I would recommend replacing the 6146's with the 'HF5's only if you are experienced with such surgery and are willing to track down the sockets for the 'HF5's (this may be more difficult). Neutralizing a Swan of this vintage is a little tricky also.

Good luck...don't get in too deep. Remember, if all else fails, you still have a fine receiver!

Pat Keogh
WB9GKZ Green Bay, WI
keogh@netnet.net

# 3240. Re: Circuit for Xtal Osc with Divider ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971003213846.19196C-100000@oso.slonet.org>
Source record: 90328

The easiest and cheapest way to obtain one per second pulses is to obtain an old battery powered wall clock. A large signal can be found driving the sweep second hand. Of course the chip can be dug out if necessary.
Cliff K7RR

# 3241. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Radio Randy <rjones@plix.com>
Message-ID: <3435D145.B7E@plix.com>
Source record: 90329

Mike L Abrams wrote:
>
> I need a good Antenna that will work in a moblehome with metal siding
> it need to be low so it is hide so the other home owner can not see
> it. I heard that a J-pole would not work up next to metal siding???
> I want to use this with the 2meter I have had my call sign for about
> two week's & wanting to get on the air when my raido get here
> thanks for any help
> 73 mikea kc7zfp

Thanks to Lou for his help with Mike's problem. It was the 1 response out of about 6 that dealt with Mike's question and not his legitimacy.

Mike, you didn't mention if you were in a rural or suburban location. If repeaters are within about 5-10 miles of your QTH, a handheld, near a window will work, just fine. Other options are the Larsen on glass antenna which can be stuck to a window and will work well with local repeaters.

Hope this helps.

73, Radio Randy

# 3242. 50 KC Xtal Needed!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Stu Cohen <stucohen@gte.net>
Message-ID: <611pu7$6f8$1@gte2.gte.net>
Source record: 90330

Does anyone have a 50 KHz xtal I could purchase? This is for the calibrator circuit in a National HRO-500 receiver. The calibrator is a simple modified Pierce oscillator, and the xtal is, I beleive, in an HC-6/U type holder. Any holder would do; I could adapt the xtal.
Thanks and 73....Stu, N1SC (Oregon)

# 3243. Re: Super VXO from Japan

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <VOSo+CAeKNN0EwSi@ddwyer.demon.co.uk>
Source record: 90400

In article <19971001010701.VAA28020@ladder01.news.aol.com>, Five13
<five13@aol.com> writes
>What would happen if two x-tals in different frequencies, say
>7.04 and 7.10 Mhz?
>
>WB1Y
>Yuki Fujita
>Five13@aol.com
>http://member.aol.com/WB1Yuki/index.html

The equivilent circuit provides information on how far a crystal pulls.
The mechanical construction of the crystal determines the equivilent
circuit.
A flat rather than a planoconvex crystal will pull further because the
Inductance to equivilent series capacitance ratio is lower.
Unfortunately a flat crystal has to be bigger in diameter than a
contoured crystal. A 1MHz crystal only just fits in the standard holder
therefore it has to be heavily contoured. A fundemental 20Mhz crystal
has lots of room therefore it is flat, and should pull further in
fractional terms, (overtones pull less anyway) . For maximum pulling the
crystal should be pulled above and below series resonance there are more
spurious responses above series resonance , another and seldom realised
reason for operating below series resonance.
The crystal reactance at a particular frequency may be "diluted" by
series or shunt reactance/resistance to increase pulling clearly this
will also reduce the stability. Two crystals at the same frequency will
pull further for the same reason, the reactance will halve. Each crystal
will still be a seperate resonator . Parallel BT cut crystals with
parabolic temperature coefficients have been employed to temperature
compensate each other.
In 1947 Marconi employed a VCXO by Mortley for direct broadcast FM the
flat crystal was carefully designed for minimum spurious by employing
energy trapping this technique was re-discovered and enabled monolythic
crystal filters to be constructed.

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

## 3244. Intrepid Homebrewer!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3434ce8b.178558099@news.erols.com>
Source record: 90401

My fellow solder melters:

Lately I've been looking through a large pile of old ham radio magazines, looking for interesting homebrew projects.

The November 1963 QST has an article that caught my eye. Timothy Hulick, W9MIJ, described a very neat little solid state 7 mc. homebrew Handi-Talkie. Superhet rx with a 455 kc if. Very nice job.

What I found most interesting about the article was the circumstances under which Tim built and tested his rig. He built it while he was a Midshipman at the U.S. Naval Academy! (Those are some busy folks.) Not only that, he notes that "Unfortunately I was unable to get much use out of it while at home on leave, so I took the rigs with me to Penascola and Jacksonville, Florida and with the aid of W4NEK, gave them some trial distance tests at the naval air station where I as undergoing my introduction to naval aviation." FB OM! That's true dedication!

I did a QRZ callsign search for Tim. I found an Extra class ham with that name listed as W9QQ. I'll bet that's him. If anyone knows him, please pass along my congratulations on a FB HB effort.

73 de Bill N2CQR

# 3245. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Vytautas Mickevicius <ke@kaunas.omnitel.net>
Message-ID: <3434E813.7831@kaunas.omnitel.net>
Source record: 90402
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

David Stockton wrote:

> Find the descriptions (by Pat Hawker, G3VA) of the work done by Colin
> Horrabin on high dynamic range receiver building blocks. With things
> like these SD5000 based mixers, the performance of the 7360 can be more
> than threatened. Medium power RF transistors in feedback configurations
> offer marvellously linear gain. The current limitation is the
> non-linearity of the actual quartz in crystal filters. None of these
> things are particularly recent. Rafuse's paper in the mid 1960s showed

You can try to linearise 7360 with some negative feedback, too!!!

The main benefit using of 7360 in mixer configuration is from fact
that it always works while being in it's most LINEAR range - 100% of
time!

On contrary - almost all other devices used in mixers circuits
are driven from its best linearity point (at least - for a little
fraction of time) by heterodyne and much smaller interferences can
distort
useful signal at these moments. No matter what devices are used -
linearised or not, bipolars, FET's, or tubes, no matter - how many
gates or grids are used for mixing. All they are in NONLINEAR region
at these moments!
Brute force can help - you must feed mixer with plenty of
heterodyne - to ensure that any interference will not counterweight
hetrodyne's action. Fast switchers can minimise fraction of
non-linearity time.

Sometimes this works, sometimes not - as in modern multi$$$ boxes for
hams...

7360 uses beam deflection for heterodyning - this doesn't act on
linearity.
Just pure mathematical multiplying - so you can get maximum for nothing
(almost),
except that you'll generate some heat and light...
And if you like brute force - 4CX250 (four pieces) in double balanced
configuration is the best solution...

Xcuse - if I was speaking abt well-known things. I just pointed to one
aspect
of the problem, and agree 100% (almost ;^) with you, oldtimers,
elsewhere.

Had a great pleasure to read!

It seem's I'm off-topic a bit ...
73, Vytas LY2PU

# 3246. Use Excel with Quattro Pro

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <34345435.2BCA@lafn.org>
Source record: 90403

Every so often I see an electronic design aid implemented with
EXCEL spreadsheet. I only own Quattro Pro spreadsheet but have been told
there are macros or other schemes that allow Quattro Pro to execute
EXCEL design tools.

I am looking for those macros or other schemes allowing Quattro Pro to
run EXCEL design aids. Also looking for sites with RF and Audio design
aids built with EXCEL.

Thanks for any thoughts.
--

_____________________________________
Dave Shalita,
af389@lafn.org
Van Nuys, CA

# 3247. Re: Circuit for Xtal Osc with Divider ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <RM6g1jAbKJN0EwT6@lfheller.demon.co.uk>
Source record: 90404

In article <01bccf80$363d93e0$7bdc24ca@not-applicable>, Garth Ball
<jira@deepsouth.co.nz> writes
>I am working on a special project where I need a crystal (or similar highly
>stable) osc which divides down to give me a usable voltage change precisely
>once per minute. Has anyone got a simple circuit?
>Garth ZL4PY

What do you mean by "precisely"?

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3248. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <34345bf5.1261792@news.zippo.com>
Source record: 90405

On Thu, 02 Oct 1997 20:45:51 -0500, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>laura halliday wrote:
>>
>> You can also get the data sheet in PDF from Analog's web
>> site (www.analog.com). This is a neat chip...
>>
>
>No kidding. I wish I'd known about the 7008 before I hand-wired a
>68-pin Qualcomm PLCC to a surface-mount Harris 12-bit DAC. :-( Had no
>idea they were making integrated DAC/DDS chips!
>
>Anybody want to buy 4 Q2334-50's in prime condition (had to buy 5 to
>meet Qualcomm's $150 minimum order)?
>
>-- jm
>
>-----------------------------------------------------
>Note: My E-mail address has been altered to avoid spam
>-----------------------------------------------------

Harris also makes NCO's , numerically controlled oscillators,
if any one is interested.
Steve Carlisle

# 3249. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <343522B1.5597@flash.net>
Source record: 90406

John Miles wrote:

> No kidding. I wish I'd known about the 7008 before I hand-wired a
> 68-pin Qualcomm PLCC to a surface-mount Harris 12-bit DAC. :-( Had no
> idea they were making integrated DAC/DDS chips!
>
> Anybody want to buy 4 Q2334-50's in prime condition (had to buy 5 to
> meet Qualcomm's $150 minimum order)?

John, I might take one, wasn't that the chip used in the 73 Article
"Techno Wizzy" DDS?

Tim, ka8ddz

## 3250. Military tone-squelch vs. CTCSS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: "Hans Sundkvist"
Message-ID: <612m1n$k7k@drn.zippo.com>
Source record: 90407
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.scanner

I am wondering if a modern low band VHF-radio with CTCSS would be compatible with military radios (e.g. prc25, prc77) that uses 150 Hz tone-squelch?

The closest CTCSS-frequency seems to be 151.4 Hz. Will that be close enough to open the squelch on the military radio?

73 de SM3PXG,
Hans Sundkvist | hans.sundkvist
Uppsala | @pts.se
Sweden |

# 3251. Re: Military tone-squelch vs. CTCSS ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: parnass@marconi.ih.lucent.com
Message-ID: <6130f2$1m8@ssbunews.ih.lucent.com>
Source record: 90408
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.scanner

In article <612m1n$k7k@drn.zippo.com>, <Hans Sundkvist> wrote:

>I am wondering if a modern low band VHF-radio with CTCSS
>would be compatible with military radios (e.g. prc25, prc77)
>that uses 150 Hz tone-squelch?...

US military FM transmissions employ wider deviation than
(USA) VHF land mobile stations and are too wide for
land mobile receivers with decent IF filtering.

The squelch on a narrow band FM receiver often slams shut
on voice peaks when listening to wider military FM signals.
--
==========================================================================
Copyright 1997, Bob Parnass, AJ9S parnass@bell-labs.com

Locate & identify transmitters in your area with a color RadioMap(tm)

# 3252. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <34351604.20B8@calweb.com>
Source record: 90409

europa@primenet.com wrote:
> 
> Has anyone else had the interest to interface this chip to a Mac serial or
> printer or ethernet port? I'm not thrilled about doing it myself since I
> have a lot of other stuff going on. Never have seen anything in QEX or
> other sources about use with Mac.
> 
> Hardware plus C source code routines would be the goal.
> 
> Rob.
Hi mates,

Published an article in the Winter 97 issue of Communications Quarterly
that deals with the AD7008 which includes the interface to a PC bus and
well annotated code by my co author, Dave, KD6QFZ. The 7008 is a nifty
little chip...you can do a lot with it.

Good luck

Bob, KE6F

# 3253. Re: Crystal Filters above 20 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <34350963.2F5@hp.com>
Source record: 90410

Jim Weir wrote:
>
>
> It is possible, but it is a royal pain in the ass. The circuit passive
> components (Ls and Cs) turn out to be so horrendous with overtone
> parameters that it rapidly becomes a problem more of passives than of the
> crystal itself.
>

Indeed so, but they have been made for some time. Half lattice and ladder structures are possible, but excellent control of the quartz processing is needed to get filter shapes in spec and to control any nearby spurious modes.

One interesting approach is to embed crystals in an LC filter structure to get a little more design freedom, giving a sharp bandpass filter in the middle of a much wider LC filter response. This sort of structure is normally avoided like the plague, but is often the only approach for crystal BANDSTOP designs, yet it offers a few different tricks if used for bandpass designs where it is not normally considered to be necessary.

> HOWEVER, having said this, one of my contacts at Jan Crystal in Florida
> tells me that they are making production quantities of any fundamental rock
> up to 100 MHz.+ Making the filter from VHF fundamental rocks is a hell
> of a lot easier than trying to use overtones. If you have trouble finding
> the right person at Jan, email me and I'll give you the engineer's name.

I've heard of experimental fundamental crystals approaching 1GHz in the form of a thin diaphragm micro machined in a hole in a much thicker support ring.
I suspect that very high freq fundamental crystals could be rather difficult to use and might prove rather fragile electrically.

Intermodulation distortion in crystal filters is now a serious problem with new mixer and amplifier designs being so much better than in the recent past. This gets worse with increasing frequency. Crystal non-linearity could be a significant problem.

Cheers
David GM4ZNX

# 3254. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <343526A8.16DAA946@direct.ca>
Source record: 90411

Tim wrote about the Qualcomm Q2334-40 DDS chip:

> John, I might take one, wasn't that the chip used in the 73 Article
> "Techno Wizzy" DDS?

'fraid not. The 73 article used the Qualcomm Q2220 - 55 MHz clock,
24 bit parallel input.

Mine works fine; I even programmed a microcontroller to tune it
with a shaft encoder.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

# 3255. F.S. - NOS tubes, books, misc....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971003154700.LAA24418@ladder01.news.aol.com>
Source record: 90412

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #911-T.

# 3256. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-03 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <34351649.6F70@hp.com>
Source record: 90413

larry wrote:
>
> greetings
> I have been an amateur since the mid 60's. I have been involved in
> most of the popular modes since they came into conception, eg 2 meter
> fm early 70's, packet mid 80's, ssb 68ish, etc.
> I am now trying to figure out where this hobby is going. I know that
> spread spectrum is, more or less, just around the corner but I don't
> think it will really arrive until the next decade.
> Any ideas on what the next major new mode is going to be and where?
> Larry ve3fxq

Robert Lay said it, "What a marvellous question"

Spread spectrum isn't around the corner, it's been here for some time in all sorts of commercial and military applications. Adoption on the amateur bands is another matter altogether. No one entity owns the entire amateur system, so the inertia in implementing something new across a significant proportion of the population is rather large. Some people have experimented with it, but it has so far failed to excite people in bulk to build gear, nor has it impelled a major manufacturer to produce equipment for the amateur market.

Amateur radio is not really going anywhere at the moment, the vast bulk of the population (including me) is stalled, just doing the same old things while a very small minority are actually doing any serious exploration of new things. When/if one of the experimentalists finds something that captures the imagination or curiosity of enough others, then the hobby will move a little in adopting it.

Things we need:

1) High speed microwave backbone to speed up packet radio traffic, evolving into a system with faster links right down to the user nodes.

2) Argument clusters, specialised packet structures (like the DX clusters that now so successfully synchronise our pile-ups), where all the Morse/no Morse immortal debates can be re-located, and keep the pro/con arguments for each national society company.

On the Morse decoding matter, Morse sent with a regulated speed and element length has a spectrum with comb-like characteristics due to its predictable timing, with complicated modulation on it due to the unpredictable nature of the text being sent. There are many different ways and levels of matching filters to this, considered either in the time or frequency domains. One method I'd wondered about trying is now

feasible due to the small number of symbols and the relatively low information rate - to build, in DSP, a bank of correlators. One for each Morse symbol and to compare their outputs. With all the talk of matching filters to the elements of the Morse symbols, why not take a step further and match to the symbols themselves? Spaces are important too and the intersymbol space would need to be included in each symbol correlator, because that's all that stops "L" being read as "E, T, E, E"

I agree with Bill that this could be great fun, and very satisfying to get something going, but if we are going to consider dramatically more elaborate detection schemes than ever before, then we ought to at least consider that changes to the coding of the signal to suit the possible decoding methods could also yield some further benefit.

I can't remember the source but theer was a quotation like:

"Space is what stops everything being in the same place"

Cheers
David

# 3257. Re: Serial port demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3435D8BA.3327@pop.removethistomailme.net>
Source record: 90331

kc8wf wrote:
>
> Can someone help me figure out how a serial demodulator works. This
> demodulator is a simple device which plugs into the serial port. Its made
> using a OP-AMP (see - www.accessone.com/~tmayhan/schem.htmand - for
> schematic), and apparently takes the audio input signal from the radio,
> changes it into a varying square wave, and outputs it to pin 6 of the
> serial port .
>
> My question is how does the software pull out the information, and how is
> it that the software can monitor pin 6 and not use the normal input pins
> of the serial port, to receive data?
>
> Many thanks,
> Simon (KC8WF)

Do a DejaNews search on MDT -- the text file that accompanies the
program explains the usual hacks pretty well.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 3258. WANTED design for HF antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Paul LeMasonry <g1cqx@zetnet.co.uk>
Message-ID: <19971004123606707 97@zetnet.co.uk>
Source record: 90332

Hi all,
having found out how flimsy the construction of so called
quality HF antenna tuners are.

I am now on the look out for designs of Homebrew HF antenna tuners.

If anyone has designs for a reliable tuner which will handle over 100
watts please contact me.

All costs of copying and postage can be refunded.

--
Cheers for now.

//////////////\\\\\\\\\\\\\\
\\\\\\\\\\\ Paul ///////////
//// g1cqx@zetnet.co.uk \\\\
\\\\\\\\\\\\\\\\//////////////
Holder of the amateur radio callsigns G1CQX and M0AZP
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

# 3259. Re: Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: 1RealHope <davidc@bit-net.com>
Message-ID: <01bcd0d4$3f0d1f40$1e8a92d0@bit-net.bit-net.com>
Source record: 90333
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I believe the SBE 33 is a hybrid, many tubes, and the SBE 34 is hybrid with
tube finals only.
I am open to correction! DavidC AA1FA

Ed <ecummins@worldnet.att.net> wrote in article
<342D788A.C3FCD5C@worldnet.att.net>...
> I think I am missing something here. I thought the SBE-33 was the first
> all solid state transceiver, not tube. I believe the SBE-34 was also
> all solid state.

# 3260. Re: Need e-mail Addr for Amplifiers Reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: rick@area.com
Message-ID: <615sn2$4dp$1@nixon.area.com>
Source record: 90334

In article <19971002.054850.11894.1.k3ky@juno.com>,
David E Sinclair <k3ky@juno.COM> wrote:
>I tried recently to subscribe to this one, but no response
>so far. I must have the address or the syntax of the
>subscribe message wrong. Sent to amps-request@
>contesting.com with the word "subscribe" in text body
>and no subject line. Any other ideas? Maybe one that
>starts out with "majordomo" or "listserv"? Thanks, 73
>
>David Sinclair K3KY
>e-mail: k3ky@juno.com

A related question: I looked at the archives of this reflector
for the last three months and noticed that there seemed to be
no discussion of solid state amplifiers. Does the charter
restrict it to tube amplifiers or is this just lack of interest?
Anyone know of any work being done regarding ham solid state
amplifiers? If not, why not?

Rick Karlquist N6RK
rick@area.com

# 3261. Re: Ad 7008 dds i need hel

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Jay.Craswell@f100.n282.z1.fidonet.org
Message-ID: <875967838.AA09041@hamlink.mn.org>
Source record: 90335

It would be pretty simple to wire up a serial to DDS control lines
widgie for the Mac but REALLY easy to do it for the PC. I love those
crummy printer ports! Check out that old May 95 QST. C code? We don't
need no stinking C code! <grin> How about some nice assembler? I know
a assembler code "riter" <hint hint>
P.S. Ethernet port? Huh? What would be the point?
73 - Jay W0VNE

# 3262. I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <OpvMnYAJypN0EwSg@two-way.demon.co.uk>
Source record: 90336

I'm looking at generating a high current charger for a 48V battery bank
from a 12V source. This is for a QRO 50V FET HF mobile amplifier.
Two routes have come to mind, a 48V alternator or a DC to DC inverter.
Well AFAIK niether Leece Neville or Lestek produce alternators with this
output voltage so can anyone recommend another company?
Alternatively I'm after an inverter, either a circuit design or a
complete unit, I don't feel comfortable designing one of these switching
rascals.
I need an output of around 1KW at 50V.
Any ideas, suggestions or constructive comments greatly appreciated.

Phil G4ZOW/M

# 3263. Re: Request for "boatancho

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Jay.Craswell@f100.n282.z1.fidonet.org
Message-ID: <875967838.AA09040@hamlink.mn.org>
Source record: 90337

BB>From: bobsteknot@ix.netcom.com
BB>Newsgroups: rec.radio.amateur.homebrew
BB>Subject: Request for "BOATANCHOR" - SOL searching (ProcTech ...& N*
BB>too) Organization: None
BB>Message-ID: <34382f2a.122581157@snews.zippo.com>
BB>Date: Wed, 01 Oct 1997 11:09:58 GMT
BB>
BB>I am trying to put together a working Processor Technology SOL-20 as
BB>"ransom" for my original one. To explain: I formerly lived in
BB>Regina, Saskatchewan some 20 years ago and put a SOL together - 6
BB>weeks of soldering and hair-pulling. Over the years I
BB>"over-clocked" it to 3.x MHz and added a 192 x128 (?) graphics board
BB>modification, etc. I sold it to a friend there who still has it, but
BB>he and another friend are populating a home computer exhibit at the
BB>university with my SOL along w/ a SWTP 6800, a Cromemco, a PET, and
BB>others. He wants me to replace it before he will send it back to me.
BB>I was lucky enough to find a non-working SOL-20 and I am trying to
BB>make it functional again. I know for sure that I could use a
BB>"personality module" (the little plug-in card). If anyone could
BB>spare any parts (or wholes), any documentation (I'd pay for
BB>xeroxing, or would do the copying myself and return the originals),
BB>any other software (on CUTS tape or N* CP/M format would be fine -
BB>that's what I had, though I have yet to track down a N* controller
BB>board, so I could use that , too), I would be willing to pay
BB>shipping, and reasonable remuneration.
BB>If anyone could help me w/ my project, I'd greatly appreciate it.
BB>
BB>
BB>Bob Stek
BB>(remove the "not" to reply by e-mail)
BB>bobsteknot@ix.netcom.com
BB>
BB>---
BB> * Origin: HamLink RBBS - 612/HAM-0000 v.34 St. Paul, MN
I'm also working on restoring a SOL. How can that be? My keyboard is
hatched but otherwise works fb. And ideas?
BB>(1:282/100.0)

## 3264. AD7008 Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: ron <ron@sparks.prestel.co.uk>
Message-ID: <01bcd0fd$f492dca0$LocalHost@sparks.prestel.co.uk>
Source record: 90338

I have an AD7008 chip and am considering using it in a homebrew receiver. I wonder if anyone has some software to drive it from a PC that would give me a start?

73s de G4IZS

# 3265. Re: AD7008 Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <3436D0FE.62F8@flash.net>
Source record: 90339

ron wrote:
>
> I have an AD7008 chip and am considering using it in a homebrew receiver. I
> wonder if anyone has some software to drive it from a PC that would give me
> a start?
>
> 73s de G4IZS

You can download software from www.analog.com, I have a dos version that talks to the printer port but so far I am unsuccessful getting it to run.

Tim

# 3266. Differences between NE602, NE612 and NE604, NE614 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3436b6dd.375412@news.online.no>
Source record: 90340
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi
I have tried to find what is the real differences between the
different versions of the same IC, but it seems too difficult.
Do you have any idea?

I believe I have all available information from Philips (Signetics)
books.

Please do not reply if you do not have a definite reply to give!
Please do not tell me an internet site where you think the info might
be found, it is not obvious to see it.
Please do not tell me about a person whom you think will know.
Too often when a questioned is asked, one receives a lot of "info"
without any value to the question, but it is of course OK to discuss
some different topics under a title when the actual question is
replied to.
Several persons have tried to judge the information to learn any
possible difference.

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3267. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3436b4ce.42627484@news.atl.bellsouth.net>
Source record: 90341
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

On Fri, 03 Oct 1997 14:41:55 +0200, Vytautas Mickevicius <ke@kaunas.omnitel.net>
wrote:
>David Stockton wrote:
>
>> Find the descriptions (by Pat Hawker, G3VA) of the work done by Colin
>> Horrabin on high dynamic range receiver building blocks. With things
>> like these SD5000 based mixers, the performance of the 7360 can be more
>> than threatened. Medium power RF transistors in feedback configurations
>> offer marvellously linear gain. The current limitation is the
>> non-linearity of the actual quartz in crystal filters. None of these
>> things are particularly recent. Rafuse's paper in the mid 1960s showed
>
> You can try to linearise 7360 with some negative feedback, too!!!
>
> The main benefit using of 7360 in mixer configuration is from fact
>that it always works while being in it's most LINEAR range - 100% of
>time!

Actually, no, it has to have nonlinearity to act as a mixer. It gets that
when it switches, via beam deflection, from one plate to the other.
The switching is not instantaneous, it takes a finite time to sweep
the beam from one plate to the other (which is proportional to the
voltages applied to the deflection electrodes). This is analogous to
the turn on/turn off time of the diodes in a diode ring mixer, the
harder you drive it, the quicker it switches. As the beam sweeps
off one plate, across the gap, and onto the other plate, you get the
familiar square law response (the beam has a finite spot size).

There is an example of using this tube as a balanced modulator
in the 1963 ARRL Handbook, pp 307-311. It does carrier
oscillator duty using cathode, control grid, and screen in a
Pierce circuit, and the portion of the beam passing through
the screen is then switched between the two plates via audio
introduced on the deflection electrodes, producing DSB in
the balanced tank circuit. In this design, that signal is then
link coupled to a McCoy 9 Mc crystal filter to produce SSB.

After a fashion, you might consider this a tube integrated
circuit since it combines different functions in the same
envelope.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net

534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3268. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3436B958.7386@crpl.cedar-rapids.lib.ia.us>
Source record: 90342

David Stockton wrote:

> One method I'd wondered about trying is now
> feasible due to the small number of symbols and the relatively low
> information rate - to build, in DSP, a bank of correlators. One for each
> Morse symbol and to compare their outputs. With all the talk of matching
> filters to the elements of the Morse symbols, why not take a step
> further and match to the symbols themselves? Spaces are important too
> and the intersymbol space would need to be included in each symbol
> correlator, because that's all that stops "L" being read as "E, T, E, E"
>
> I agree with Bill that this could be great fun, and very satisfying to
> get something going, but if we are going to consider dramatically more
> elaborate detection schemes than ever before, then we ought to at least
> consider that changes to the coding of the signal to suit the possible
> decoding methods could also yield some further benefit.

The important thing for Morse is to try to determine, in an optimal manner in the presence of noise, the time lapse between 1/0 transitions. This is really what Morse machine decoding is all about.

As part of that, correlation dot/dash filtering of an audio frequency tone, at the output of a product detector, is superior in terms of Eb/N0 for 10^-3 bit error rate, to envelope detection. Envelope detection concerns the Rician distribution (weak signal plus noise) and the Rayleigh distribution (noise only), which are not really all that great. A product detector plus correlation filtering is practically the same as coherent, or synchronous, detection because we are looking at AWGN that is *translated* to baseband. The improvement is at least 1 dB.

We also need an adaptive threshold detector that determines the 1/0 transitions in this AWGN background. We then "time" the no-signal interval in an optimal manner using time domain filters.

To get any better than that, for a better channel capacity, according to Shannon's equation, we must increase the transmitted bandwidth, which in my opinion is a real bummer for the CW portions of the HF amateur bands.

One thing that is not generally realized is that FSK is only 3 dB better than OOK but requires a considerably wider bandwidth.

David's idea of optimizing the symbol set in some way may be a good one. I am not able to say how we might do that.

My main concern is what we have all seen over the years. The so called big time high tech improvements turn out, in the end, to be nothing but smoke and mirrors, a big pain in the butt.

Bill W0IYH

# 3269. Re: Info requested for a 2N3375

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971004231601.TAA20187@ladder02.news.aol.com>
Source record: 90343

>his is common practice for some audio transistors, but so far I have
>not seen any RF devices having collector to stud, so I am not
>impressed by your discovery.
>>
If I wished to impress anyone, you wouldn't even make my list. A gentleman wanted info on the device and I passed it along. The observation that the stud was isolated was a casual comment.

>>Is there some particular reason you keep doing this?
>Sometimes I have used 2N3375 and 2N3632 with -24 or -28V supply

That's nice, most people don't.

>with collector to stud it is a good idea to use an "emitter follower"
>type amplifier (operates like common emitter), I tested 4x BD139 in
>QRP 10m and 20m amplifier, G3VA presented my amplifier in Radio
>Communication about 10 years ago

That's nice too. Pat has published some of my stuff also, I don't consider it a license to criticize. I needed voltage gain, not power gain. It was "simpler" as I commented initially, to go common emitter rather than common collector and a transformer. An emitter follower, does NOT operate like a common emitter.

Not much going on in Norway eh?
>
W4ZCB

## 3270. Re: Ad 7008 dds i need hel

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Mark J Sandford <sandford@tridsys.com>
Message-ID: <3436D9BB.1D34ED09@tridsys.com>
Source record: 90344

Where can AD7008 in small qty for a reasonable price the only place I know of isFuture/Active who want $72 or something like that each.???????

# 3271. Re: AD7008 Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Pieter Ibelings <n4ip@amsat.org>
Message-ID: <6171qe$hgu@camel19.mindspring.com>
Source record: 90345

This might help. This program is written in Qbasic. Just conect pin 1 of
LPT1 to ENB, pin 2 to DAT and pin 3 to clock. Make sure d and c = address of
lpt1 and lpt1+2 respectively. You can replace the string f$ with any value
to set the frequency you need. Hope this helps.
Pieter N4IP

```
Rem AD7008 Control Program
Rem This program Sets frequency to 14,000,000 HZ assuming 50 MHz clock
Rem pin1=enb, pin2=dat, pin3=clock

d = &H378 ' LPT1
c = &H37A ' LPT1 STROBE CONTROL
OUT c, 1
f$ = "01000111101011100001010010000000"
For SD = 1 To 32
V = Val(Mid$(f$, SD, 1))
If V = 0 Then OUT d, 0: OUT d, 2 Else OUT d, 1: OUT d, 3
Next SD

OUT c, 0
OUT c, 1
```

ron wrote in article <01bcd0fd$f492dca0$LocalHost@sparks.prestel.co.uk>...

```
:I have an AD7008 chip and am considering using it in a homebrew receiver. I
:wonder if anyone has some software to drive it from a PC that would give me
:a start?
:
: 73s de G4IZS
```

# 3272. FS:MOD TRANSFORMERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <01bcd05c$a26c33a0$5011430c@dell>
Source record: 90346

I have two Mod transformers for sale:
1) New- Mil spec, conservatively rated at 335 watts (could use 572B's ) for
$60
2) Used- heavy, est 400-500 max for $50 (could use 810, 813, 100th, or
805's-I hve them too)
contact WS0E Joe at Joe.7hc@juno.com

## 3273. ADI AT600

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: scotter1@aol.com
Message-ID: <19971004004301.UAA05064@ladder02.news.aol.com>
Source record: 90347

Looking for rx/tx mods on this new gem, or a site where they might be found.
It is just intolerable to buy a radio and have only part of it available...

E-mail or post, either appreciated.

KB2HJH
Scotter1@aol.com

# 3274. CAT Program for the Yaesu 747 - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: "Denis R. McKay" <vk2dmr@mpx.com.au>
Message-ID: <01bcd085$61162400$1cc71dcb@dialup.mpx.com.au>
Source record: 90348

I have been trying to unearth suitable software for the Yaesu 747
Transceiver.

I have found plenty of software for the 757 but not the earlier unit.

I am absolutely dying to try out the interface I have built!
--
Vk2dmr
Corrimal NSW

# 3275. Re: Circuit for Xtal Osc with Divider ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcd0b3$521d3320$78dc24ca@not-applicable>
Source record: 90349

Leon Heller <leon@lfheller.demon.co.uk> wrote in article
<RM6g1jAbKJN0EwT6@lfheller.demon.co.uk>...
> In article <01bccf80$363d93e0$7bdc24ca@not-applicable>, Garth Ball
> <jira@deepsouth.co.nz> writes
> >I am working on a special project where I need a crystal (or similar
highly
> >stable) osc which divides down to give me a usable voltage change
precisely
> >once per minute. Has anyone got a simple circuit?
> >Garth ZL4PY
>
>
> What do you mean by "precisely"?
>

Simplest design which produces a change on the minute, only on the minute,
every minute with a few seconds per month accuracy. Xtal oven not necessary
as there is a conditioned environment.

# 3276. Re: WANTED design for HF antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: kmillerX@flash.net
Message-ID: <34364fe3.1186201@news.flash.net>
Source record: 90350

On Sat, 4 Oct 1997 12:36:06 +0100, Paul LeMasonry <g1cqx@zetnet.co.uk>
wrote:

>
>
>
>Hi all,
> having found out how flimsy the construction of so called
>quality HF antenna tuners are.
>
>I am now on the look out for designs of Homebrew HF antenna tuners.
Paul,
Try any of the ARRL Handbooks for DeMaw's tuners, they are pretty
heavy duty and have lots of room for mods.
Kerry Miller, WD5ABC

kmillerX@flash.net
(remove the X to reply, I really hate spam)

# 3277. SWAN NB-500 parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: rod7rg@aol.com
Message-ID: <19971004151801.LAA17304@ladder02.news.aol.com>
Source record: 90351

Hi all
I recently acquire a NB-500 noise blanker but it did not come with the i.f. pc board needed to connect it to my 500C. Anyone out here have one they are willing to part with,or the 5.500 Mhz i.f. transormer used on it? Anyone have one installed they are no longer using and willing to remove it? Several hams have told me how well they work and am anxious to get mine installed.

Thanks for reading.

Rod
KL7RG/8
email rod7rg@aol.com

# 3278. Re: AD 7008 DDS I need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com>
Message-ID: <343676BA.12C8CEF7@primenet.com>
Source record: 90352

John Miles wrote:
>
> laura halliday wrote:
> >
> > You can also get the data sheet in PDF from Analog's web
> > site (www.analog.com). This is a neat chip...
> >
>
> No kidding. I wish I'd known about the 7008 before I hand-wired a
> 68-pin Qualcomm PLCC to a surface-mount Harris 12-bit DAC. :-( Had no
> idea they were making integrated DAC/DDS chips!

In case anyone is interested, AD makes newer DDS chips. The '9850
will clock at 125MHz. There all only 10 bits though.

http://www.analog.com/products/sheets/AD9850.html
http://www.analog.com/products/sheets/AD9830.html

Bob

# 3279. Re: 465 O-scope problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: amradio@aol.com
Message-ID: <19971004174001.NAA21037@ladder01.news.aol.com>
Source record: 90353

>My 465 Tektronix oscilloscope went belly up with no sweeps displyed on
>the tube.

I experienced the same problem with my Tektro 453. I don't know how the schematics of your 465 is, but the high voltage unit is probably out of order. First, check the fuse and the driver transistor on the primary of the high voltage transformer. To see wether you have high voltage on the secondary, you can check it carefully, testing the -1950 Volts on the kathode (you have a check point on the high voltage unit). If the -1950V is out, you have no oscillations in the circuit. Check the primary coil of the transformer with an ohmeter. At last, check all the high voltage section rectifiers and capas. Not with an ohmeter because they probably fail working under high voltage only.
Please let me know.
Good luck.
Marc Graviere amradio@aol.com
American Old Radios http://members.aol.com/amradio

# 3280. Re: Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: glennt@ibm.net
Message-ID: <34369396.0@news1.ibm.net>
Source record: 90354
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In <01bcd0d4$3f0d1f40$1e8a92d0@bit-net.bit-net.com>, "1RealHope" <davidc@bit-net.com> writes:
>I believe the SBE 33 is a hybrid, many tubes, and the SBE 34 is hybrid with
>tube finals only.
>I am open to correction! DavidC AA1FA
>
>Ed <ecummins@worldnet.att.net> wrote in article
><342D788A.C3FCD5C@worldnet.att.net>...
>> I think I am missing something here. I thought the SBE-33 was the first
>> all solid state transceiver, not tube. I believe the SBE-34 was also
>> all solid state.

No... the SB33 and the SB34 are nearly identical in terms of circuit design. There are two main differences. The SB34 includes both 117VAC and 12VDC power supplies while the SB33 includes only the 117VAC supply (the 12VDC was an external option). Also, the SB33 was constructed using 1950's techniques (transistors socketed as if they were tubes and point-to-point hand soldered wireing) while the SB34 was constructed mainly on printed circuit cards.

I happen to own a functioning SB33, The good news is that I also have the manual for it. The bad news is that it's currently stored in another state, so I can't easily get a copy.

If the problem is a need to shift the specific frequency coverage of a specific band, it's a matter of identifying the crystals for the 1st converter and replacing the appropriate crystal with one for the desired range. There is no need to worry about damageing a crystal filter by mistake, the SB33/34 has no crystal filter = it uses a Collins mechanical filter which looks NOTHING like a crystal!

Good luck! - Seventy Trees - Glenn wb6w

# 3281. Re: Ad 7008 dds i need hel

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Jay.Craswell@f100.n282.z1.fidonet.org
Message-ID: <875967838.AA09039@hamlink.mn.org>
Source record: 90355

You might want to check out my articles in QST about DDS chips. Those refer to the Harris parts but the idea is the same. Clock, Data and Transfer lines are needed to send a command to the DDS. You use the clock pin to tell the part that the data is valid. So set the Data to what you want (1 or 0) than flick the clock line. Thats the first bit! Now repeat for the rest of the bits that need to be sent than flick the transfer line (That tells the chip you have sent the command)
Tada! Or is that Tadah? Well whatever. They have samples of my code that is in QBASIC (Ugg! Only C is worse) or Assembler! Might fine stuff. Assembler that is. Not my code. <grin>
73 - Jay W0VNE formaly WB0VNE Craswell.

# 3282. Re: WTB: Teletype ASR-33

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: William Eardley <WEARDLEY@swbell.net>
Message-ID: <34369D38.7EEB@swbell.net>
Source record: 90356
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.rtty,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap

Richmond L. Armstrong wrote:
>
> Looking for fully functional model with stand. Would prefer one with a 20ma
> current loop or RS-232, but I'll consider another interface. Unless you're
> real close to Spring, TX, I would probably need you to ship it as well. I
> know that's real pain for something this big, but I'm willing to pay
> shipping costs as well. It might be easiest to ship it in two pieces if
> that's possible. :)
>
> Thanks,
> Rich Armstrong
> --
> richa@insync.net
ckeck with ka5iid as gardendale vfd has some....

# 3283. Re: Adjusting for Signal to Noise Ratio ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3436b0d0.41605107@news.atl.bellsouth.net>
Source record: 90357

On 29 Sep 1997 22:53:24 GMT, "Anthony Levand" <alevand@FoxValley.net> wrote:
>I have a Yeasu 2 meter radio with a dual gate MOSFET rf amplifier. I can
>adjust the first tuned tranfomer for maximum gain, how would I find the
>optimum setting for best signal to noise ratio? I can see the signal and
>the noise riding on top in the osciloscope. Can I replace the mosfet with a
>gasfet for better sensitivity?
>
>Tony, AA9CC

Tony, the easiest way to adjust a preamp for best noise figure is with a pulsed excess noise source. A noise diode is biased to give you excess broadband noise, and the bias is then pulsed on and off at an audio rate. There are plans in the Handbook.

This is attached to the preamp input, and the output is monitored with an AM detector. Adjust the preamp for maximum tone output and you are done. Note, you'll want to play with bias as well as tuning to achieve best noise figure.

Note that even a bipolar preamp can have a satisfactory noise figure on 2m. A GASFET is not needed unless you need strong overload immunity. Then you want to use a *power* GASFET with a strong standing current. Power GASFETS rated in the 2-4 GHz range make satisfactory high intercept 2m preamps, see the Proceedings of the Central States VHF Conference for design details.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3284. Re: Info requested for a 2N3375

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: la8ak@online.nospam.no
Message-ID: <3436c12f.3016481@news.online.no>
Source record: 90358

On 3 Oct 1997 19:29:54 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>
>Feel free, say anything you want. I can ground an emitter and let it's stud
> stick outside of the shielding for cooling and still keep the RF inside the
> shield. When the stud is connected to the collector, as so many devices are,
> it's tougher.
This is common practice for some audio transistors, but so far I have
not seen any RF devices having collector to stud, so I am not
impressed by your discovery.
>
>Is there some particular reason you keep doing this?
Sometimes I have used 2N3375 and 2N3632 with -24 or -28V supply

with collector to stud it is a good idea to use an "emitter follower"
type amplifier (operates like common emitter), I tested 4x BD139 in
QRP 10m and 20m amplifier, G3VA presented my amplifier in Radio
Communication about 10 years ago

Jan-Martin N�ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3285. Re: Help PC Interface for IC-706Mk II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-04 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <343700CD.51F6@icss.net>
Source record: 90359

Eric Vincent wrote:
>
> Any body have the pin out of IC-706MkII to connect the computer interface to
> the radio.
>
> Where can I found the software to programm the IC-706MkII, original or sherware
> will be appreciate.
>
> Thank you.
> Eric VE2VXT Quebec City.
>
> Conctact me via e-mail.

Eric, you might try the JBI interface featured in 73 magazine a couple
of months ago. Try http://www.apci.net/~jbi/ for the web site or
jbi@apci.net for e-mail. 73, Brian/N0iMD

# 3286. Re: Adjusting for Signal to Noise Ratio ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: la8ak@online.nospam.no
Message-ID: <3437140a.885500@news.online.no>
Source record: 90264

On Sat, 04 Oct 1997 21:19:10 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>On 29 Sep 1997 22:53:24 GMT, "Anthony Levand" <alevand@FoxValley.net> wrote:
>>I have a Yeasu 2 meter radio with a dual gate MOSFET rf amplifier. I can
>>adjust the first tuned tranfomer for maximum gain, how would I find the
>>optimum setting for best signal to noise ratio? I can see the signal and
>>the noise riding on top in the osciloscope. Can I replace the mosfet with a
>>gasfet for better sensitivity?
>>
>>Tony, AA9CC
>
>Tony, the easiest way to adjust a preamp for best noise figure is with a pulsed
>excess noise source. A noise diode is biased to give you excess broadband
>noise, and the bias is then pulsed on and off at an audio rate. There are plans
>in the Handbook.
Is noise diode arrangements so easy to find? I would rather say this
is a complicated way. A signal generator with reliable output level
attenuator is far easier to find than any noise diode arrangement.
The noise diode arrangement is necessary ONLY if your receiver has no
FM mode, and if you wish to measure noise figure, see also G4COM
Alignment aid.....
>
For 2m DX I use mastmounted (homebrew) BFT66 pre-amp (10mA current)
since 1980, it has several input filters attached and it measures
1.1dB noise figure. For 70, 23, 13, 6cm I use GaAs-fet pre-amps.
Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3287. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: la8ak@online.nospam.no
Message-ID: <34376ece.1714923@news.online.no>
Source record: 90265
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.amateur.boatanchors

On Sun, 05 Oct 1997 02:41:09 GMT, fcobra@ix.netcom.com (Frank Grzych KE1FJ) wrote:

>>
>WHO CARES
obviously a lot do, any reasons for bullshit?

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

# 3288. 1SS99/MAX187 in VHF/UHF RF power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: la8ak@online.nospam.no
Message-ID: <34376efb.1759357@news.online.no>
Source record: 90266
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Wilhelm Sch�rings, DK4TJ (M�nchengladbach) describes an interesting
circuit in DARC 42. Weinheimer UKW-Tagung september 1997,
Scriptum der Vortr�ge:
Spannungsmessung mit PC - am Beispiel eines mW-meter bis 1,5GHz
I received the book from this meeting some time ago.
he uses a 1SS99 with 12 bit AD serial converter to feed a PC
The actual reading is computed, so it is possible to show the actual
voltage in millivolt or dBm 50 ohm.
A problem is that lowest reading is 1mV, so levels between
-10...-20dBm will not have much accuracy.

My suggestion is to use a non-linear amplifier to increase the gain at
low end of level input, it is easy to re-calibrate for this
A CA3140E may easily be connected to have 11x gain below 0.5V DC input
and closer to unity above 0.5VDC in. This may improve sensitivity and
reading down to below -20dBm (22mV).

A Danish microwattmeter is on the marked in Germany, perhaps they use
some interesting technique to use cheap detector components?

Any suggestion for a non-linear amplifier to improve this circuit?

Jan-Martin N�ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

## 3289. specs used in ordering crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: mugshot77@mail.geocities.com
Message-ID: <mugshot77-ya02408000R0510970656200001@snews.zippo.com>
Source record: 90267

I would like to order a crystal for use with one of those 1-watt
CW QRP kits (which I also haven't ordered yet). Looking at the
JAN Crystals catalog, I see that they require you to specify
load capacitance and series or parallel resonance in your order.
Is there a standard all-weather response to these two specifications?

# 3290. Re: Differences between NE602, NE612 and NE604, NE614 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: rwalter7@aol.com
Message-ID: <19971005131901.JAA26718@ladder01.news.aol.com>
Source record: 90268

>>Hi
>>I have tried to find what is the real differences between the
>>different versions of the same IC, but it seems too difficult.
>>Do you have any idea?
>>
>>I believe I have all available information from Philips (Signetics)
>>books.
>>
>>Please do not reply if you do not have a definite reply to give!
>>Please do not tell me an internet site where you think the info might
>>be found, it is not obvious to see it.
>>Please do not tell me about a person whom you think will know.
>>Too often when a questioned is asked, one receives a lot of "info"
>>without any value to the question, but it is of course OK to discuss
>>some different topics under a title when the actual question is
>>replied to.
>> Several persons have tried to judge the information to learn any
>>possible difference.
>>
>>Jan-Martin N�ding,LA8AK@online.no
>>Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments
>>
>
>

I know than answer to this but guess what? I ain't tellin' ya.

# 3291. Re: Serial port demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3437A61D.135@one.net>
Source record: 90269

kc8wf wrote:
>
> Can someone help me figure out how a serial demodulator works. This
> demodulator is a simple device which plugs into the serial port. Its made
> using a OP-AMP (see - www.accessone.com/~tmayhan/schem.htmand - for
> schematic), and apparently takes the audio input signal from the radio,
> changes it into a varying square wave, and outputs it to pin 6 of the
> serial port .
>
> My question is how does the software pull out the information, and how is
> it that the software can monitor pin 6 and not use the normal input pins
> of the serial port, to receive data?
>
> Many thanks,
> Simon (KC8WF)

It's really pretty simple. The demodulator doesn't do much demodulating, and the computer does a lot of work.

As you note, the demodulator squares up the incoming audio. The op-amp is wired as a comparator rather than a linear amp in order to do this.

The computer watches for transitions in the output of the demodulator from high to low (or plus to minus). While the signal is high, the computer counts its own clock pulses. When the signal switches to low, the computer stops counting. The number of clock pulses tells it how long that half of the square wave was. That is, the pulse count is proportional to the period of the incoming audio at that instant. And the frequency of the signal is the inverse of the period.

Today's PCs can do this easily, because the audio frequencies are on the order of 2000 cycles per second, and the clock frequencies are millions of cps (Hz). So the computer may be counting several thousand clock pulses during each audio cycle, which yields good resolution.

Rich W2RG

# 3292. Re: 465 O-scope problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: geotek@flex.net
Message-ID: <34379f93.152438249@news.zippo.com>
Source record: 90270

On Sat, 27 Sep 1997 11:11:41 -0500, Sir Robin <nexus15@flash.net>
wrote:

>My 465 Tektronix oscilloscope went belly up with no sweeps displyed on
>the tube. Even the 'beam finder' doesn't display anything. I haven't
>opened it up to have a look yet.
>
>Any suggestions or can anyone refer me to an oscilloscope fixing
>business?
>
>Thanks..Rick in Houston, TX.

Call Oscilloscope Services in Houston. Their number is 713-645-2029.

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

# 3293. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd1a3$f9397ce0$0100005a@wa6vse>
Source record: 90271

Cecil Moore <Cecil_A_Moore@ccm.intel.com> wrote in article
<342BDB59.55F7@ccm.intel.com>...
> William E. Sabin wrote:
> > There is a "dot" matched filter, a "dash" matched filter and
> > matched filters for the spaces in-between (all of them integrate and
> > dump). These can be combined and decoded by algorithms. The code speed
> > can be "learned" by the processor.
>
> Hi Bill, are you saying that there is no advantage to constant bit width,
> fixed word length FSK signals?
> --
> 73, Cecil, W6RCA, OOTC (not speaking for my employer)
>

That was *exactly* what he tried to claim, before Gary, (I believe
Yin), and I jumped all over him ... he even went further to claim
that it is possible to build a matched filter for the non-existent
signal energy in the spaces between "dits" and "dahs" is absurd
and merely indicates that Mr. Sabin either genuinely doesn't know
what the hell he's talking about or was deliberately trying to mislead
the uninformed ... he also *conveniently* ignored the Morseodist
dogma vis a vis "simplicity" by not mentioning the fact that even
if it *was* possible (and it is NOT) to build his mythical matched
filter demodulator for Morse, it would be at least 5X more complicated
than a matched filter demodulator for BFSK and STILL wouldn't work
as well ...

This is probably what pisses me off the most about pro-code
fantatics ... their dishonesty and proliferation of outright falsehoods
and "voodoo electronics" as "facts" to "support" their cult religion.

If they could simply say "I like Morse, therefore I think everyone
should use it," or "I had to pass the test, so everyone else should,"
or "I think the Morse test keeps the phone bands from getting too
overcrowded," or any of the other *honest* reasons they have for
wanting to continue to force Morse on everyone, that would be fine.
They have a right to those opinions and to express them, even if
I don't like them ... even if *everyone_else_in_the_world* didn't like
them, I would still support their rights to those opinions ... I might
say that I thought the opinion was absurd, but I would still support
their rights to those opinions .

But one cannot spout total falsehoods as fact and not expect a
challenge ... especially when it *appears* that there may well be
a deliberate attempt to spread those falsehoods in an attempt to

mislead the masses and fraudulently enlist their support for a
cause that doesn't merit that support.

That's what pisses me off the most about the radical pro-coders ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3294. Re: need homebrew antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: mikea@efn.org
Message-ID: <618g7m$nrm$1@haus.efn.org>
Source record: 90272

In article <3435D145.B7E@plix.com>, rjones@plix.com says...
>
>Mike L Abrams wrote:
>>
>> I need a good Antenna that will work in a moblehome with metal
siding
>> it need to be low so it is hide so the other home owner can not see
>> it. I heard that a J-pole would not work up next to metal siding???
>> I want to use this with the 2meter I have had my call sign for
about
>> two week's & wanting to get on the air when my raido get here
>> thanks for any help
>> 73 mikea kc7zfp
>
>Thanks to Lou for his help with Mike's problem. It was the 1 response
out
>of about 6 that dealt with Mike's question and not his legitimacy.
>
>Mike, you didn't mention if you were in a rural or suburban location.
If
>repeaters are within about 5-10 miles of your QTH, a handheld, near a
>window will work, just fine. Other options are the Larsen on glass
>antenna which can be stuck to a window and will work well with local
>repeaters.
>
>Hope this helps.
>
>73, Radio Randy

That was my next question, how good the glass mount antenna works???
I was thanking about using one in my van. My raido,s came in this week
I can pick-up two local repeaters,in the house with my Handheld. That
is
about the same as being out side. how doze the glass monut work comp.
to
the mag. mount.?????
Thanks to all for coming back on my Question it helped very much.
73's to ALL
kc7zfp
mikea

# 3295. Re: Lookin for SBE model 33 old tube HF set manual and European ADI UHV/VHF equipment import adress

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: glennt@ibm.net
Message-ID: <3437e5f1.0@news1.ibm.net>
Source record: 90273
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In <34369396.0@news1.ibm.net>, glennt@ibm.net writes:
>In <01bcd0d4$3f0d1f40$1e8a92d0@bit-net.bit-net.com>, "1RealHope" <davidc@bit-net.com>
writes:
>>I believe the SBE 33 is a hybrid, many tubes, and the SBE 34 is hybrid with
>>tube finals only.
>>I am open to correction! DavidC AA1FA
>>
>>Ed <ecummins@worldnet.att.net> wrote in article
>><342D788A.C3FCD5C@worldnet.att.net>...
>>> I think I am missing something here. I thought the SBE-33 was the first
>>> all solid state transceiver, not tube. I believe the SBE-34 was also
>>> all solid state.
>
>No... the SB33 and the SB34 are nearly identical in terms of circuit design.
>There are two main differences. The SB34 includes both 117VAC and 12VDC
>power supplies while the SB33 includes only the 117VAC supply (the 12VDC
>was an external option). Also, the SB33 was constructed using 1950's
>techniques (transistors socketed as if they were tubes and point-to-point
>hand soldered wireing) while the SB34 was constructed mainly on printed
>circuit cards.

(snip)

OOPS! My earlier posting may have been a little off topic. Both the SB33 and
SB34 were all solid state EXCEPT for the transmit driver (I think it's a 12BY7)
and the final (a pair of oddball TV sweep tubes).

- de wb6w>

# 3296. simple radio controlled project/circuit???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: ccn011@email.mot.com
Message-ID: <875937483.12178@dejanews.com>
Source record: 90274
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,
I always interested in radio controlled stuff, like
radio controlled car, plane, boat, etc. I used to have a radio
controlled car (which I still do) and a radio controlled glider (i
never got it up to the air though!).
What I really interested to know is the receiver and the
transmitter
part. I have yet to find out how they actually work. I was just
wondering whether you know if there is any simple radio
controlled project/circuit around that I can build. I did look through
the web , but dont seem to find any. If you happen to have or
know a site, please let me know. Thanks in advance.

p/s: please reply to ccn011@email.mot.com if possible.
-
Regards,
CH Ng

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3297. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <343818b5.46358018@news.erols.com>
Source record: 90275

On 5 Oct 1997 16:05:27 GMT, rah72550@aol.com (RAH72550) wrote:

> I am looking for information on the foxhole receiver used during WW2 i think.
>It was made with a razor, headphones and what ever. I would like to build one
>using some of todays technologies if needed. I have had no luck finding this
> info
>on this radio. I had some info on it a few years ago but lost it.

Antique Electronic Supply of Tempe Arizona has a very neat little
Foxhole radio kit.

You could probably get more info on these radios by doing a web search
for "The xtal society" Interesting group.

I may have some stuff in my e-mail files that would be of use. If I
find them I'll send them along.

Good Luck! 73 Bill N2CQR

# 3298. Re: Info requested for a 2N3375

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: la8ak@online.nospam.no
Message-ID: <343805bd.1232736@news.online.no>
Source record: 90276

On 4 Oct 1997 23:16:07 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>
>>with collector to stud it is a good idea to use an "emitter follower"
>>type amplifier (operates like common emitter), I tested 4x BD139 in
>>QRP 10m and 20m amplifier, G3VA presented my amplifier in Radio
>>Communication about 10 years ago
>
>That's nice too. Pat has published some of my stuff also, I don't consider it a
> license to criticize. I needed voltage gain, not power gain. It was "simpler"
> as I commented initially, to go common emitter rather than common collector
> and a transformer. An emitter follower, does NOT operate like a common
> emitter.
>
it is a circuit described and applied particularly in Germany, have
not seen it used much elsewhere, it looks like emitter follower, but
it is not. has 17-18dB power gain on 20m and 13-14dB on 28MHz
collector is grounded, input is a link connected electrically between
emitter and base, and output from emitter - like in an emitter
follower. It has the properties like grounded emitter, but no RF on
collector.

sometimes it has some advantage to build a stage using negative
supply, particularly when it is part a rig which already uses such
voltages. Unfortunately most hams considers 12V to be the only
acceptable voltage for transistor amplifiers, consider a power
amplifier running with 12V and 200amps.....
I like 24v...28V, but had some problems with some 48V designs
I have bought a surplus 500W RF output amplifier (0.5W input)
1.5-30MHz needing 40V 25Apeak, hope to have it running later.
It uses some thompson transistors, but they need copper type cooling
fins to be safe....

Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

## 3299. Java Chat Room

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: KC7JHO <kc7jho@flinthills.com>
Message-ID: <619d5t$50p@news.flinthills.com>
Source record: 90277

http://www.flinthills.com/~kc7jho/chat.htm
This chat room is made for the purpose of discusing Ham radio ant the things
we use in ham radio.
73 KC7JHO

## 3300. Switch Ceramic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: Watts <watts@rgv.net>
Message-ID: <34386E9F.1D29@rgv.net>
Source record: 90278
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I need a fairly heavy three pole double throw ceramic switch for a 2KW tuner I am making up. If you can help please let me know!

Gary K5XZ watts@rgv.net

## 3301. Re: Serial port demodulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3438463A.21F9@antispam.trader.com>
Source record: 90279

kc8wf wrote:
> using a OP-AMP (see - www.accessone.com/~tmayhan/schem.htmand - for

Wanna try that url again? This one is broken.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3302. The DXCC worksheet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: Gabriel Sampol Durán <g_sampol@redestb.es>
Message-ID: <01bcd186$21411ef0$0100007f@srvbiel>
Source record: 90280
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc
Body handling: HTML body converted to readable text

Este es un mensaje con m�ltiples partes en formato MIME.

------=_NextPart_000_01BCD186.2142A590

Are you fed up of counting up and down manually you listing of the DXCC
countries in order to know your current status?
Are you tired of copying your listings of worked and confirmed countries
from one sheet to another every time there is an addition of deletion of a
country?
Don't you want to say "I have worked 150 countries, more or less" any more?
Have you ever spent an evening searching that paper or notebook where you
used to trace your DXCC status?

Here you have the definitive solution. The DXCC Worksheet.

HTTP://www.redestb.es/personal/g_sampol

What is the DXCC worksheet?
It is an Excel worksheet that helps you trace your status of DXCC
countries. You only have to fill the cells with your worked and confirmed
countries and the totals will be automatically updated. You don't have to
make any calculation !

What do I need for using the DXCC worksheet?
You need a computer running Microsoft's Excel Version 5.0 or 7.0(97)
Availability for former versions of Excel can be studied on demand.

Which are the facilities of the DXCC worksheet?
It provides an updated listing of the DXCC countries (including the deleted
ones). This listing includes:
Common prefix/prefixes
Name
Continent
ITU zone
CQ zone
Provides information on the date of insertion or deletion of the country.
Allows to enter data for any band from 160 m. to 23 cms. plus a
customizable band (3 cms, etc.).
Allows to enter separate data for SSB and CW plus a customizable mode
(RTTY, SSTV, etc.).
Automatically calculates:
Number of worked countries per band in SSB
Number of worked countries per band in CW
Number of worked countries per band in the customizable mode

Number of worked countries per band in mixed mode
Number of confirmed countries per band in SSB
Number of confirmed countries per band in CW
Number of confirmed countries per band in the customizable mode
Number of confirmed countries per band in mixed mode
Total number of countries worked in SSB in the WARC bands
Total number of worked countries in CW in the WARC bands
Total number of worked countries in mixed mode in the WARC bands
Total number of confirmed countries in SSB in the WARC bands
Total number of confirmed countries in CW in the WARC bands
Total number of confirmed countries in mixed mode in the WARC bands

How can I get the DXCC worksheet?
You can download it from my web site at:
HTTP://www.redestb.es/personal/g_sampol

------=_NextPart_000_01BCD186.2142A590

Are you fed up of counting up =
and down manually you listing of the DXCC countries in order to know =
your current status?
Are you tired of copying your listings of =
worked and confirmed countries from one sheet to another every time =
there is an addition of deletion of a country?
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You need a computer =
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listing includes:

* Common prefix/prefixes
* Name
* Continent
* ITU zone
* CQ =
zone

Provides information on the date of insertion or deletion of the =
country.
Allows to enter data for any band from 160 m. to 23 cms. =
plus a customizable band (3 cms, etc.).
Allows to enter separate data =
for SSB and CW plus a customizable mode (RTTY, SSTV, =
etc.).
Automatically calculates:

* Number of worked countries per band in SSB
* Number of =
worked countries per band in CW
* Number of worked countries per band =
in the customizable mode
* Number of worked countries per band in mixed =
mode
* Number of confirmed countries per band in SSB
* Number of =
confirmed countries per band in CW
* Number of confirmed countries per =
band in the customizable mode
* Number of confirmed countries per band =
in mixed mode
* Total number of countries worked in SSB in the WARC =
bands
* Total number of worked countries in CW in the WARC =
bands
* Total number of worked countries in mixed mode in the WARC =
bands
* Total number of confirmed countries in SSB in the WARC =
bands
* Total number of confirmed countries in CW in the WARC =
bands
* Total number of confirmed countries in mixed mode in the WARC =
bands

How can I get the DXCC =
worksheet?
You can download it =
from my web site at: HTTP://www.redestb.es/personal/g_sampol

------=_NextPart_000_01BCD186.2142A590--

## 3303. high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: w1gak@mindport.NET
Message-ID: <199710050251.WAA15598@Eden.mindport.net>
Source record: 90281

Who makes high voltage high power transformers these days? (4kv, > 0.5 amp). I dont want to use custom built unless absolutely necessary.

Spencer
w1gak@mindport.net

## 3304. ft227rb access

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: nawrocki@direct.CA
Message-ID: <3437B5F7.4F69@direct.ca>
Source record: 90282

```
access pin connections
pin 1 - speaker
pin 2 - mic in
pin 3 - ptt
pin 4 - speaker (jumpered to pin 1)
pin 4 - 13.8vdc

mic connections

pin 1 - up
pin 2 - common for up/down
pin 3 - down
pin 4 - ptt
pin 5 - gnd
pin 6 - mic

I hpoe that's enuf? if you need more e-mail me
at nawrocki@direct.ca
73's ted VE7TIN
```

## 3305. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: arek@mayn.DE
Message-ID: <199710050928.LAA00125@mayn.de>
Source record: 90283

```
unsub arek@mayn.de ham-homebrew
```

# 3306. Re: Differences between NE602, NE612 and NE604, NE614 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEHn37G.8GJ@netcom.com>
Source record: 90284
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <3436b6dd.375412@news.online.no>,
J M Noeding <la8ak@online.no> wrote:
>Hi
>I have tried to find what is the real differences between the
>different versions of the same IC, but it seems too difficult.
>Do you have any idea?

Look at the temperature ranges on the graphs. Fig 10 thru 13 for the 602 and 612 in the book I've got (1989 Signetics Liner:Communications). The 612 is only charaterized over 0 to 70 degrees C, while the 602 is -40 to +80 degrees C. (The current drain is has a higher max value, too).

This means that these parts have looser specifications and can be given a cheaper test. With simple jelly bean high frequency analog parts like this, testing can be major part of the cost. In order to test at the extremes, you need to heat and cool either the entire wafer full of chips, or the individual packages. (Electrical heaters in the hot case, liquid nitrogen in the cold case). And each temperature means a seperate run through the tester, either with a bunch of setup on your wafer prober or device handler, or requires a seperate tester installation. That stuff gets expensive.

Either that, or the 612's are fallouts that failed to work as 602's.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 3307. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <zH8jcYAGP3N0EwX+@two-way.demon.co.uk>
Source record: 90285

Hi Garth,
>Have you thought about using a regular 12/240V sinewave inverter driving a
>50V power supply? The inverters are commercially available from 125 Watts
>up to several Kilowatts here in NZ so you must have access to them over
>there.
>Alternatively, some of the Jap and early Lucas vehicle alternators had
>external regulators as opposed to the built-in types. You can replace/reset
>these regulators to achieve other voltages for external supply
>applications. I ran a S/H 12V alternator successfully at 24V on a field
>trial by keeping the revs up a bit without blowing the rectifiers. You can
>expect maybe 80 amps from a car 12V type but for your application have you
>thought about mounting a truck 24V alternator and doing the same?
>Garth ZL4PY
>
>philip de cadenet <phil@two-way.demon.co.uk> wrote in article
><OpvMnYAJypN0EwSg@two-way.demon.co.uk>...
>> I'm looking at generating a high current charger for a 48V battery bank
>> from a 12V source. This is for a QRO 50V FET HF mobile amplifier.
>> Two routes have come to mind, a 48V alternator or a DC to DC inverter.
I've had plenty of feedback on my post above and yours is echo'd by
several other e-mails I've had.
I'm running a brand new Leece Neville 200 A alternator that I imported
from the US and this does fine on my QRP 8-pill which pulls around 150 A
on keydown.
I think I'll pay a visit to a local alternator shop and see what they
have to say. Do you happen to know what voltage rating rectifier diodes
are typically fitted in a 12/14V alternator, maybe I'll have to change
these as well?

Thanks

(((73)))

Phil G4ZOW/M.

# 3308. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: kinsler@froggy.frognet.net
Message-ID: <619jnl$ot1@froggy.frognet.net>
Source record: 90286
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Randie Ohtsji [4555] <rohtsji@glenayre.com> wrote:
>Does anybody out there know a good unidirection antenna design for
>transmission purposes (as opposed to receive). I basically
>need to transmit in front of me, none to the rear and very litte
>to the sides. Is there also some way to vary the angle of how
>much is transmitted to the sides? I need to transmit a 433MHz
>signal into a 50 ohm unidirectional antenna.

The only bulletproof design would use a parabolic reflector, which at the
UHF frequencies you're using would have to be pretty large.

It certainly wouldn't be impossible to build, though, and
a transmitting antenna = a receiving antenna. The
angle is dependent on the size of the reflector: the
bigger the reflector, the smaller the angle and thus
the more directional the antenna. I don't have the formula
for it, but it's common enough and should be in any electromagnetics
text.

The only advantage to building a dish for low frequencies is that you
don't need a very substantial one: you could build the thing out of
chicken wire and still have a very efficient reflector. But you'll still
need a pretty large structure: I'm guessing something about 10-20 feet in
diameter, depending on your application.

Mark Kinsler

# 3309. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: la8ak@online.nospam.no
Message-ID: <34371742.1709705@news.online.no>
Source record: 90287
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Tue, 30 Sep 1997 08:19:24 -0400, Steve Robertson
<stephen.h.robertson@cpmx.saic.com.xxx> wrote:

>Ken McCoy wrote:
>>
>> Pardon the cross-posting. I am having some trouble while transmitting
>> on my vintage Swan 400 (all tube). It seems to arc once the tubes in
>> transmit circuit heat up; the lack of visual evidence around sockets
>> and solid state components leads me to believe it is in a tube
>> somewhere. I have tested and replaced all tubes except the finals,
>> since the setting instructions are confusing to me, calling for an
>> external ampmeter to further adjust the bias to 55 ma (even though the
>> adjustment knob only goes to 50 ma)...
>>
>> Anyway, the real reason for my post is that the tubes currently in the
>> final amplifier stage are 6146. The schematics and manual call for
>> 6HF5. The compatibility of these separate types is unknown to me; the
>> settings on my Heathkit TT1 tube tester differ greatly.
>>
>> Does anyone know whether these tube types are compatible, or should I
>> consider trying to acquire the original tube type called for in the
>> manual? I don't *think* there has been any modification to the
>> circuitry.
>>
>> Please reply here or email me directly at kmccoy@stetson.edu
>>
>> Thanks much,
>>
>> Ken KF4BQF
>
>YIKES!! No wonder you are having problems! The 6146 is a "real"
>tranmitting tube, while the 6HF5 is a color television sweep tube. The
>6146 was made to go all day and night without complaining at medium
>power (about 180 watts CW input for a pair). Sweep tubes, however, are
>great for *INTERMITTANT* service at high power. Doing a replacement
>without circuit changes is really asking for trouble. The power supply
>for the Swan probably delivers voltage too high for the 6146 and that is
>causing the problem.
>
>Get the tubes that are supposed to be in there. (I don't know offhand if
>the tube pinouts are the same, so be real sure that no mods were made to
>the set before replacing the tubes). BTW, they won't be cheap!
>

>73 de Steve, KE4OH
>--
>To get my real e-mail address, remove the characters ".xxx" at the end
>of my address.

another problem using 6146 type instead of sweeptubes is
6146 type never live 18-20 years with heater voltage on. 6146 sicken
and emission decreases when not operated, while the sweep tube does
not have such problems. The 6146B may not last 5 years, while many
sweep tubes may still work after 20 years.
Jan-Martin N&#65533;ding,LA8AK@online.no
Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

## 3310. Motorola MaxTrc 300

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: scotter1@aol.com
Message-ID: <19971005112201.HAA28681@ladder02.news.aol.com>
Source record: 90288

I picked up a maxtrac300 at a yard sale of all places for $4.

It worked in the sense that 12 volts made the lights come on and the monitor switch made it hiss.

Anyone have a suggestion as to how do something useful with it? It apparently needs a dedicated programming computer or interface (the former, knowing Motorola). Any work-arounds or mods in this regard?

Any help appreciated, vie posting or e-mail.

KB2HJH
scotter1@aol.com

# 3311. Re: Differences between NE602, NE612 and NE604, NE614 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: tcs@cmcorp.com
Message-ID: <61874e$g5v$1@newsie2.cent.net>
Source record: 90289

rwalter7@aol.com (RWalter7) wrote:

>>>Hi
>>>I have tried to find what is the real differences between the
>>>different versions of the same IC, but it seems too difficult.
>>>Do you have any idea?
>>>
>>>I believe I have all available information from Philips (Signetics)
>>>books.
>>>
>>>Please do not reply if you do not have a definite reply to give!
>>>Please do not tell me an internet site where you think the info might
>>>be found, it is not obvious to see it.
>>>Please do not tell me about a person whom you think will know.
>>>Too often when a questioned is asked, one receives a lot of "info"
>>>without any value to the question, but it is of course OK to discuss
>>>some different topics under a title when the actual question is
>>>replied to.
>>> Several persons have tried to judge the information to learn any
>>>possible difference.
>>>
>>>Jan-Martin N�ding,LA8AK@online.no
>>>Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments
>>>
>>
>>

>I know than answer to this but guess what? I ain't tellin' ya.

I too have the spec sheets, and know the differences,
but why would I take the time and trouble for this jerk?
(I want you to tell me just what I want to know, I'm too lazy to look
for myself, and I want FREE!)

## 3312. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd1a7$0a9df940$0100005a@wa6vse>
Source record: 90290

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<3436B958.7386@crpl.cedar-rapids.lib.ia.us>...
> David Stockton wrote:
>
> > One method I'd wondered about trying is now
> > feasible due to the small number of symbols and the relatively low
> > information rate - to build, in DSP, a bank of correlators. One for each
> > Morse symbol and to compare their outputs.

If you have already done the demod and "sliced" the signal to
"1s" and "0s" you are not building a correlation demod, just
trying to do some simple pattern matching on what you have
already decided the bits to be in an effort to automate the
translation of a serial bit stream to Morse characters ... this is
NOT demodulation ... and it's not what we were talking about
vis a vis Mr. Sabin's mythical "matched filter, integrate and dump
Morse demodulator" ... that was nothing more than "voodoo electronics."

> > With all the talk of matching
> > filters to the elements of the Morse symbols, why not take a step
> > further and match to the symbols themselves? Spaces are important too
> > and the intersymbol space would need to be included in each symbol
> > correlator, because that's all that stops "L" being read as "E, T, E, E"

Same answer as the preceding paragraph ...

> > I agree with Bill that this could be great fun, and very satisfying to
> > get something going, but if we are going to consider dramatically more
> > elaborate detection schemes than ever before, then we ought to at least
> > consider that changes to the coding of the signal to suit the possible
> > decoding methods could also yield some further benefit.

Amen ... why use what is arguably about the worst possible encoding
scheme, when far better ones are available? (answer: religious dogma)
Remember, those who want to "do things the hard way" and copy signals
by ear and key by hand, could lean to do so with say, ASCII, using FSK
as long as they slowed down to baud rates comparable to what they
currently use with Morse ... they would also gain an advantage of about 6 dB
as has been demonstrated by several of us on several occasions ... plus
they would have, at their disposal a richer character set and the ability to
use the same code with trivially complex machines to operate at MUCH higher
data rates should they need/want to ...

> The important thing for Morse is to try to determine, in an optimal
> manner in the presence of noise, the time lapse between 1/0 transitions.
> This is really what Morse machine decoding is all about.

>
> As part of that, correlation dot/dash filtering of an audio frequency
> tone, at the output of a product detector, is superior in terms of Eb/N0
> for 10^-3 bit error rate, to envelope detection. Envelope detection
> concerns the Rician distribution (weak signal plus noise) and the
> Rayleigh distribution (noise only), which are not really all that great.
> A product detector plus correlation filtering is practically the same as
> coherent, or synchronous, detection because we are looking at AWGN that
> is *translated* to baseband. The improvement is at least 1 dB.
>
> We also need an adaptive threshold detector that determines the 1/0
> transitions in this AWGN background. We then "time" the no-signal
> interval in an optimal manner using time domain filters.

Neither of you has ever explained (because you can't) how to do a correlator and integrate and dump against the nonexistent energy in the "unvoiced" intervals, how to tell the difference between the real absence of tone and a tone in a deep fade, and a number of other problems that shoot more holes in this farce than a world-class Swiss cheese ...

> To get any better than that, for a better channel capacity, according to
> Shannon's equation, we must increase the transmitted bandwidth, which in
> my opinion is a real bummer for the CW portions of the HF amateur bands.

Baloney ... Morse, with the filter bandwidths commonly employed, comes nowhere close to the Shannon limit ... properly designed digital signals can, and do, provide 100% copy at much higher data transfer rates in the same bandwidths or less ... besides, the OLD idea that "narrower is always" better is, like most ham's knowledge of technology, outdated and passe ... having been replaced over the past 40 years or so in the REAL world by better knowledge and techniques ...

> One thing that is not generally realized is that FSK is only 3 dB better
> than OOK but requires a considerably wider bandwidth.

Horsepuckey ...

> David's idea of optimizing the symbol set in some way may be a good one.
> I am not able to say how we might do that.

Right ... another way to say what you said here might well be "I just can't bring myself to admit that far better coding schemes than Morse exist, so I can't come out and suggest that we abandon Morse and use one of those superior coding schemes ... It's against my religion."

> My main concern is what we have all seen over the years. The so called
> big time high tech improvements turn out, in the end, to be nothing but
> smoke and mirrors, a big pain in the butt.

More "spin-doctor" baloney with no basis in fact ... not worth of further comment ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

## 3313. Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: rah72550@aol.com
Message-ID: <19971005160501.MAA12560@ladder02.news.aol.com>
Source record: 90291

I am looking for information on the foxhole receiver used during WW2 i think.
It was made with a razor, headphones and what ever. I would like to build one
using some of todays technologies if needed. I have had no luck finding this
info
on this radio. I had some info on it a few years ago but lost it.

# 3314. FS: Eimac SK-800A tube socket for 4CX1500B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <01bcd122$39ca8c40$4a457392@default>
Source record: 90360

Hi,

I have forsale in very good condition an Eimac SK-800A
tube socket. This is for the 4CX-1500B. It is used and the
silver plating is slightly tarnished but could clean up to
near new shape
$55, shipped to the lower 48.

73,

Chuck...K1KW

# 3315. Drake MN75 Tuner $150.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcd1f2$ff02ddc0$67a0d8cc@km3g.cts.com>
Source record: 90361
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

This is the 300 watt tuner that matches the 7-line. Beutiful unit with
built-in WH-7 type wattmeter (300 watts fullscale). 4:1 balun, etc., etc.

$150.00 plus 1/2 shipping costs.

Lane
Kilo Mexico Three Germany
San Diego

# 3316. Re: Differences between NE602, NE612 and NE604, NE614 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <3437039c.1241579@news.zippo.com>
Source record: 90362
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Sat, 04 Oct 1997 21:45:04 GMT, la8ak@online.no (J M Noeding) wrote:

>Hi
>I have tried to find what is the real differences between the
>different versions of the same IC, but it seems too difficult.
>Do you have any idea?
>
>I believe I have all available information from Philips (Signetics)
>books.
>
>Please do not reply if you do not have a definite reply to give!
>Please do not tell me an internet site where you think the info might
>be found, it is not obvious to see it.
>Please do not tell me about a person whom you think will know.
>Too often when a questioned is asked, one receives a lot of "info"
>without any value to the question, but it is of course OK to discuss
>some different topics under a title when the actual question is
>replied to.
> Several persons have tried to judge the information to learn any
>possible difference.
>
>Jan-Martin N&#65533;ding,LA8AK@online.no
>Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments
>

Then Please, we will not tell you, Steve Carlisle

# 3317. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-05 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcd14a$45ea4f60$7edc24ca@not-applicable>
Source record: 90363

Have you thought about using a regular 12/240V sinewave inverter driving a 50V power supply? The inverters are commercially available from 125 Watts up to several Kilowatts here in NZ so you must have access to them over there.
Alternatively, some of the Jap and early Lucas vehicle alternators had external regulators as opposed to the built-in types. You can replace/reset these regulators to achieve other voltages for external supply applications. I ran a S/H 12V alternator successfully at 24V on a field trial by keeping the revs up a bit without blowing the rectifiers. You can expect maybe 80 amps from a car 12V type but for your application have you thought about mounting a truck 24V alternator and doing the same?
Garth ZL4PY

philip de cadenet <phil@two-way.demon.co.uk> wrote in article <OpvMnYAJypN0EwSg@two-way.demon.co.uk>...
> I'm looking at generating a high current charger for a 48V battery bank
> from a 12V source. This is for a QRO 50V FET HF mobile amplifier.
> Two routes have come to mind, a 48V alternator or a DC to DC inverter.

# 3318. Re: WTB- 50C5 tube and socket, 6T9 socket...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Steve Robertson <stephen.h.robertson@cpmx.saic.com.xxx>
Message-ID: <3438EBA9.4BC0@cpmx.saic.com.xxx>
Source record: 90214

Mark A. Johnsen wrote:
>
> Anyone have any of the above??
> If so, how much??
>
> 73, Mark NB1U

See Antique Electronic Supply http://tubesandmore.com/

They have what you need.

73 de Steve, KE4OH
--
To get my real e-mail address, remove the characters ".xxx" at the end
of my address.

# 3319. Just got my 432 up and looking for some one to talk to.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: "Peter D. Richeson" <peter.d.richeson@boeing.com>
Message-ID: <3438E5DB.14E1@boeing.com>
Source record: 90215

I jut got my 432 system up and running, 2 meter ant. is up but not routed yet. I live in Decatur, AL and am looking for someone to help me test it.

Thanks.

# 3320. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Don Ward <don@kay-dee.demon.co.uk>
Message-ID: <lv+bUBA7mPO0Ewv9@kay-dee.demon.co.uk>
Source record: 90216

In article <199710050251.WAA15598@Eden.mindport.net>, w1gak@mindport.NET
writes
>Who makes high voltage high power transformers these days? (4kv, > 0.5 amp). I
>dont want to use custom built unless absolutely necessary.
>
>Spencer
>w1gak@mindport.net

Have you considered Microwave Oven transformers? The latest RSGB Radcom
mag features these for HV power supplies.
--
Don Ward G0MDO

## 3321. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <3438AC65.1929@taxes.net>
Source record: 90217

You can call Peter Dahl, or you can rewind a pole pig,
or you can maybe get lucky at a swapfest. You could also
try Fair Radio or $urplus $windlers of Nebra$ka.

Besides Dahl (who can fix you up for about $500), you'll
have to search and you'll be spending well into four figures.
I got a note in email yeterday from a gentleman who had
a Harris transformer in that power range, and he said
Harris had quoted him $3K for a replacement.

If "new" is a requirement, call Dahl.

N6OTQ

# 3322. Re: Heathkit Warrior Linear Schmatics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <3438B0AE.554F@taxes.net>
Source record: 90218

I have a schematic for the Warrior HA-10. Email me
at jstrohm@texas.net and I can snail-mail you a copy.
An IRC or greenstamp in exchange would be nice but
not necessary if your email address ends in .edu .

The Warrior HV plate supply is separate from the other supplies,
so it can be replaced by anything that gives 1500 to 2000 volts
at 0.3 A or more for full output. Higher voltage means more power
out with shorter tube life, and a stiffer supply seems to work better.

My Warrior had a plate transformer from an old Motorola base station
and a home-brew solid-state rectifier stack, and worked fine with
1900 volts idling.

Homebrew hint: you can strip high-voltage caps and diodes from
dead PC power supplies, and build a series/parallel capacitor
bank for next to nothing.

N6OTQ

# 3323. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971006150301.LAA00614@ladder02.news.aol.com>
Source record: 90219

>
>CW EME uses 1kW RF, 20dB antennas, 250Hz RX filter for 5bps and 3dB S/N.
>Malfunctioning Galileo probe sends signals from 1000 times greater
>distance using only 20W into omnidirectional antenna, RX antenna is 60m,
>information speed is 10bps with S/N only 30 times lower! These modern
>communication techniques are available to hams (exception is RX antenna)
>in the simple form of software, PC and SoundBlaster.

Indeed Galileo does great work, it would never make the grade however, if it had to put up with the reflection coefficient of the moon.

W4ZCB...Been there, done that.

# 3324. Re: school project-need info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <3438B16F.3879@taxes.net>
Source record: 90220

Check out Harry Lythall's home page at:

http://user.tninet.se/~acz732k/

Best simple homebrew projects on the web^H^H^H^H^H^H^H^H^H^H^H
IN THE WORLD!!

## 3325. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: n4jvp@ix.netcom.com
Message-ID: <3438ff27.2592860@snews.zippo.com>
Source record: 90221

On 6 Oct 97 01:53:30 GMT, s56a@s55tcp.ampr.ORG (Marijan Miletic)
wrote:

>
>CW EME uses 1kW RF, 20dB antennas, 250Hz RX filter for 5bps and 3dB S/N.
>Malfunctioning Galileo probe sends signals from 1000 times greater
>distance using only 20W into omnidirectional antenna,

Would height above average terrain have anything to do with this?

# 3326. RFC Value

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Ted Kester <tk1932ga@atl.bellsouth.net>
Message-ID: <34393EB8.3D08@atl.bellsouth.net>
Source record: 90222

I am attempting to build a TRF receiver from an application note that does not have the values listed for the 4 RFC's that are used. The circuit has 4 stages of 2N3904 and a 2N3906 detector. The 04's have RFC's in the collector leads and the 06 has one in the emitter. This receiver is designed to operate around 47 MHZ.

Can somone suggest an appropriate value for these RFC's in uhy or mhy.

Thanks

Ted in Atlanta

# 3327. Re: crazy(!) duplexer question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Ron Curry <recurry@insighttec.com>
Message-ID: <61b3og$5d1$1@usenet76.supernews.com>
Source record: 90223

Gary is on the right track. In fact, some manufacturers sell you the same cans for 440 or 1.2. I have personally used 440 duplexers on 1.2. In general I've found most of them to be pretty lossy at 1.2 but they do work if you tune carefully.

--
Ron Curry
recurry@insighttec.com
recurry@inside.intel.com
KE6WED

Gary Coffman wrote in article <3433e7d2.366303079@news.atl.bellsouth.net>...

>On Wed, 01 Oct 1997 17:33:10 -0500, Clif <avvid@onramp.net> wrote:
>>sk wrote:
>>>
>>> Hi! I need a 1200 Mhz duplexer for a repeater. I have available a
>>> Wacom 4 cavity 450 duplexer. What are my chances of being able to hack
>>> this thing up and make it work on 1200???? Does anyone out there on
>>> this vast planet of ours have any modifications to do such a thing?
>>>
>>> Thanks...
>>>
>>> 73,
>>> Steve
>>
>>If you can figure out how to make them appx 1/3 of the length they are
>>now, change the feed loops to 1/3 amd make the interconnecting cables
>>1/3 then there you go. Sorta in the ballpark. That's why 1.2g cans are
>>tiny. Seriously you would be better off buying some and selling the
>>450's.
>
>Well now, Steve's idea isn't as crazy as it seems. Realize that a
>1/4-wave cavity at 432 MHz is a 3/4-wave cavity at 1296 MHz.
>That'll look the same to the signals. The harness has to be redone,
>but if you can tune the cavities *low* enough, they'll work just
>fine.
>
>Gary
>Gary Coffman KE4ZV | You Make It | Email:
>Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
>534 Shannon Way | Guaranteed | or
>Lawrenceville, GA 30244 | | ke4zv@radio.org

## 3328. MN75 tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: mnewl41983@aol.com
Message-ID: <19971006005200.UAA15574@ladder01.news.aol.com>
Source record: 90292

At any rate, the MN75 is a very good tuner, as I had one several years ago.

MSN

## 3329. Battery Charger question...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: "Mark A. Johnsen" <mjohnsen@ids.net>
Message-ID: <01bcd1c3$14556560$37d1d49b@default>
Source record: 90293

This question references a simple charging circuit from page 56 of the June 1997 CQ magazine. The author claims
that the charging current is limited to about 6 amps by the 0.47 ohm (R1) resistor. Is this a correct value or am I missing
something? If R=E/I, then 12/6= 2 ohms. I have a 12v @ 3A p.s. that I would like to use. If I choose to draw only 2A
then I figure the value of R1 should be 6 ohms, 24W! Could someone please enlighten me..

73' Mark NB1U. W. Greenwich, RI USA

## 3330. WTB- 50C5 tube and socket, 6T9 socket...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: "Mark A. Johnsen" <mjohnsen@ids.net>
Message-ID: <01bcd1c6$ca084280$37d1d49b@default>
Source record: 90294

Anyone have any of the above??
If so, how much??

73, Mark NB1U

# 3331. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcd216$22408b20$6cdc24ca@not-applicable>
Source record: 90295

I recall my old ex-services Dad making some sort of Radio on the kitchen floor with strips of paper spread with boot polish for resistors, measured lengths of wire wound in/out through slots cut in circles of cardboard, an empty Corned Beef tin which did something and a willing kid to climb the big Birch with the end of the aerial wire. ??? Whatever it was, it worked because we heard Droitwich in a GPO earphone.

RAH72550 <rah72550@aol.com> wrote in article
<19971005160501.MAA12560@ladder02.news.aol.com>...
> I am looking for information on the foxhole receiver used during WW2 i
think.
> It was made with a razor, headphones and what ever. I would like to build
one
> using some of todays technologies if needed. I have had no luck finding
this
> info
> on this radio. I had some info on it a few years ago but lost it.
>

# 3332. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Scott <zenier@geocities.com>
Message-ID: <3438755B.4FDE@geocities.com>
Source record: 90296

test

# 3333. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: joe d <jedent@c-com.net>
Message-ID: <3438B722.A0F@c-com.net>
Source record: 90297

RAH72550 wrote:
>
> I am looking for information on the foxhole receiver used during WW2 i think.
> It was made with a razor, headphones and what ever. I would like to build one
> using some of todays technologies if needed. I have had no luck finding this
> info
> on this radio. I had some info on it a few years ago but lost it.
The "Foxhole Reciver" was made up of two double edge razor blades and
a peice of pencil "lead" the pencil "lead" was and is a graphite
compound. The blades were stuck in a block of wood about an inche apart.
the pencil "lead" is layed across the other sharp edge. A ground wire
is attached to one blade, an antenna (very long) is attached to the
other blade. High IMP (2000 ohms>) earphones are attached across the
blades or in line with the antenna or ground.(which ever works)
This design was a ripoff of the original radio receiver used in the late
1800s and early 1900s "spark days". Where a glass tube was filled with
simiconducting particules of graphite and or iron fileings.
You say you would like to duplicate this technology with todays
technology. OK,..... use a 1N34 diode insted of the razor blades and
the pencil lead.
jed -.- ..... --.. -.-. -...

# 3334. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <3438CE85.6DF03AEA@ix.netcom.com>
Source record: 90298

This type of receiver is similar to yout typical crystal radio and used a Gillette "Blue Blade" as the diode detector instead of a galena crystal. This type of blade was coated (anodized?) with a material that would behave as a diode. A wire whisker or wire wrapped around a pencil lead was used as the point contact. I don't believe this blade has been manufactured for a long time. However, you never know what you might find at an old garage sale :)

Regards,
Rolf

RAH72550 wrote:

> I am looking for information on the foxhole receiver used during WW2 i think.
> It was made with a razor, headphones and what ever. I would like to build one
> using some of todays technologies if needed. I have had no luck finding this
> info
> on this radio. I had some info on it a few years ago but lost it.

# 3335. Re: Battery Charger question...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3438bf78.199200@news.crosslink.net>
Source record: 90299

On 6 Oct 1997 00:16:08 GMT, "Mark A. Johnsen" <mjohnsen@ids.net>
wrote:

>This question references a simple charging circuit from page 56 of the June
>1997 CQ magazine. The author claims
>that the charging current is limited to about 6 amps by the 0.47 ohm (R1)
>resistor. Is this a correct value or am I missing
>something? If R=E/I, then 12/6= 2 ohms. I have a 12v @ 3A p.s. that I
>would like to use. If I choose to draw only 2A
>then I figure the value of R1 should be 6 ohms, 24W! Could someone please
>enlighten me..

You get an "A+" on your arithmetic, and an "A+" on Ohm's Law, but you
get an "F" on your "Kirchoff''s law. The battery that you are
charging has an e.m.f. of roughly 12.6 to 13.0 volts as it charges.
Your charger has a source or Thevenin voltage of somewhere between
13.5 and 14.5 volts, typically. If you want to design a dissipative
current limiting resistor, you have to use the Difference between the
two voltages, which is only a volt or two in the equation. This is
because the battery voltage and the charger's voltage are in oppostion
to one another. Actaully, such a circuit is not very sophisticated if
it's just using a series resistor as the current limiter.
Unfortunately, I don't have the referenced article to see what they
are using in their circuit.

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

## 3336. Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: s56a@s55tcp.ampr.ORG
Message-ID: <12743@s55tcp.ampr.org>
Source record: 90300

With slight delay I noticed interesting tech debate (again?) on Morse.

I have a great respect for a longtime work of Bill, W0IYH and frequent comments from Gary, KE4ZV but Carl, WA6VSE seems to be of Internet age! I am 52, M. Sc. E.E., computer professional, ham since 1962 on 6-160m using CW, SSB and RTTY. I did Ph.D. resarch on HF CW computer detection until 1991. Let me add few thoughts on the beloved Morse code.

Morse code was introduced 100 years ago as the only form of direct human digital communication and it is impossible to defend in the 21st century. It had efficient entropy information encoding using statistical features of English language by assigning short symbols to the frequent letters.

Morse code has 1:3:5 relation between dots (and element pauses), dashes (character pauses) and word pauses (might be even 7 dots). When hams use hand and electronic keyer to generate code to be received by ears on the other end, dots, element pauses and dashes stay close to 1:1:3 relation but character and especially word pauses are left to the operator's feeling of rythm. Beware of human errors in sending hand Morse which adds to the difficulties of the exact computer decoding.

Endless string of Morse dots with equal length pauses is the fastest CW code produced and we should design our channel filter for that bandwidth. It will not be optimal for real mix of dots, dashes and pauses but the power spectra will be within our bounds and additional dash energy wont hurt much. I intentionally avoid perfect matched filter theme!

Signals in CW On-OffKeying are much easier to detect than NOISY pauses. These are of random nature unless we use complex AI learning algorithms. Even on HF with notorius fading, we have >90% of signals stable within 10msec period so we can accurately estimate optimal threshold for the next signal-to-symbol slice but we are left in the dark during a long pause periods. We can have three 10msec FFT energy samples per dot/pause for a reasonable symbol estimate. Reference length of two dots time is enough for a resolution between dots and dashes, element and character pauses even with poor hand keying. Simple digital median filter of length three easily recovers single bit errors.

DSP CW systems I developed and tested in 1991 could cope with weak HF signals. The only advantage letf was my prior knowledge of the expected information. I stoped further research not wanting to spoil my hobby. I also felt Morse place was preserved in the history as we are the last human generation using it!

Our DC-THz tech guru Matjaz, S53MV, professor at Ljubljana University, claims the following educational advantages of CW in hamradio comms:

QSO procedures, TX/RX protocol, error detection and correction.
Weak side of CW is poor usage of radio spectrum and power (surprised?).
Our ears with associated part of brain are so inferior to visual senses.
The following table sumarises some important radio communications facts:

| Modulation type | Information speed | Bandwidth | Efficiency |
|---|---|---|---|
| Human CW - OOK | 10bps | 500Hz | 0.020bps/Hz |
| Radioteletype | 50bps | 300Hz | 0.167bps/Hz |
| SSB speech | 200bps | 2kHz | 0.100bps/Hz |
| AM speech | 200bps | 6kHz | 0.033bps/Hz |
| FM speech | 200bps | 15kHz | 0.013bps/Hz |
| AFSK/FM packet | 1200bps | 15kHz | 0.080bps/Hz |
| Manchester packet | 38.4kbps | 200kHz | 0.192bps/Hz |
| BPSK packet data | 1.2Mbps | 2MHz | 0.614bps/Hz |
| QPSK GSM mobile phone | 271kbps | 200kHz | 1.355bps/Hz |

Note: Manchester and 1.2Mb packet networks are implemented in Slovenia!

CW EME uses 1kW RF, 20dB antennas, 250Hz RX filter for 5bps and 3dB S/N.
Malfunctioning Galileo probe sends signals from 1000 times greater
distance using only 20W into omnidirectional antenna, RX antenna is 60m,
information speed is 10bps with S/N only 30 times lower! These modern
communication techniques are available to hams (exception is RX antenna)
in the simple form of software, PC and SoundBlaster.

PACTOR2 hamradio modem does 1000bps in 500Hz BW, 100 times more than CW!

73 de Mario, S56A, N1YU.

# 3337. FS: Books - Partial List -

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <3438F375.3F3A@ix.netcom.com>
Source record: 90301
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have the following books for sale from a large collection I recently purchased. I will list more soon but if you have needs, wants for a particular book - let me know.

NOTE: ALL PRICES LISTED INCLUDE SHIPPING - LOWER 48

VHF UHF Manual, Fourth Edition 1985, by GR Jessop, G6JP - Hardcover, excellent shape except for a few pen marks on the front cover. Many projects, PC board negatives. Best book of its kind I've ever seen. $25

Radio Handbook, Nineteenth Edition 1975, by William Orr, W6SAI - Harcover. Cover is a bit torn, otherwise in very good condition. Extensive description of antennas. $20

RCA Transistor Manual - 1966 - Softcover - Cover corner bent, otherwise excellent condition. $8

Radio Shack Transistor Substitution Guide, 1974, softcover $3

Radio Shack Understanding Solid State Electronics, 1972, softcover $3 (needs binding)

GE Transistor Manual, 3rd Edition - 1958, Softcover $10

Transistor Circuits and Applications, 1968, Lawrence Cowles, Hardcover with dustjacket. $12 - excellent condition.

SET of 3 RCA Ham Tips. July-August 1954 (Components for Pi-Coupled Amplifiers), Summer 1962 (A 120 Watt 50 MC Transmitter), July 1968 (An Audio Control System for SSB). These are pamphlets and in good condx - some staining, minor tearing. $8

Principles and Practices of Radio Servicing, 2nd Edition 1943 - HJ Hicks. Hardcover text type book. Very Good condx. $15

ARRL Handbook - 1952 - Cover complete but needs binding. Good condx with a few bent page corners. $20

ARRL Handbook - 1965 - Excellent Condx. inside cover page which has been separated from the binding. $18

ARRL Handbook - 1974 - Very Good condx. Cover a bit worn with minor bends. $12

RCA Transmitting Tubes Technical Manual TT-4 - 1956 - Excellent Shape. Cover has a little wear. Looks like it was never opened. Softcover - $10.

Many more available - particularly for broadcast television.

NOTE: Satisfaction Guaranteed. You don't like it, send the book back I'll refund the purchase price minus the cost of shipping.

ALSO: 10% Discount for current FISTS, QCWA and OOTC Members. Only one 10% discount applies. Buy several books and we'll talk about price.

PRICES INCLUDE SHIPPING. Prefer US Postal Money Order. Checks will be held 2 weeks to clear.

Contact me with any questions.

73 de Ron, WA1UWZ

FISTS #3099
QCWA #28749

# 3338. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34391297.756E@crpl.cedar-rapids.lib.ia.us>
Source record: 90302

Marijan Miletic wrote:

> DSP CW systems I developed and tested in 1991 could cope with weak
> HF signals. The only advantage letf was my prior knowledge of the
> expected information. I stoped further research not wanting to spoil my
> hobby. I also felt Morse place was preserved in the history as we are
> the last human generation using it!

Not true!

The problem that we face regarding CW operation is this:

1) We all recognize that CW is not, technically speaking, a method of the greatest efficiency. My critics just refuse to let me alone on that subject. I get tired of hearing it.

2) But there are other factors involved that we insist on ignoring, in our enthusiasm for technical perfection as the only issue that is allowed to be considered (it is politically correct, right?).

3) In amateur bands where spectrum space is not a critical issue, the more efficient data modes are certainly preferable. No one is arguing about that. I know the numbers as well as anyone.

4) The problem lies in the HF CW bands, which are narrow and are often crowded, especially during contests and during DXing activities. There are some who have a certain disdain for these activities, but I couldn't care less about that. For example the 20 meter CW band is only 100 kHz wide, and half of that is occupied by data stations (which is OK).

5) In this scenario, it is vitally important to restrict bandwidth as much as possible, just simply because it is a precious commodity. Let me give you an example of what I mean. At one time there was a very similar rather strident and noisy and opinionated group who promoted Double-Sideband-Suppressed-Carrier speech, because it offers a 3 dB S/N advantage over SSB. In just a very short time it was realized that the narrower bandwidth of SSB was a greater benefit because of the crowded HF bands and also because it was easier to receive (phase coherent detection not needed). Since that decision was made there has been very little looking back, at least as far as the HF ham bands are concerned.

6) We have the same situation now, people who don't want to look at both sides of the issue. The simple conclusion that is very easy to recognize is that for the ***HF CW BANDS*** CW mode using Morse is still, and will continue to be, a sensible and efficient mode, if it is done correctly.

7) The point that I and several others have tried to make is that narrowband Morse code, properly implemented with computer-assisted coding and decoding (in a noise and interference environment) is still an excellent mode for Amateur communication, despite its theoretical limitations. In a crowded and fading spectrum it begins to look a hell of a lot better than the introductory-level textbook number crunchers give it credit for.

8) The approach that I and others are advocating is to **OPTIMIZE** Morse code usage as a desirable alternative to eliminating it, for the very precise reason that in the crowded HF CW bands it makes a lot more sense than the wider bandwidth alternatives. If you listen on 20 meters or on the commercial/military frequencies you find that a data station takes up much more spectrum than a CW station. This illustrates the problem very clearly. A high speed data stations completes a message faster, but creates wideband interference. A CW station takes longer but creates less interference. The wideband interference is a greater problem, in practice.

9) There are those who have examined the bit error rate vs S/N ratios of the various waveforms and have made up their minds, no arguments allowed. Numbers are numbers, right? Wrong! What I am telling you is that this is not good engineering or good science unless it also considers the realities of the *channel* and the *spectrum* that is being used for communication. The *real* experts deal with these realities every day of the week. The simplistic answer is to ignore all of these bothersome details.

Bill W0IYH

# 3339. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: geomac@hop-uky.campus.mci.net
Message-ID: <geomac-0610971231140001@s14-pm07.snaustel.campus.mci.net>
Source record: 90303
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

> I will say that the *good* ham & SW gear that was made
> back in the old days involved a considerable handwiring
> (uggh, check out some Hallicrafters' bandswitches, yikes!),
> and could not be duplicated these days for less than
> 6X to 10X the price. Them ol' National HRO's sold
> for $359 new in 1951!
>
> BTW, we have a good deal on Russian 807's
> if anyone's interested. Check out:
> http://www.triodeel.com/tubes.htm

Ned,

Consumer electronics is one of the few things to actually decline in price based on the operative CPI. That National HRO actually sold for about $2,200 in today's dollars. The SX-88 of the 1954 era aold for about $4,000 in today's dollars and a KWS-1 - 75A4 combination sold for about $9,000 in today's dollars.

A good rule of thumb when calculating in constant dollars is... 1946 - 1950 multiply by 6.5 1951 - 1955 multiply by 6 1956 - 1963 multiply by 5
This will get you in the ballpark.

73
George
WA3DNC

# 3340. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: europa@primenet.com
Message-ID: <europa-ya023580000610971440280001@news.primenet.com>
Source record: 90304

In article <12743@s55tcp.ampr.org>, S56A@s55tcp.ampr.org wrote:

Since I am only interested DX operating, my opinion will be rather biased. However, I am certain that in the midst of extreme interference like one would find in a pileup (thinking along the lines of the 1978 Clipperton expedition, the worst I can remember) CW reigns supreme. That is why I was able as teenager to work all that rare DX using 100W and a dipole. Or work China on CW in early 80's using indoor antenna and 100W :) SSB was always a bust- only did well when I went over to visit friend with KW and monobander.

Lastly, I used to do a lot of work with power line carrier products, for using the AC power lines for remote control. In that case, the debate was between FSK and ASK, although Japanese company was trying spread spectrum. The AC power lines have to be one of the most grueling environments for transmitting data. I guess CW is a form of ASK.

Rob.

ps. one thing I wonder about all these advanced modes: Do they put the operators' brain so far removed from the ether that they are just no fun? I always thought that the difficulty of the simpler modes was what made them interesting. Really, if we are left with digital modes using a keyboard and crt, then I may as well just use the Internet.

# 3341. WTB: Weak or Dead High Power Tranmitting Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: jim.b@okisemi.com
Message-ID: <876179954.20079@dejanews.com>
Source record: 90305
Cross-posted to: alt.radio.networks.cbc,rec.radio.swap,rec.radio.amateur.homebrew,alt.radio.broadcasting

I'm looking weak or dead high power transmitting tubes. Tell me what you have available.

Principally looking for tubes with >100 and <50,000 watts plate dissipation that will work (used to work) at full rating up through 144 Mhz.

-Jim

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 3342. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <34613a76.1171443767@news.sci.fi>
Source record: 90306

"William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>Matthew Francey wrote:
>>
>> >William E. Sabin wrote:
>> >> There is a "dot" matched filter, a "dash" matched filter and
>> >> matched filters for the spaces in-between (all of them integrate and
>> >> dump). These can be combined and decoded by algorithms. The code speed
>> >> can be "learned" by the processor.
>>
>> In reality, there is only a "dot" filter, and you have to make a more or
>> less arbitrary choice as to whether there is a signal present or not.
>> Which is why OOK (be it fixed-width or Morse) is far from optimal.
>
>
>In the first place, I never said that Morse code is "optimal" in any
>sense. I would appreciate it if you would not ascribe things to me that
>I have never stated.
>
>There are 5 intervals in Mores code:
>
>1) The dot interval
>2) The dash interval
>3) The interval between dots and dashes
>4) The interval between words
>5) The interval between sentences.
>
>In any on-off keying system, we make the following decisions:
>
>1) Is the signal present?
>2) Is the signal absent?
>
>In any on-off type signal we assign a threshold level. Above the
>threshold the signal is presumed to be present. Below the threshold
>level the signal is presumed to be not present. Digital logic does
>exactly this all the time.
>
>If the signal is absent the threshold detector can be followed by an
>inverter that converts a "low" state to a "high" state. This high state
>can be integrated or timed so that the duration of the "signal absent"
>interval can be determined.
>
>In Morse code there are 3 "signal not present" intervals. As part of the
>Morse code translation by a computer we would like to be able to

>identify these three intervals. They contain valuable information about
>the Morse signal, especially when it is transmitted from a computer.
>
>We can do this by assigning a matched filter for each of these three
>intervals (after the logic inversion that I mentioned). These three
>filters, combined with the dot and dash filters, can then be sorted out
>by the computer and decoded, character by character (using a lookup
>table), word by word and sentence by sentence.

I do not remember, if I have previously reported these experiments in some newsgroups, so someone may have seen this before.

I have been playing around with an old DSPlay DSP simulation package and constructed some matched filters using FIRs with coefficients +1 for mark and -1 for space clocked with 2 or 3 times the dot frequency. Each character included the character itself and the intercharacter space. Since the taps must be in reverse order, the taps for "A" were

0,0,...,0,-1,-1,-1,-1,-1,-1,1,1,1,1,1,1,-1,-1,1,1,-1,-1,-1,-1,-1,-1,0,0..

After each filter, the output was normalized to compensate to different lengths of filters. Running a noise free unipolar (0,1) Morse signal (simulating A1A modulation) containing the word "PARIS " in parallel to all these filters, the "P" filter had a peak early, followed by the "A" filter and so on. However, the 2nd and 3rd highest peaks from each filter were within only a few dBs from the strongest peak for short characters. For a practical decoder the output from each (normalized) matched filter output would have to be compared to find out which is the strongest and that it is above a threshold value. I also made a matched filter to match the entire word "PARIS " and it displayed a single very strong peak (as expected) and a few much weaker one.

However, adding gaussian noise to the input signal degraded the results very rapidly causing false peaks from the matched filters. Switching to bipolar signal (-0.5, +0.5) (simulating FSK) improved the situation somewhat. The test setup was not very realistic, since both the intended signal and gaussian noise were not band limited and only two samples/dot time were used.

My main interest was to study parallel decoding, but the most remarkable observation was the relatively strong side-peaks for short characters even with noise free signal. For longer characters, the main peak to side-peak ratio at the matched filter output was quite good in some cases and even better when decoding a whole phrase, as the example with decoding the word "PARIS " shows. The "PARIS " filter gave a nice peak with bipolar input, when the outputs from individual character filters were completely useless due to the added noise.

Paul OH3LWR

## 3343. Need Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Todd Albritton <akhnaton@mindspring.com>
Message-ID: <3439A2A6.AD3E28B@mindspring.com>
Source record: 90307

I would like to build a transmitter/receiver but I am having trouble finding plans on the net. If anyone can help me please e-mail me.

akhnaton@mindspring.com

Todd

# 3344. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: "John D. Farr" <johnfarr@ro.com>
Message-ID: <61cb28$81s$1@news.ro.com>
Source record: 90308

Snip!

>Can you still get high-Z headphones? If not, you may need to use modern
>(30-ohms-ish) earphones and a transformer -- assuming you can find a
>transformer!
>
>Roy Lewallen, W7EL

Radioshack has high Z earplugs.

John, KC4ZXX

# 3345. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: geomac@hop-uky.campus.mci.net
Message-ID: <geomac-0610972251120001@s13-pm16.snaustel.campus.mci.net>
Source record: 90309
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

In article <343964d1.11870500@news.chicago.il.ameritech.net>,
postmaster@triodeel.com wrote:

> geomac@hop-uky.campus.mci.net (George McCouch) wrote:
>
> >
> >Consumer electronics is one of the few things to actually decline in price
> >based on the operative CPI.
>
> I would say that's only if you go to PC boards and automated
> manufacturing techniques.If consumer electronics were built
> the same way they were, handwiring and all that, I don't think
> that would be the case,and that's how I was making the comparison.
>
> I also note the CPI numbers for consumer electronics 1950 vs 1997
> would be comparing tube to transistor gear.
>
> >That National HRO actually sold for about
> >$2,200 in today's dollars.
> >A good rule of thumb when calculating in constant dollars is... 1946 -
> >1950 multiply by 6.5 1951 - 1955 multiply by 6 1956 - 1963 multiply by
> >5
> >This will get you in the ballpark.
>
> That's going to only be an average, at best, as you noted.
> The Marantz 7 stereo preamp sold for $249 in 1961
> the current repros retail for about $2,800.
> Dyna ST70's were $89.95 in 1961, the 1997 price
> retail is for the Sound Valves copy: $1099.
> So I don't think I'm that far off the mark,
> perhaps even a little short, with a 10X price diff
> 1950 to 1997, for gear with similar components
> and construction.

Ned,

I can not disagree with anything you say. Yes you would have to take into account the tube vs solid state construction as well as the economies of scale with mass production techniques. As you say, those National receivrs were virtually hand crafted. However, industry was geared up to produce the tubes, tuning caps, and bandswitches which have been technologically outmoded today. With the Marantz and the Dynakit, there is no one producing parts to any large extent. Small runs mean high prices. If the

transister or IC were never invented it would be interesting to see if electronics would have in fact decreased in price in terms of todsy's dollars.

On the other hand, automobile production has been automated to a large extent. I did a little research today on the cost of a Chevy 4 door full size sedan in 1951, and it was about $1,800.
If the CPI held true, that should be about $10,400 today. The full size Caprice, last I looked, sold for about $22,000, or twice the rate of the CPI. of course there is more equipment and light year ahead technology in it. A house is another interesting example. My house new sold for about $12,000 in 1958. not it appraises at 13 times that amount. New construction for the same size home costs even more. Take a look at health and auto insurance costs from the same time period, or the costs of a college education. Maybe the CPI has been misfigured all these years on the low side?

73
George WA3DNC

# 3346. Re: specs used in ordering crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-0610971826420001@k4dii.ksc.nasa.gov>
Source record: 90310

In article <mugshot77-ya02408000R0510970656200001@snews.zippo.com>,
mugshot77@mail.geocities.com (I. I. "Crash" Knorr) wrote:
> I would like to order a crystal for use with one of those 1-watt
> CW QRP kits (which I also haven't ordered yet). Looking at the
> JAN Crystals catalog, I see that they require you to specify
> load capacitance and series or parallel resonance in your order.
> Is there a standard all-weather response to these two specifications?

I. I.-

If the crystal can be tuned across several KHz, it is probably operating in parallel resonance mode. It might have a varicap diode (voltage-variable capacitor) or a real variable capacitor, to effect its frequency change.

If this is the case, then exact frequency and load capacitance may not be critical. In other words, you may be able to use the cheapest crystal available. You might specify something like parallel resonance, 24pf load capacitance, 0.01% tolerance.

If this isn't the case, and the crystal operates on a single, precise frequency, then all bets are off.

I think you can get what you want if you talk to someone at the crystal factory. In years past, I've ordered from Sentry and International, and the people taking the orders knew what I wanted better than I did! They may already be familiar with that specific QRP Kit's requirements.

73, Fred, K4DII

# 3347. Re: Differences between NE602, NE612 and NE604, NE614 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: Nicholas Gray <ngray@redwood.nsc.com>
Message-ID: <EHnLE3.E51@nsc.nsc.com>
Source record: 90311
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

la8ak@online.no (J M Noeding) wrote:
>Hi
>I have tried to find what is the real differences between the
>different versions of the same IC, but it seems too difficult.
>Do you have any idea?
>
>I believe I have all available information from Philips (Signetics)
>books.
>
>Please do not reply if you do not have a definite reply to give!
>Please do not tell me an internet site where you think the info might
>be found, it is not obvious to see it.
>Please do not tell me about a person whom you think will know.
>Too often when a questioned is asked, one receives a lot of "info"
>without any value to the question, but it is of course OK to discuss
>some different topics under a title when the actual question is
>replied to.
> Several persons have tried to judge the information to learn any
>possible difference.
>
>Jan-Martin N�ding,LA8AK@online.no
>Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments

Bill Sloman's response is correct. It is common for manufacturers to get requests from their customers for a "more loosely specified" product (or a "more tightly specified" one). If the manufacturer then determines that there is enough business for cuch a device, they will generally introduce it with a slightly differernt part number. This is the case with the NE602/612 and the NE604/614.

The NE602/604 were the original products and were designed mostly for the cellular phone market. A customer requested a lower price with more relaxed specifications and Signetics marketing did a market study and found that there was a need for lower priced, relaxed specifications and introduced the NE612/614. The testing eliminated means that the cost of manufacturing was lower and that cost was passed on to the customers who did not need the tighter specifications. The die for the NE612 is the same as the die for the NE602; the only hdifference is in the the testing. The "A" version is an improved die.

(I was there when these parts were intriduced).

--
Nick Gray

Applications Engineer
National Semiconductor Corporation
email: ngray@redwood.nsc.com
National Data Sheets at http://www.national.com

# 3348. Re: Paralleled power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <61cim3$sjh@harpo.cs.ubc.ca>
Source record: 90312

William W Janssen <billj@calweb.com> writes:
>Allso if the supplies have Max current limiters go ahead and parallel
>them as the worst that can happen is one will go to max outpiut and
>the other will pick up the remainder of the current.

Also, check if the supply has a "remote" input on the back. Some
supplies are designed to be operated in parallel or series.

The way this works is this: Normally, the error amplifier in one
supply drives the output stage in that supply. If it is a constant-voltage
and constant-current supply, there are two error amplifiers, and whichever
one wants the *least* output drive wins. But in either case, there
is a point in the circuit that represents the drive to the output
supply.

In a supply intended for parallel operation, this point is brought out
to the rear panel. Normally, the output of the error amplifier is just
jumpered to the input of the output stage. But you can break that
connection, and instead connect the output stage to the error amplifier
output of *another* identical supply. Then the one supply acts as
a "master", with its current and voltage controls setting the maximum
output of the paralleled supply. The second supply is a "slave", just
supplying extra current under the control of the master supply. Since
two nominally-identical output stages are being driven with the same
signal, each supplies about half the total output current.

Dave

# 3349. Re: Differences between NE602, NE612 and NE604, NE614 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-06 00:00:00 UTC
From: sloman@sci.kun.nl
Message-ID: <61al14$sdk$1@wnnews.sci.kun.nl>
Source record: 90313
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <3436b6dd.375412@news.online.no>, la8ak@online.no (J M Noeding) says:
>
>Hi
>I have tried to find what is the real differences between the
>different versions of the same IC, but it seems too difficult.
>Do you have any idea?
>
>I believe I have all available information from Philips (Signetics)
>books.
>
>Please do not reply if you do not have a definite reply to give!
>Please do not tell me an internet site where you think the info might
>be found, it is not obvious to see it.
>Please do not tell me about a person whom you think will know.
>Too often when a questioned is asked, one receives a lot of "info"
>without any value to the question, but it is of course OK to discuss
>some different topics under a title when the actual question is
>replied to.
> Several persons have tried to judge the information to learn any
>possible difference.

The difference between the NE/SA602A and the NE/SA612A is that the
data sheet for the former specifies maximum values for noise figure at
455kHz, third order intercept point and RF input capacitance.

All of these will make the former part more expensive to manufacture,
because guaranteed maximum values have to be tested, which costs money,
and parts that don't meet the spec have to thrown out, or (in this case)
shipped as NE/SA612A parts.

The difference between the NE/SA604A and the NE/SA614A is much the
same, except that here we have to look at the tightness of the tolerances
on the parts - the NE604A is more tightly toleranced than the SA604A
which is in turn more tightly toleranced than the NE614A.

These sorts of diferences may seem trivial, but anybody who had worked
with tightly toleranced designs would be aware of the economic
importance of predictable performance from the IC's.

What is the Norwegian for "cowboy"?

Bill Sloman, Nijmegen

# 3350. Poss mod to FT-50?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Daniel and Cheryl Warren <warrend@ridgecrest.ca.us>
Message-ID: <61c84q$9of$3@ash.ridgecrest.ca.us>
Source record: 90224

The Yaesu FT-50 dual band HT has extended RX capability up to 900 Mhz,
cellular blocked.

Is there an international version or mod to restore full RX?

Thanks,

Dan

# 3351. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcd2e5$02969ce0$6bdc24ca@not-applicable>
Source record: 90225

philip de cadenet <phil@two-way.demon.co.uk> wrote in article
<zH8jcYAGP3N0EwX+@two-way.demon.co.uk>...
> Hi Garth,
<cuts>
> have to say. Do you happen to know what voltage rating rectifier diodes
> are typically fitted in a 12/14V alternator, maybe I'll have to change
> these as well?

I think 100V spikes would be getting extreme for a 12V type alternator.
Right or wrong, I worked on a rough rule of thumb that spikes may be 2.5
times the o/p voltage. Having said that, I have never actually had one pop
on me and we did (accidentally) run the alternator off-load to near 50V
briefly on testing when attempting to get the regulator correct. Maybe a
quick phone call to a friendly Auto-electrician? Hopefully you have a
nearby friendly car wrecker with reasonable prices? Best of Luck!
Garth ZL4PY

# 3352. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcd2e7$db02bf80$6bdc24ca@not-applicable>
Source record: 90226

I went to the James Watt Memorial College in Greenock to learn my morse code (is it still there?). Then I spent many happy years wandering the globe communicating by hand morse for a living. I used long and short codes, Q Codes and learned out of sheer desperation the right way to send v-v-vs to catch those sweep Russian transmitters in the Arctic. When I settled here, I ended up conducting morse code examinations for amateurs. I finally escaped from its pull but now I hear morse code in the wind, in a squeaking door, and I would swear Sam the family pet Cockatiel sings in morse code. I do not think morse code will die for me but I have no scientific confidence for this belief, just a contented prejudice.

Marijan Miletic <s56a@s55tcp.ampr.ORG> wrote in article
<12743@s55tcp.ampr.org>...
> With slight delay I noticed interesting tech debate (again?) on Morse.

## 3353. Wanted: Kantronics D4-10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Dean Arthur <dearthur@cyberhighway.net>
Message-ID: <34398380.41FA@cyberhighway.net>
Source record: 90227
Cross-posted to:
rec.radio.amateur.packet,rec.radio.amateur.homebrew,rec.radio.amateur.digital,rec.ham-radio.swap,rec.ham-radio.packet

Anyone with D4-10 willing to part with it?

How much, what condition, manual??

# 3354. Welcome To The European Microwave News

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <y0WsxJAs3eO0Ewde@pacsat.demon.co.uk>
Source record: 90228

```
Welcome To The European Microwave News
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Interested in amateur radio above 1 GHz?

Need something new in your hobby?

Enjoy home construction?

The European Microwave News is dedicated to supporting microwave
amateur radio in the UK and across Europe. The EMN is published
on a regular basis and is available at no cost, via email or WWW.
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construction, news, bands reports, sked info, sales/wants and
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Subscription is free. Simply send an email to:
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+-------------------------------------------------------------------+
```

# 3355. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <61caev$djq$2@news1.teleport.com>
Source record: 90229

In article <3438B722.A0F@c-com.net>, joe d <jedent@c-com.net> wrote:
>RAH72550 wrote:
>>
>> I am looking for information on the foxhole receiver used during WW2 i
think.
>> It was made with a razor, headphones and what ever. I would like to
build one
>> using some of todays technologies if needed. I have had no luck finding
this
>> info
>> on this radio. I had some info on it a few years ago but lost it.
>The "Foxhole Reciver" was made up of two double edge razor blades and
>a peice of pencil "lead" the pencil "lead" was and is a graphite
>compound. The blades were stuck in a block of wood about an inche apart.
>the pencil "lead" is layed across the other sharp edge. A ground wire
>is attached to one blade, an antenna (very long) is attached to the
>other blade. High IMP (2000 ohms>) earphones are attached across the
>blades or in line with the antenna or ground.(which ever works)
>This design was a ripoff of the original radio receiver used in the late
>1800s and early 1900s "spark days". Where a glass tube was filled with
>simiconducting particules of graphite and or iron fileings.
>You say you would like to duplicate this technology with todays
>technology. OK,..... use a 1N34 diode insted of the razor blades and
>the pencil lead.
>jed -.- ..... --.. -.-. -...

Can you still get high-Z headphones? If not, you may need to use modern
(30-ohms-ish) earphones and a transformer -- assuming you can find a
transformer!

Roy Lewallen, W7EL

# 3356. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3439f405.0@newshost.pcug.org.au>
Source record: 90230

s56a@s55tcp.ampr.ORG (Marijan Miletic) wrote:
>With slight delay I noticed interesting tech debate (again?) on Morse.
> (stuff deleted)

Other modes may be more efficient, but when you add up the simplicity of equipment required, cost, operator skill etc, Morse has a lot in its favour.

I've just finished building a direct conversion CW transceiver for 40 & 20m. It puts out about 5 watts and uses a VXO and freq doubler to cover the bottom 20 kHz of 40m and the bottom 40 kHz of 40m.

Got it on the air last night. First QSO on 20m was a local (15km away). Then had a few interstate QSOs on 40m. Then back to 20m - worked BV, HL, ZL and VK6 with just a dipole antenna. So it looks as if it works and is a good DX performer.

It will certainly not be much good for passing commercial traffic - computers and satellites are best for that, but on the basis of cost, simplicity and sheer fun of building and operating it, it's unbeatable. As a hobby we can use a range of techniques - some (many) are not state of the art, but we use them anyway. Our objective as hams has nothing to do with making money, so I for one will continue to build gear for this obsolete mode until someone comes up with a mode easier/cheaper to construct equipment for.

73,

Peter VK1PK

(off to check out 20 metres!)

--


---
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

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## 3357. Crystal Radio Problems and Insights

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: lordclump@aol.com
Message-ID: <19971007100401.GAA12800@ladder02.news.aol.com>
Source record: 90231

When I was a kid I had great fun playing with crystal radios, and thought I knew pretty much how they work. So the other day I bought the Smithsonian "SmartLabs" crystal radio set for my kid and put it together, but it didn't work. My favorite station back when I was young was KFI 640, which came in nice and strong with the simple wire antenna strung along the house in Orange County. Now I live in Los Angeles County so I thought since I'm even closer to the transmitter it should come in even stronger. But when I hooked up the radio, all I get is KNX 1070 -- regardless of how I tune the capacitor or even if I remove the variable capacitor entirely. Suspecting a faulty capacitor, I went and bought an identical crystal set but it also failed to tune in any other stations. This radio has a simple single-wound coil consisting of a wire wrapped about a hundred times around a plastic tube. I remembered from before that there are two ways to tune the crystal radio: one uses a fixed coil and variable capacitor, and the other uses a fixed capacitor and variable coil (both types worked when I was a kid). I constructed a new crystal set from scratch and wound my own coil and sanded off a strip to use for tuning. This radio acted as if it tuned better than the other because as the contact moved along the coil the reception peaked and then faded; but I was still not able to tune in any other station.

On a whim, I went to Radio Shack and bought the crystal radio they had, called "Science Fair". This set has a variable capacitor with a complex double-wound coil with a soft iron core. When I put together this radio I was suddenly able to tune different frequencies, but the only frequency with any detectable signal was once again 1070. Thinking that a longer antenna would help pick up the lower frequency, I replaced the 40 foot antenna with an 80 foot long wire, but this resulted in no improvement. Resigned to the realization that one station is all I will ever be able to get, I turned my attention to antenna design. I always thought how inconvenient it was to string up this long fixed wire all over the place for an antenna and then find a water pipe, scrape bare metal and attach a wire for a ground. Why not use a loop antenna to capture the magnetic field instead of a wire to capture the electric field?

I had an old piece of quarter inch wood doweling so I notched it up into an X and wound up a simple loop antenna with some thick magnet wire. To my surprise it worked by picking up the 1070 signal, but weaker than the wire antenna and ground. So I figured that the greater the cross-section and the more the windings, the better the antenna. Then I bought two 36" dowels and notched up a larger X and wound it with some fine magnet wire, 24 loops. When I hooked it up I expected either better or the same; instead I got almost nothing at all. I figured the impedance was too high for the coil or something. But I knew the loop worked with the small antenna so I measured the length of wire in each -- 35 ft for the

small one and 200 for the big loop. I knew that for a straight wire antenna you want 85 to 100 feet, so I took out 12 loops. When I first hooked it up I was glad to find the 1070 station at last, coming in quite strong. After fiddling with the different coil inputs and the tuning capacitor and maximizing the signal by orienting the rectangular loop just right, I was barely able to pick up the 640 station that I had been questing after for so long. (I also get KABC 790 even fainter, yet still understandable).

I searched this newsgroup and the web for loop antenna information. Some people said that the twisted pair of leads coming off the loop into your set act as mini straight antennas that disrupt the signal and one should use shielded coax cable. Anticipating even better reception, I cut into the antenna, removed the twisted leads and soldered on a coax cable. When I connected it to the radio my hopes were dashed with confusion because the signal was much weaker. So I cut into the wires again to reconnect the twisted pair.

All this time of fiddling with antennas, another queer thing kept happening: the Radio Shack radio would quite often simply stop making sound -- either by fading out or by suddenly clicking off. Sometimes as I reached toward the connections it would suddenly start working again. Other times I would wiggle all the connections to make sure contact is being made, but nothing happens to make it work. I checked the first crystal radio (with the simple coil), but it always played 1070 regardless (and by the way never worked with the loop antennas). So after replacing the capacitor to no avail, I suspected a defective coil. Once again I bought another crystal radio, but the same darned thing kept happening. By chance (or my constant fiddling) I discovered that if I place a charge across the tuning coil (with a single AA battery) it kicked the coil's butt into operation and everything was fine for a long time until it needed to be shocked into shape again.

Another aspect of the radio that seemed to bother me was that the diode only passes half the current; now I hate to waste anything, especially if it is free, so I wanted to capture both the positive and negative swings of the circuit's cycle. Immediately I built a diode bridge (such as one I built in college lab to rectify AC current to a DC power supply) using four diodes to connect the tuned circuit signal with the earphone. It didn't get any louder! I was disappointed because my station reception is so faint. Then while fiddling with the diode connections in my mind, I thought why not simply rectify the reverse current through a separate resistance instead of the same resistance (earphone) as the forward current. So with two diodes and two earphones I could effectively double the output (but it is still no louder).

For those of you electronics experts who have followed my story this far, I offer the following questions:
1) Why can't I get more than one station? Is the transmitting antenna for 1070 so close to me it drowns out the others? Is the small hill I live behind that gives me poor TV reception also blocking the AM

radio waves?
2) Why does the simple single coil do so poorly while the iron-core
double coil tunes better?
3) Why does the iron-core coil radio switch off and on?
4) Why did the coax cable fail?
5) Why can't I use diodes to get more volume from one earphone?

# 3358. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <343A07A7.6D66@hp.com>
Source record: 90232
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.swap,rec.radio.shortwave

Vytautas Mickevicius wrote:
>
> You can try to linearise 7360 with some negative feedback, too!!!
>

Some time ago Ulrich Rohde published some circuits of mixers made out of an array of switched amplifiers, each one being one of the transformer-feedback bipolar transistor type. His published results were quite good.

> The main benefit using of 7360 in mixer configuration is from fact
> that it always works while being in it's most LINEAR range - 100% of
> time!
>

You seem to be making the assumption that the switching process of the beam deflection tube does not affect the linearity of the beam modulation process. This will not be strictly true if any of the deflection field has any influence on the electron gun region. Also, the electron beam modulation by the incoming signal will not be perfectly linear, any more than we could make perfectly linear triodes, tetrodes, pentodes etc.

The 7360 was certainly excellent, but it was not perfect. I have wondered about making a double balanced mixer with a pair of matched 7360 tubes....

> On contrary - almost all other devices used in mixers circuits
> are driven from its best linearity point (at least - for a little
> fraction of time) by heterodyne and much smaller interferences can
> distort
> useful signal at these moments. No matter what devices are used -
> linearised or not, bipolars, FET's, or tubes, no matter - how many
> gates or grids are used for mixing. All they are in NONLINEAR region
> at these moments!

Consider the transistor tree mixer such as the Plessey SL6440 or Motorola MC1648/MC1496 families. The signal applied to the "tail" transistor is amplified in a device which is 110% of the time biassed into its most linear region, the signal current it produces is diverted by the transistor pair above it - this resembles the beam deflector of the 7360 very closely. However, their performance is not in the league of the 7360, nor of the latest crop of switch-mode FET mixers.

Structurally, the 7360 was far ahead of its time, and the actual power level it was capable of running gave it the advantages of brute force, too. Together these advantages made an outstanding mixer. At a time when most receivers (though there were a couple of honourable exceptions) had mixers with third order intercept points in the 0dBm region, the 7360 was in the over +30dBm class (I made one and measured it about 15 years ago)

It has taken many years, but semiconductor mixer technology has finally caught up.

> 7360 uses beam deflection for heterodyning - this doesn't act on
> linearity.

There is a small effect of the seflection fields in the electron gun area that does have a small effect on the linearity of the modulation of the electron beam, giving some non-linearity due to the oscillator signal, and the modulator itself has its own non-linearity problems. It is not perfect, but until fairly recently, it was the best.

> And if you like brute force - 4CX250 (four pieces) in double balanced
> configuration is the best solution...
>

This isn't really a beam deflection approach, it's a tree mixer, I suppose. Beware that the 4CX250 was designed entirely for AM class C and FM use, its linearity is poor compared to tubes designed for linear operation.
With the amount of brute force possible, of course, the result would still be extremely good, though a more linear triode of comparable power could be even better.

> Xcuse - if I was speaking abt well-known things. I just pointed to one
> aspect

It's an area I've had a long term amateur interest in, and I've also been involved professionally in extremely linear receiver structures for measuring equipment. I'm enjoying the discussion immensely!

> of the problem, and agree 100% (almost ;^) with you, oldtimers,
> elsewhere.

Ooops, a few friends who read this group will start teasing me about that! I don't feel like an oldtimer. I'm 43 years old, though most people would tell you that my mental age is a lot less than that :-)

> Had a great pleasure to read!

Me too

Cheers
David GM4ZNX

# 3359. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: "Denis R. McKay" <vk2dmr@mpx.com.au>
Message-ID: <01bcd302$07d312c0$2ac71dcb@dialup.mpx.com.au>
Source record: 90233

w1gak@mindport.NET wrote in article
<199710050251.WAA15598@Eden.mindport.net>...
> Who makes high voltage high power transformers these days? (4kv, > 0.5
amp). I
> dont want to use custom built unless absolutely necessary.

Why not try the HT transformer out of a junked micro wave? Two in series
should do the trick or use two parallel with a doubler circuit.

Just a thought - at least it's cheap!

Denis VK2DMR

## 3360. Soundblaster and CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Don Ward <don@kay-dee.demon.co.uk>
Message-ID: <dB21fDAbehO0EwK6@kay-dee.demon.co.uk>
Source record: 90234

My morse tutor program uses the internal PC speaker. I would like to use the Soundblaster card but I have no interface details. How is the card detected and how can I generate a simple sine wave. Anyone help?
--
Don Ward G0MDO

## 3361. Voice Controlled Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: antoon.milatz@tek.com
Message-ID: <343a0cb0.13250502@news.eur.tek.com>
Source record: 90235

Hi all,

I'm looking for a diagram of a VOX circuit with adjustable delay, gain
etc.
Who can help me with a schematic of this kind of circuits ?

Regards, Antoon PA3BWE
Internet: www.box.nl/~antoonm

# 3362. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343A2822.212E@crpl.cedar-rapids.lib.ia.us>
Source record: 90236
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

Peter Parker wrote:

> Our objective as hams has nothing to
> do with making money, so I for one will continue to build gear for this
> obsolete mode until someone comes up with a mode easier/cheaper to
> construct equipment for.

I really think that many of us are not aware of the *real* agenda in this discussion of Morse CW vs other modes. These other modes are presently available to anyone who wants to experiment with and use them. Or, STAs from FCC are available.

The name of the game is "control", where a certain small but strident and militant group is not satisfied to do what they want to do, they want to tell everyone else what to do. And anyone who doesn't want to fall into line is subjected to ridicule and name calling, such as "fanatic", "stick in the mud", "old fart" and so forth, and is subjected to other curmudgeonly behavior. The buzz word for them is "educate". They are going to educate the ignorant mob.

Sociologists are well aware of the dynamics of the "clique" group, and its relationships with "outsiders" and "non-believers". This is a classic example, right out of the textbooks. The rationale is one thing, but the real game is something else.

Bill W0IYH

# 3363. WANTED: Eimac 6C21 or 450 TH or L tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <01bcd32a$4f583800$67457392@default>
Source record: 90237

Anyone have these forsale? Reasonable $$ paid for good ones.

Thanks!!

73,

Chuck...K1KW

# 3364. Re: Soundblaster and CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <343A4086.5A51@boeing.com>
Source record: 90238

Don Ward wrote:
>
> My morse tutor program uses the internal PC speaker. I would like to use
> the Soundblaster card but I have no interface details. How is the card
> detected and how can I generate a simple sine wave. Anyone help?
> --
> Don Ward G0MDO
I haven't tried it, but there is a setting with Soundblaster which will
emulate the internal speaker.
Ralph

# 3365. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343A7A86.4B78@crpl.cedar-rapids.lib.ia.us>
Source record: 90239

Carl R. Stevenson wrote:

> Wait a minute ... in "Reference Data for Radio Engineers," 6th Edition, 2nd
> Printing, 1977 (ITT Sams), Page 23-5, in the section entitled "Comparison of
> Amplitude Modulation Systems" it says:
>
> " For equal power in the sidebands the output signal to noise
> power ratios are identical.

For equal values of average sideband power or for equal values of PEP,
and for ordinary speech with no sharp peaks (Hilbert transform peaks)
the signal power to noise **DENSITY** ratios are the same. But since
DSBSC has twice the bandwidth, the total noise is 3 dB greater for
DSBSC.

W.E. Sabin & E.O. Schoenike "Single-Sideband Systems and Circuits",
second edition, McGraw-Hill, 1995, page 58, chapter 2 by R.L. Craiglow.

See also, Carlson "Communications Systems" McGraw-Hill, 1975 p.271-2.

Bill W0IYH

Bill W0IYH

# 3366. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: dbossel529@aol.com
Message-ID: <19971007155001.LAA26029@ladder02.news.aol.com>
Source record: 90240

In article <343A2822.212E@crpl.cedar-rapids.lib.ia.us>, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> writes:

>I really think that many of us are not aware of the *real* agenda in
>this discussion of Morse CW vs other modes. These other modes are
>presently available to anyone who wants to experiment with and use them.
>Or, STAs from FCC are available.
>
>The name of the game is "control", where a certain small but strident
>and militant group is not satisfied to do what they want to do, they
>want to tell everyone else what to do. And anyone who doesn't want to
>fall into line is subjected to ridicule and name calling, such as
>"fanatic", "stick in the mud", "old fart" and so forth, and is subjected
>to other curmudgeonly behavior. The buzz word for them is "educate".
>They are going to educate the ignorant mob.
>
>Sociologists are well aware of the dynamics of the "clique" group, and
>its relationships with "outsiders" and "non-believers". This is a
>classic example, right out of the textbooks. The rationale is one thing,
>but the real game is something else.
>
>Bill W0IYH
>
>

Well said Bill!

73 de KB9JAI, Dwight

# 3367. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <343A4DBC.67B@boeing.com>
Source record: 90241

europa@primenet.com wrote:
>

My two cents on this thread.

I am a strong advocate of the preservation of Morse. I believe there is NO technical or socio/political justification for it. However, there is no technical or socio/political justification for use of HF.

I believe removal of the code requirement is inevitable.

I would like to see sub-bands preserved for Morse only. Preferable the lowest 10 kHz of each HF ham band or even the guard band below it. Power would be limited to 5 W or some other small power. A special class of license which requires a code test would be needed to operate in these bands. 5 wpm would be adequate with a strong enough technical test to ensure understanding of the band's rules. Morse at full band power would be allowed in any other digital sub-band. No test would be needed for this as it would be self testing in use. If a person's code was bad enough, no-one would answer him or her and they would give up using it.

Ralph
AF4EZ
ex K9OOX
ex ET2US

# 3368. Re: ft227rb access

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: c.c.tqbssz@89.killspam.us.com
Message-ID: <61dl9f$pkg$1@samba.rahul.net>
Source record: 90242

But watch out, if these are the pin numbers off the schematic, the Acc 5 pin DIN socket pins are numbered 1, 4, 2, 5, 3 clockwise, not 1,2,3 as you might expect.

Stephen

Ted Nawrocki (nawrocki@direct.CA) wrote:
: access pin connections
: pin 1 - speaker
: pin 2 - mic in
: pin 3 - ptt
: pin 4 - speaker (jumpered to pin 1)
: pin 4 - 13.8vdc

: mic connections

: pin 1 - up
: pin 2 - common for up/down
: pin 3 - down
: pin 4 - ptt
: pin 5 - gnd
: pin 6 - mic

: I hpoe that's enuf? if you need more e-mail me
: at nawrocki@direct.ca
: 73's ted VE7TIN

# 3369. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <F0deAgAM3kO0Ew7c@two-way.demon.co.uk>
Source record: 90243

>> Hi Garth,
><cuts>
>> have to say. Do you happen to know what voltage rating rectifier diodes
>> are typically fitted in a 12/14V alternator, maybe I'll have to change
>> these as well?
>
>I think 100V spikes would be getting extreme for a 12V type alternator.
>Right or wrong, I worked on a rough rule of thumb that spikes may be 2.5
>times the o/p voltage. Having said that, I have never actually had one pop
>on me and we did (accidentally) run the alternator off-load to near 50V
>briefly on testing when attempting to get the regulator correct. Maybe a
>quick phone call to a friendly Auto-electrician? Hopefully you have a
>nearby friendly car wrecker with reasonable prices? Best of Luck!
>Garth ZL4PY
Garth,
I don't bother playing with junkyard dogs, I've purchased several 'new'
Leece Neville units and imported them direct from the US. I kinda know
what I'm buying.
I'll open up a 160A unit up and check out the diodes to see if I can
change them easy enough and also sit down and design a 50V regulator.
Head scratching time.
I gather this modded unit will give me around 40A at 50V, yes or no?
My proposed battery bank will total 210A at 50V (4 X 210A 12V deep cycle
units), and with typical amateur duty cycle I'm wondering if this will
be enough to keep my batteries charged.
I have full digital monitoring of V and I drain on my entire mobile
system. On full chat I'll be peaking around 10KW for 5-6KW pep o/p.

Phil G4ZOW/M

The above is of course total fiction, as with all my amplifiers, they
are only ever driven to our legal output level of 400w.

# 3370. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <343A92F2.E83@boeing.com>
Source record: 90244

Bob Lewis wrote:
>
> Ralph Reinhold wrote:
> > However, there is no technical or socio/political justification for
> > use of HF.
> >
>
> HF is however, the only low-power means of long distance communication
> which does not depend upon a man-made infrastructure.

I believe that I should have said: "There is no technical or socio/political justification for use of HF with the possible exception of back-up to the current infrastructure. In this role, it is not particularly reliable."

As an aid to reliability, the US Navy and Army Signal Corps had a series of relay sites throught the world with high power transmitters (ca. 250 kW) and multicurtain rhombic antennas operating with dual diversity. Even then, the availablility point-to-point was only on the order of 85% because of solar activity being able to disable any particular link.

Within 5 to 10 years systems like Iridium and Teledesic will eliminate this advantage. When these systems are on line, the individual will be able to communicate point-to-point anywhere on the globe reliably at an afordable rate.

Using the justification that Morse is an obsolete means of communications...therefore everybody should be allowed to use HF is a conflict in terms. Obsolecence is not justification for opening HF without CW. They both are obsolete.

I believe that there is a reduction in use of the bands in CW. I believe that the cost of getting on the air on CW is no longer an order of magnitude less than getting on the air on 'phone. I believe that digital interfaces to computers are reducing in cost. These are good reasons for opening up at least a large portion of the bands to non-code licensees.

Nevertheless, I believe that all of my reasons which affect the need for a code requirement may be a factor in increasing the advantage of the "have nations" over the "have not nations" and this should be considered before eliminating the code requirement entirely.

Ralph
AF4EZ

## 3371. Custom Meter Faces?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: "David R. Smith" <wa6ydi.telis@telis.org>
Message-ID: <343A5B03.C10@telis.org>
Source record: 90245

Does any one know of a company that can make a custom face or re-scale one for panel meters?

Thanks,

Dave Smith - WA6YDI

# 3372. Re: specs used in ordering crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: la8ak@online.nospam.no
Message-ID: <343a6d98.2039530@news.online.no>
Source record: 90246

On Mon, 06 Oct 1997 18:26:42 -0400,
frederick.mckenzie-1@kmail.ksc.nasa.gov (Fred McKenzie) wrote:

>In article <mugshot77-ya02408000R0510970656200001@snews.zippo.com>,
>mugshot77@mail.geocities.com (I. I. "Crash" Knorr) wrote:
>> I would like to order a crystal for use with one of those 1-watt
>> CW QRP kits (which I also haven't ordered yet). Looking at the
>> JAN Crystals catalog, I see that they require you to specify
>> load capacitance and series or parallel resonance in your order.
>> Is there a standard all-weather response to these two specifications?
>
>I. I.-
>
>If the crystal can be tuned across several KHz, it is probably operating
>in parallel resonance mode. It might have a varicap diode
>(voltage-variable capacitor) or a real variable capacitor, to effect its
>frequency change.
>
>If this is the case, then exact frequency and load capacitance may not be
>critical. In other words, you may be able to use the cheapest crystal
>available. You might specify something like parallel resonance, 24pf load
>capacitance, 0.01% tolerance.
>
>If this isn't the case, and the crystal operates on a single, precise
>frequency, then all bets are off.
>
>I think you can get what you want if you talk to someone at the crystal
>factory. In years past, I've ordered from Sentry and International, and
>the people taking the orders knew what I wanted better than I did! They
>may already be familiar with that specific QRP Kit's requirements.
>
>73, Fred, K4DII
For most amateur constructed circuits an xtal below 20MHz is paralell
mode, and above 20MHz is overtone mode (series resonnance).
Parallell mode xtals will tune the correct frequency with a certain
load capacitance, somebody claim that 30pF is normal, other believe
25 pF to be normal. Old Kenwood sets (TR-2200) need 40pF xtal
specifications to operate on correct frequency.
Drake and Collins rigs and other uses fundamental series mode xtals on
all HF ranges.
Normal is a specification of zero pF, but again somebody mixes up the
30pF loading capacitance to be valid for either series and parallell
resonnance. This is a bad problem, I have seen many German circuits

where the authors thinks it is normal to have 30pF loaded overtone xtal, in my opinion it is a strange practice. Commercial rigs has a rather varied practice, and the best idea is to send a copy of the circuit diagram to the xtal manufacturer when ordering xtals
72
---
remove the "spam" : Jan-Martin N&#65533;ding,LA8AK@online.no

# 3373. Re: 465 O-scope problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19971007184001.OAA05906@ladder02.news.aol.com>
Source record: 90247

>>My 465 Tektronix oscilloscope went belly up with no sweeps displyed on
>>the tube. Even the 'beam finder' doesn't display anything. I haven't
>>opened it up to have a look yet.

Recently had a similar problem on my scope*NOT TEKTRONIX* bad HV rectifier was the problem.

## 3374. A simple rf tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Pedro Sinogas <plsi@rnl.ist.utl.pt>
Message-ID: <343A8C42.16AFD621@rnl.ist.utl.pt>
Source record: 90248

Can anyone get me a VERY simple fm tuner squeme ?

--
+-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-=-+-+
| Pedro Liborio Sinogas E-Mail: plsi@rnl.ist.utl.pt |
| Instituto Superior Tecnico (LEIC) Sistemas Computacionais |
| http://camoes.rnl.ist.utl.pt/~plsi |
+-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-==-+-=-+-+

# 3375. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343ACBFE.50CB@crpl.cedar-rapids.lib.ia.us>
Source record: 90249

Jon Bloom wrote:
>
> William E. Sabin wrote:

snip, snip.

I have just finished a session of replying to these comments, and I find that I am just repeating everything over and over, like a tape machine. It just isn't worth it any more. If you want to put direct sequence or frequency hop or PSK on the low end of the 20 meter band because it is more "efficient", go ahead.

I want nothing more to do with this. All I hear is that the higher efficiency of wider bandwidth is all that matters. All that matters is the revolution in communications that imitates what the military and commercial people are doing. Whether it makes any sense for Amateur Radio or not is immaterial. So be it, then.

Bill (exhausted) W0IYH

# 3376. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <343aa56c.0@newshost.pcug.org.au>
Source record: 90250

"John D. Farr" <johnfarr@ro.com> wrote:

>Radioshack has high Z earplugs.
>

However, if they're described as "crystal earphones", you will need to put a high value resistor (220 or 470 k) across them to provide a DC path to ground.

73,
--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____

# 3377. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <343AB344.9419736C@arrl.org>
Source record: 90251

William E. Sabin wrote:
> 2) But there are other factors involved that we insist on ignoring, in
> our enthusiasm for technical perfection as the only issue that is
> allowed to be considered (it is politically correct, right?).

Speaking for myself, my objection to some arguments advanced in these newsgroups is that some have overstated the technical capabilities of CW. Whatever the other merits of CW may be, it's not state-of-the-art by any stretch.

> 3) In amateur bands where spectrum space is not a critical issue, the
> more efficient data modes are certainly preferable. No one is arguing
> about that. I know the numbers as well as anyone.

I suggest that efficiency is even more of a concern where spectrum *is* tight.

> 4) The problem lies in the HF CW bands, which are narrow and are often
> crowded, especially during contests and during DXing activities. There
> are some who have a certain disdain for these activities, but I couldn't
> care less about that. For example the 20 meter CW band is only 100 kHz
> wide, and half of that is occupied by data stations (which is OK).
>
> 5) In this scenario, it is vitally important to restrict bandwidth as
> much as possible, just simply because it is a precious commodity.

A modern spectrum manager would say that it is vital to *reuse spectrum* as much as possible. While occupied bandwidth is one component of spectrum reuse, it's not the only one, and focusing exclusively on bandwidth minimization is a simplistic -- and often wrong -- approach. Costas showed in 1957 (if memory serves) that spectrum use is maximized by use of *wideband* signals (properly done, of course), and the math hasn't changed since then. That's not to say that we should all rush to wideband systems. Other factors come into play. But the idea that CW will pack the most communications into the least spectrum overlooks the time and power factors. More about that later.

Of course, the dominant characteristic of the "HF CW bands" is the presence of CW signals. If the goal is to pack the most CW signals into the band, that's one thing. But if the goal is to maximize the amount of communication that can be performed in the same spectrum, there are better techniques. That's not to say we should rush to use those techniques because absolute maximum spectrum use is not our primary goal.

> Let me
> give you an example of what I mean. At one time there was a very similar
> rather strident and noisy and opinionated group who promoted
> Double-Sideband-Suppressed-Carrier speech, because it offers a 3 dB S/N
> advantage over SSB. In just a very short time it was realized that the
> narrower bandwidth of SSB was a greater benefit because of the crowded
> HF bands and also because it was easier to receive (phase coherent
> detection not needed). Since that decision was made there has been very
> little looking back, at least as far as the HF ham bands are
> concerned.

Sure, but who's talking about a mere 3-dB improvement and a doubling of bandwidth? The ineffectiveness of DSSC, considering the bandwidth increase, says nothing about the effectiveness of other techniques. They have to be independently analyzed.

> 6) We have the same situation now, people who don't want to look at both
> sides of the issue. The simple conclusion that is very easy to recognize
> is that for the ***HF CW BANDS*** CW mode using Morse is still, and will
> continue to be, a sensible and efficient mode, if it is done
> correctly.

I don't want to dissuade anyone from using Morse. It's fun -- I like it myself. I just dislike seeing it touted as state-of-the-art; it's not.

> 7) The point that I and several others have tried to make is that
> narrowband Morse code, properly implemented with computer-assisted
> coding and decoding (in a noise and interference environment) is still
> an excellent mode for Amateur communication, despite its theoretical
> limitations. In a crowded and fading spectrum it begins to look a hell
> of a lot better than the introductory-level textbook number crunchers
> give it credit for.

This, leaves me nonplused. Computer-assisted Morse? What's the point of that? Once you introduce a computer into the equipment mix, why not go ahead and use it to optimize the communications? And that will inevitably mean using a coding other than Morse.

> 8) The approach that I and others are advocating is to **OPTIMIZE**
> Morse code usage as a desirable alternative to eliminating it, for the
> very precise reason that in the crowded HF CW bands it makes a lot more
> sense than the wider bandwidth alternatives. If you listen on 20 meters
> or on the commercial/military frequencies you find that a data station
> takes up much more spectrum than a CW station. This illustrates the
> problem very clearly. A high speed data stations completes a message
> faster, but creates wideband interference. A CW station takes longer but
> creates less interference. The wideband interference is a greater
> problem, in practice.

You're making an assumption that "data" implies "high speed." The issue here is the optimal use of spectrum. That is accomplished by using the smallest product of bandwidth, time and RF domain. That product can be optimized at any speed, not just high speeds. Clover, for example, fits

in a 500-Hz bandwidth, a value which was chosen to match the commonly available IF bandwidth, while providing data rates of hundreds of bits/s. Contrast this to some of the data transmissions outside the amateur bands that occupy several kHz and provide greater data rates.

All else being equal, if a data station transfers the desired communication in far less time than the CW station but using slightly more bandwidth, the overall capacity of the spectrum is greater -- more stations can transfer more information in a given period. Or if the data station occupied the same spectrum as the Morse station and transferred data at the same rate, but required considerably less power, the spectrum capacity would again be improved due to the lower level of interference caused by the data station. You have to consider *all* of these factors when analyzing spectrum use.

> 9) There are those who have examined the bit error rate vs S/N ratios of
> the various waveforms and have made up their minds, no arguments
> allowed. Numbers are numbers, right?

It's not as simple as BER versus S/N, no. But neither is it as simple as "use the minimum possible bandwidth." When you start to fold in the effects of Rayleigh/Rician fading, intersymbol interference, non-Gaussian noise and interference, the advantages of using advanced digital techniques actually increase, not only with respect to a particular communication link but also with respect to spectrum capacity as a whole. At that point, yes, numbers are numbers.

> Wrong! What I am telling you is
> that this is not good engineering or good science unless it also
> considers the realities of the *channel* and the *spectrum* that is
> being used for communication.

That's why the modern communications engineer deploys modern tools to combat these realities.

> The *real* experts deal with these
> realities every day of the week. The simplistic answer is to ignore all
> of these bothersome details.

What "real experts" do you mean? Can you identify them? One identifiable group of "real experts" consists of those who earn their daily bread by deploying HF communication systems. Since these professionals have virtually eliminated Morse as an operating mode in every other service, I'm struggling to figure out what experts you could be referring to. Who in the professional world is deploying new Morse systems to combat the realities of channel perturbations and spectrum crowding?

Jon
--
Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League | Amateur Radio info:
225 Main St., Newington CT 06111 | http://www.arrl.org/

# 3378. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Don Huff <"don huff"@hp.com>
Message-ID: <343A8698.36FB@hp.com>
Source record: 90252
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

William E. Sabin wrote:
>
> Peter Parker wrote:
>
> > Our objective as hams has nothing to
> > do with making money, so I for one will continue to build gear for this
> > obsolete mode until someone comes up with a mode easier/cheaper to
> > construct equipment for.
>
> I really think that many of us are not aware of the *real* agenda in
> this discussion of Morse CW vs other modes. These other modes are
> presently available to anyone who wants to experiment with and use them.
> Or, STAs from FCC are available.
>
> The name of the game is "control", where a certain small but strident
> and militant group is not satisfied to do what they want to do, they
> want to tell everyone else what to do. And anyone who doesn't want to
> fall into line is subjected to ridicule and name calling, such as
> "fanatic", "stick in the mud", "old fart" and so forth, and is subjected
> to other curmudgeonly behavior. The buzz word for them is "educate".
> They are going to educate the ignorant mob.
>
> Sociologists are well aware of the dynamics of the "clique" group, and
> its relationships with "outsiders" and "non-believers". This is a
> classic example, right out of the textbooks. The rationale is one thing,
> but the real game is something else.
>
> Bill W0IYH

Bill:

AMEN! CONFORMITY seems to be paramount these days, doesn't it?

73,
Don, W6JL

## 3379. AR2500 / AR3000A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: (unknown)
Message-ID: <343ec5ea.1473549@news.telepac.pt>
Source record: 90253

As anyone got the software to control the AOR AR2500 and/or AR3000A?
If YES please email me directly to sns@mail.telepac.pt

Thank you

73 Sergio Silva

# 3380. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEHqpo5.412@netcom.com>
Source record: 90254

In article <01bcd302$07d312c0$2ac71dcb@dialup.mpx.com.au>,
Denis R. McKay <vk2dmr@mpx.com.au> wrote:
>w1gak@mindport.NET wrote in article
><199710050251.WAA15598@Eden.mindport.net>...
>> Who makes high voltage high power transformers these days? (4kv, > 0.5
>amp). I
>> dont want to use custom built unless absolutely necessary.
>
>Why not try the HT transformer out of a junked micro wave? Two in series
>should do the trick or use two parallel with a doubler circuit.
>
>Just a thought - at least it's cheap!

You shouldn't series connect them, one end of the high voltage winding is connected to the core/frame/chassis and by stacking them up you may be taking the primary winding insulation to places where it was not meant to go.

They normally run as half wave doublers, the second diode being the magnetron itself. So paralleling them sounds like a ok idea. And if you could reverse the primary phase of one of them, you should be able to reduce the ripple.

They often have a magnetic shunt to act as current limiter, (a block of laminations that fills the winding holes in the core, between the primary and secondary), but this may be able to be knocked out if the load is well behaved, or left in for safety's sake.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 3381. Re: What is a"BOATANCHOR" ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: ross langridge <urqhart@igrin.co.nz>
Message-ID: <01bcd2f8$41b5ff20$82f431ca@urqhart.igrin.co.nz>
Source record: 90255
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur,rec.radio.amateur.boatanchors

Anything with the word ALINCO in front of it

# 3382. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <343a0465.60894413@news.erols.com>
Source record: 90256

On Mon, 6 Oct 1997 22:40:39 -0500, "John D. Farr" <johnfarr@ro.com>
wrote:

>Snip!
>
>>Can you still get high-Z headphones? If not, you may need to use modern
>>(30-ohms-ish) earphones and a transformer -- assuming you can find a
>>transformer!
>>
>>Roy Lewallen, W7EL
>
>Radioshack has high Z earplugs.
>
>John, KC4ZXX
>
Yes and high Z headphones are still quite common at hamfests. I
think Antinque Electronic Supply has some in the catalog also.
(They go great with Galena and Cat's whisker!)

73 Bill N2CQR >

## 3383. coax relays for 432? Help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: baack@maine.edu
Message-ID: <61d6fn$2cig$1@sol.caps.maine.edu>
Source record: 90257
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hello all,
I am looking for coax relays that can handle 500W on 432.
In the process of modifying an AM6155 for 432 MHz and I need the relays..

Anyone have any ideas / leads on where I can get a pair?

Jason N1RWY
baack@maine.edu

## 3384. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <343A6560.2096@erols.com>
Source record: 90258

Ralph Reinhold wrote:
> However, there is no technical or socio/political justification for
> use of HF.
>

HF is however, the only low-power means of long distance communication
which does not depend upon a man-made infrastructure.

# 3385. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: frussle@erols.com
Message-ID: <343c3ebc.5772208@news.erols.com>
Source record: 90259

Those of you who love to quote information transfer rates using various communications modes are missing a very important point:

Ham Radio is only a hobby.

Folks, even long after the industrial revolution has effectively rendered horses obsolete for most transportation needs, we still see lots of folks riding horses. Why? Because it's fun. Sure, one could make the argument that there are places you can go where a horse is still the ideal mode of transportation. But those places are fewer and fewer in number.

Likewise, Morse Code adherents are always saying that it can do what no other digital mode can. Yes, there are situations where Morse Code is still appropriate, but those are fewer and fewer in number every day. That issue is irrelevant, however, because the biggest reason one might still use Morse Code is because it's fun.

Having said that, allow me to point out that we don't ask people applying for a driver's license to prove they can ride horses. Likewise, we should not be asking folks who apply for a ham radio license to prove they can receive Morse Code.

I still enjoy using Morse Code from time to time. It's fun in the same way as riding a horse is fun. Sure you could go faster, use less power, be more spectrally efficient and so on. But this isn't a business. If you're not having fun with this hobby, then why are you doing it?

P. S.: Those of you who argue "this is a service, not a hobby" are missing another thing: The FCC classifies us as a service only because as hobbyists, we are also performing a valuable educational service. This should not obscure the fact that not only are we doing this for free, we actually spend a great deal of money and time for the privilege of holding a license. Again, if it isn't fun, then why put out all that effort for free?

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

# 3386. CB to 6m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: Glenn Schultz <glenn@spacestar.net>
Message-ID: <01bc6b0a$8980dce0$a9c9bfce@larry.spacestar.net>
Source record: 90260

Hello,
A couple of years ago I ran across an article on a BBs (remember those?!!) on converting a CB to 6 meters. It required a rig that used the PLL02A pll chip. Has anyone seen this mod anywhere?
How well it worked, etc? I did one for 10 meters, but 6 is a long way from 11 meters.
--
Glenn
N0VYK
10X #68391
n0vyk@spacestar.net
glenn@spacestar.net
Check out the N0VYK Antique and Amateur Radio Homepage:
http://www.spacestar.net/users/glenn/index.html

# 3387. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-07 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19971007183501.OAA05611@ladder02.news.aol.com>
Source record: 90261

The foxhole rx was in no way standradized. It was built wih what you had and what your ingenuity would allow. The only common component was the detector. As the selenium coated razor glades were fairly common they could be fashioned into a detector.

# 3388. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd382$10fa9c80$0100005a@wa6vse>
Source record: 90164

Jake Brodsky <frussle@erols.com> wrote in article
<343c3ebc.5772208@news.erols.com>...
> Those of you who love to quote information transfer rates using
> various communications modes are missing a very important point:
>
> Ham Radio is only a hobby.

It *is* a hobby, but it is *also*, as you point out later in this post,
a service and many participants are not doing much of what the
government had in mind when our spectrum allocations were granted.

> Folks, even long after the industrial revolution has effectively
> rendered horses obsolete for most transportation needs, we still see
> lots of folks riding horses. Why? Because it's fun. Sure, one could
> make the argument that there are places you can go where a horse is
> still the ideal mode of transportation. But those places are fewer
> and fewer in number.

True ...

> Likewise, Morse Code adherents are always saying that it can do what
> no other digital mode can. Yes, there are situations where Morse Code
> is still appropriate, but those are fewer and fewer in number every
> day. That issue is irrelevant, however, because the biggest reason
> one might still use Morse Code is because it's fun.

True ...

> Having said that, allow me to point out that we don't ask people
> applying for a driver's license to prove they can ride horses.
> Likewise, we should not be asking folks who apply for a ham radio
> license to prove they can receive Morse Code.

True ...

> I still enjoy using Morse Code from time to time. It's fun in the
> same way as riding a horse is fun. Sure you could go faster, use less
> power, be more spectrally efficient and so on. But this isn't a
> business. If you're not having fun with this hobby, then why are you
> doing it?

Many of us would have more fun and be able to contribute a lot more
if we had access to the HF bands for *our* interests ... experimentation
and design of new modes and equipment for those bands ... (NOT, as
some pro-coders insist, so we could "grab a mike and scream CW DX!")

> P. S.: Those of you who argue "this is a service, not a hobby" are
> missing another thing: The FCC classifies us as a service only
> because as hobbyists, we are also performing a valuable educational
> service.

The educational/self-teaching side has atrophied seriously over the
years ... and needs major rejuvenation ... as does the expermentation
and advancement of the SOTA part ... *those* things are more fun to
many of us than getting a silly (to us) piece of paper that says "DXCC"
on it ... and Morse is no fun at all for many of us .. so, using your
argument, why should anyone HAVE to "do Morse" ???

> This should not obscure the fact that not only are we doing
> this for free, we actually spend a great deal of money and time for
> the privilege of holding a license. Again, if it isn't fun, then why
> put out all that effort for free?

Same question for Morse again? (If it's not *fun*, why?)

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3389. Re: Foxhole Receiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: msimon@tefbbs.com
Message-ID: <343aef7b.30647435@news.megsinet.net>
Source record: 90165

A detector can be made by using an graphite pencil lead in contact
with the sharp edge of a razor blade.

Simon
---
jsender104@aol.com (Jsender104) wrote:

>The foxhole rx was in no way standradized. It was built wih what you had and
> what your ingenuity would allow. The only common component was the detector.
> As the selenium coated razor glades were fairly common they could be fashioned
> into a detector.

Opinions expressed herein are solely my own and may or may not reflect my opinion at this particular time or any other.

## 3390. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <343a2667.5454773@news.crosslink.net>
Source record: 90166

On Mon, 6 Oct 1997 15:46:19 +0100, Don Ward <don@kay-dee.demon.co.uk>
wrote:

>In article <199710050251.WAA15598@Eden.mindport.net>, w1gak@mindport.NET
>writes
>>Who makes high voltage high power transformers these days? (4kv, > 0.5 amp). I
>>dont want to use custom built unless absolutely necessary.
...snip
>
>Have you considered Microwave Oven transformers? The latest RSGB Radcom
>mag features these for HV power supplies.
...snip

First of all, I seriously doubt that a Microwave Oven Power
transformer would be capable of 2000 volt-amperes. It would weigh as
much as my legal limit amplifiers. I suppose they do make MW ovens
that big, but the one in my kitchen is around 500 watts, and that
sure won't do it.

Almost every legal limit amplifier in the country - AL-800H, Henry 2K,
and many others, will have a power transformer rated at 3000 to 4000
volts and capable of supplying 1/2 amp steady state. So why don't you
just call up Ameritron and tell them you blew the transformer in your
Model _____( you fill in the blank), and that you want to buy a
replacement?

Bob

P.S. Peter Dahl's transformers are good - no question about it.
However, the one in my Henry 2K weighs a ton - I can't lift the power
supply unit more that 6" of the deck without help. The entire AL-800H
is light as a feather by comparison. The Peter Dahl runs as cool as
ice. Think it might be over-designed?

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 3391. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Rod Lane <laner@connix.com>
Message-ID: <343B9F4B.4256C63B@connix.com>
Source record: 90167

philip de cadenet wrote:
>
> I'm looking at generating a high current charger for a 48V battery bank
> from a 12V source. This is for a QRO 50V FET HF mobile amplifier.
> Two routes have come to mind, a 48V alternator or a DC to DC inverter.
> Well AFAIK niether Leece Neville or Lestek produce alternators with this
> output voltage so can anyone recommend another company?
> Alternatively I'm after an inverter, either a circuit design or a
> complete unit, I don't feel comfortable designing one of these switching
> rascals.
> I need an output of around 1KW at 50V.
> Any ideas, suggestions or constructive comments greatly appreciated.
>
> Phil G4ZOW/M

So what does anyone think of using a DC-DC converter section out of a
mobile audio amp. I worked on a one for a friend and it put out about 3
amps at +-50V. A blown up audio amp might be a great source of parts
and boards.

de Rod N1FNE

# 3392. Re: RFC Value

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <343a28a1.6024738@news.crosslink.net>
Source record: 90168

On Mon, 06 Oct 1997 12:40:40 -0700, Ted Kester
<tk1932ga@atl.bellsouth.net> wrote:

>I am attempting to build a TRF receiver from an application note that
>does not have the values listed for the 4 RFC's that are used. The
>circuit has 4 stages of 2N3904 and a 2N3906 detector. The 04's have
>RFC's in the collector leads and the 06 has one in the emitter. This
>receiver is designed to operate around 47 MHZ.

Hello Ted,

The formula is X= 2pi * F * L.

At 47 MHz, that yields 6.28 * 47 * 10^6 or roughly 300 ohms per
MicroHenry. If you think the inductive reactance of j300 will be
enough of a choke for the circuit, then go with 1 microhenry, etc. Be
advised however that there are many different types of RFC's,
depending on how much distributed capacitance you can accept, the
resonant frequency of the choke, etc.

Look in the Newark Electronics Catalog on p 136. They have
Mil-C-15305 Molded inductors in sizes from 0.1 microH to 1000 microH
They are about the size of 1/4 to 1/2 watt resistors.

Bob

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

## 3393. Re: (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <343a2842.5930500@news.crosslink.net>
Source record: 90169

On 5 Oct 97 09:28:20 GMT, arek@mayn.DE wrote:

>unsub arek@mayn.de ham-homebrew

Gee, OM, you didn't send your un-subscribe fee. Sorry, but without
the $15 fee, we can't un-subscribe you.

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

## 3394. Tube Parts, Tubes , Transformers, Tube Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <61evi2$28m@news.teleplex.net>
Source record: 90170

Hammond Transformers and metalwork (Chassis and Rack Panels), Tubes ,
and Parts for vintage and vacuum tube constructors. Svetlana Power
Tubes ( email for low prices)

NOS Tubes for vintage Ham Equipment 6AG7 $3 or 10 for $20 plus postage

www.stf-electronics.com

STF Electronics

## 3395. Notebook Computer FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <61evo1$28m@news.teleplex.net>
Source record: 90171

Toshiba 486 DX Notebook with color screen. Windows 3.1 , With Dual external Charger. Great for logging and Shack use. Works Great.

$275

# 3396. Re: Soundblaster and CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcd3a6$ff8269e0$71dc24ca@not-applicable>
Source record: 90172

My SB16 Card came with instructions how to link the PC speaker into the SB card. This simply plays all PC noises thru the SB system. There is an i/p provided. Have another look at your SB16 manual.

Don Ward <don@kay-dee.demon.co.uk> wrote in article <dB21fDAbehO0EwK6@kay-dee.demon.co.uk>...
> My morse tutor program uses the internal PC speaker. I would like to use
> the Soundblaster card but I have no interface details. How is the card
> detected and how can I generate a simple sine wave. Anyone help?
> --
> Don Ward G0MDO
>

# 3397. Re: Soundblaster and CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Don Ward <don@kay-dee.demon.co.uk>
Message-ID: <v0RpiCAFs0O0Ewe0@kay-dee.demon.co.uk>
Source record: 90173

Thanks to all who replied to my request for Soundblaster details.
Perhaps I should have been more specific. I write programs for hams, one
of which is a Morse tutor, so thank you to suggestions of getting
Supermorse, not really what I want! Connecting the SoundBlaster to the
internal speaker drive is also not what I need. If anyone is interested
my software is at <kay-dee.demon.co.uk>. There is a very clever CW
program on the Demon ftp site (ftp.demon.co.uk in the /pub/ham/cw
directory) called pileup.exe which emulates a pile up (surprise!), I
don't know who the author is but my hat off to him.
--
Don Ward G0MDO/AA1FU

# 3398. Re: Crystal Radio Problems and Insights

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <343B9CAD.D98@erols.com>
Source record: 90174

If it was tubes or transistors, I could 'splain it to you.
Crystal sets are by their very nature, magic!

TRY: http://www.midnightscience.com/

That is the home of the XTAL Set Society.

Regards es 73, Dave K7HMP

Lord Clump wrote:
>
> When I was a kid I had great fun playing with crystal radios, and thought
> I knew pretty much how they work. >< snip ><

> For those of you electronics experts who have followed my story this far,
> I offer the following questions:
> 1) Why can't I get more than one station? Is the transmitting antenna
> for 1070 so close to me it drowns out the others? Is the small hill
> I live behind that gives me poor TV reception also blocking the AM
> radio waves?
> 2) Why does the simple single coil do so poorly while the iron-core
> double coil tunes better?
> 3) Why does the iron-core coil radio switch off and on?
> 4) Why did the coax cable fail?
> 5) Why can't I use diodes to get more volume from one earphone?

# 3399. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <343B9D1C.33CF@erols.com>
Source record: 90175

The XTAL Set Society is at:

http://www.midnightscience.com/

Regards, Dave

Bill Meara wrote:
>
> On 5 Oct 1997 16:05:27 GMT, rah72550@aol.com (RAH72550) wrote:
>
> > I am looking for information on the foxhole receiver used during WW2 i think.
> >It was made with a razor, headphones and what ever. I would like to build one
> >using some of todays technologies if needed. I have had no luck finding this
> > info
> >on this radio. I had some info on it a few years ago but lost it.
>
> Antique Electronic Supply of Tempe Arizona has a very neat little
> Foxhole radio kit.
>
> You could probably get more info on these radios by doing a web search
> for "The xtal society" Interesting group.
>
> I may have some stuff in my e-mail files that would be of use. If I
> find them I'll send them along.
>
> Good Luck! 73 Bill N2CQR
>
>

# 3400. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343B82F2.19F4@crpl.cedar-rapids.lib.ia.us>
Source record: 90176

europa@primenet.com wrote:
> 
> :
> :Oh yes, but they can pound the brass, and copy the beep-beep. That
> :excuses them from having to know anything else.
> :
> :
> :--
> :Butch N2YMJ
> :
> :To reply, delete the
> :xyz from my address.
> 
> I'm not certain where the idea came from that code proponents are
> technically incompetent. I guess somebody just made it up to fit their own
> agenda. The discussion in this thread is the first time in my life I have
> heard such a silly idea.
> 
> My experience has been the exact opposite. The hams I have know over the
> years who have been avid CW ops have also been the most technically astute.
> Don't ask my why- I don't know know- but it certainly has been true in my
> experience.
> 
> Rob.

You bet your boots. Many of my colleagues (I exclude myself) at
Rockwell/Collins are crackerjack CW operators, and as engineers they
don't take any crap from anyone.

Bill W0IYH

## 3401. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <343b3dc3.0@newshost.pcug.org.au>
Source record: 90177

People speak of the advantages of the higher data rates per kilohertz
that are possible, but they miss the main point - What's the higher
bandwidth going to be used for? A bit like having sufficient bandwidth
for 500 TV channels, but finding that it's just 500 channels of rubbish.

I don't think I need any more bandwidth than standard CW provides to call
"CQ contest"!

73,
--


------------------------------------------------------------
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
------------------------------------------------------------

## 3402. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343BA427.1456@crpl.cedar-rapids.lib.ia.us>
Source record: 90178

mud wrote:

> In the second place, why try to decipher hand-morse as if it
> was machine language?

A computer-assisted adjunct to manual or clocked (electronic keyer) CW operations that would enhance weak-signal and QRM situations would be a desirable way to *reduce* the inherent deficiencies of CW, without relinquishing the narrow bandwidth and the wide acceptance of and interest in the CW mode. It's a compromise.

Bill W0IYH

# 3403. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343b7949.61082931@news.atl.bellsouth.net>
Source record: 90179

On Tue, 07 Oct 1997 17:22:03 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Gary Coffman wrote:
>>
>> <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>> >Gary Coffman said:
>> >
>> >> When using OOK modulation, the latter three elements
>> >> are unvoiced, IE they are represented by no signal energy.
>> >
>> >I did not say that they contained energy. I said they contain
>> >information. There is as much information in the interval between
>> >signals as there is in the signal itself. The "zero" is as important as
>> >the "one".
>
>This statement stands. The determination of "what is noise" is just as
>important as the determination of "what is signal plus noise". The use
>of "voiced" and "unvoiced" is deceptive. The noise (or the absence of a
>tone) speaks just as loudly as the presence of a tone. Unvoiced implies
>"nothing there". Not true. The absence of signal is not "nothing". It is
>"something". For this exercise we need to put aside temporarily the FSK
>idea that only the presence of a signal can be of any use. We are going
>to try to make the most of "noise there, but signal not there". We are
>going to do that as follows: A digital filter that is sharply tuned to
>500 Hz will respond very poorly to AWGN (most of the noise is outside
>the passband) and the in-band noise is poorly phase-correlated. If the
>output of this filter is below threshold, we then look to see what else
>is there. If there is nothing at all, or if there is noise, then let's
>measure the duration of *that* until a 500 Hz signal appears. We will
>measure the time between "signal" transitions.

Indeed, that's what we *have* to do with OOK. But note that this is
part of the *decoding* problem, and not the demodulation problem.
We still have to make a slice decision before we can start to time this
interval. That's where we do demodulation, and that's where matched
filtering of the signal would give us the best slice margin, IE the best
SNR.

We can't do that for the unvoiced symbols, and we can't do it for
the voiced symbols either (because we can't know that we are receiving
a dot or a dash until after slicing, and their spectrums are different so
they'd require a different matched channel filter). All we *can* do is
assume everything is a dot, and do a matched filter for that before
slicing. We can then infer that a dash is three dots without intervening
intracharacter spaces, and we can infer that the intervals between dots

are the 3 space symbols (and determine *which* of the space symbols they are by measuring the interval between voiced symbols). Note that this latter is part of the *decoding* problem, not the demodulation problem.

Further, we are making an inference that there is no signal. It could have faded. And we may detect a signal, but it can be interference rather than the signal we are trying to copy. **WE CAN'T KNOW** at this point what it is. With FSK (or other fully voiced modulation) we will know we have a fade because we must always have energy in one of the channels, or we'll know we have interference because we'll have signal in *both* channels at the same time. There is no ambiguity. Knowledge of where we have an erasure, either due to fading or interference, is very valuable, and can greatly ease the job of error correction.

If we make some assumptions about the transmitted OOK signal, there is a way to *indirectly* do this for it too, but it doesn't equal the quality of information we can extract from a fully voiced signal. Thus we can't achieve the same effective SNR with OOK that we can with FSK. This ambiguity cost is separate from the 3 db more signal we have simply due to the transmitter always being on. This ambiguity reduction gives us a 3 db improvement in signal space, IE it is the ratio of allowed versus disallowed vectors in signal space. This is why we have a total of 6 db better margin with FSK over plain OOK (without considering the advantage of being able to do full matched filtering on the FSK signal before demodulation if we use a uniform code). As noted, there is a way to recover some of this with OOK (using a varient of the turbo coding decoding algorithm).

Note that there are two separate issues here. We have OOK vs FSK (where FSK is acting as a stand in for any fully voiced modulation, some of which are better than FSK, IE BPSK). And we have a variable length code with non-uniform symbols vs a fixed length code with uniform symbols. We can mix and match between these to give us a uniform coded OOK, or a variable length coded FSK as well as the more normal variable length coded OOK and the uniform coded FSK. And indeed, RTTY was once done with OOK and Baudot code, and Morse was once done using FSK (arc transmitters which couldn't easily be OOKed, but could be FSKed by keying a reactance across the frequency determining tank).

We have to be a bit wary of getting these things confused. The issue of OOK vs FSK is primarily an issue of voiced vs unvoiced symbols regardless of what code we use. And the issue of Morse vs a uniform code is primarily one of being able to form a matched channel filter for the demodulator, and one of being able to easily extract a clock for the decoder part of the problem. Both of these latter items favor the uniform code.

Once we fully understand these two separate issues, we can proceed to see what we can do with each of the combinations. It turns out,

of course, that we get the best result if we use a fully voiced modulation
and a uniform code, but we can still make some improvements to the
other combinations over ordinary practice if we examine their strengths
and weaknesses carefully so we can design systems which take maximum
advantage of their strengths, and minimize as much as possible their
deficits.

>> >If you invert a "zero" to a "one" you can make a matched filter for that
>> >interval.
>
>The reason for inverting the "low" state (below threshold) between
>dots/dashes to a "high" state (above threshold) is to get a larger
>voltage that can be more easily timed, rather than a small voltage. This
>is a simple enough idea. Why is there so much problem about this? Put
>the noise on a "pedestal" and time it. I have done this. When the signal
>reappears go back to looking at the signal and find out if it is a dot
>or a dash.

This doesn't accomplish anything. We can get the same information
directly from the voiced symbols. In other words, we aren't measuring
anything relevant to signal energy with this "matched" filter. We can
just directly time the interval between detected voiced signals and get
the same information by inference. This may be of some use in a
purely analog detector, simply because the integrated voltage is
proportional to the gap between symbols, but with a digital detector,
we can simply count the interval between detected voiced symbols
directly.

>> >The idea of a time domain matched filter in this case is to
>> >estimate the *duration* of the zero in the presence of noise. This is
>> >one well known application of a certain kind of matched filter.
>
>This statement stands. A time domain filter yields the time duration of
>a "key up" state, possibly in the presence of noise. The tone filter is
>an optimum filter for a particular beat note, say 500 Hz. I am *not*
>going to use envelope detection.

You must. You cannot extract timing information from the signal
until you demodulate it and recover the modulating waveform.
That's what the slicer does, and is where you get the "0" you
are inverting (and where you get the "1" you are detecting too).

>> With OOK, we can
>> only do this for voiced signals. Unvoiced signals can not be filtered
>> from the channel noise, because there is no signal energy there to be
>> filtered. Those unvoiced signals have to be *inferred* from the apparent
>> absence of a voiced signal.
>
>That is exactly what we are trying to do and exactly what I have been
>telling you. There is no signal energy but there *is* noise energy (or
>possibly there is minuscule noise). I want to know "is it noise or is it
>signal plus noise". I don't give a damn about mark/space at this point.

>The only exercise here is see what can be done with OOK.

When you slice, you regenerate mark and space, that space is unvoiced
is part of the demodulator problem, not part of the decoder problem.
You *must* demodulate to mark/space before you can start to decode.
You keep confusing these two processes. That's understandable to an
extent because you're trying to do them together in a way that doesn't
make it obvious that you *are* performing two different functions.

>> This match filtering of signal energy followed
>> by optimum demodulation slicing is what determines how poor a SNR
>> we can tolerate in recovering the modulating waveform.
>
>Exactly. But we also have to determine as accurately as possible the
>"key up" time.

At the point of demodulation, *WE DON'T CARE* about that. That's
part of the decoder problem, not part of the demodulator problem. Those
are separate things, even if you are trying to combine them in one circuit
(and you can do the job better if you *don't* try to combine these two
functions in a single circuit, algorithm, or process). Take the job one
step at a time, and optimize each step separately.

>> The second, and separate, task we have is to decode the baseband
>> modulating waveform recovered in the slicing process into text
>> representable by the machine. We cannot improve the minimum
>> SNR at this point, only further degrade it by making sub-optimal
>> decisions. We can do pseudo-matched filtering on the artificial
>> signal produced by slicing in a bank matrix in an attempt to perform
>> the decoding, but this is generally not the most practical or most
>> optimal way to go about the decoding process.
>
>That may be. But, referring briefly to FSK, as far as S/N is concerned,
>it compares a weak signal in one channel to the noise in the other
>channel, so the problem is *almost* the same (we don't have to decide
>"dot" or "dash").

No. The problem is not almost the same. We have a different decision
matrix. In FSK to decode mark, we must have mark *and* not-space,
to decode a space, we must have space *and* not-mark. With OOK
we only have mark and not-mark with space being inferred from the lack
of mark. The full decision matrix for each looks like this:

FSK Mark Not-Mark Space Not-space Metric

1 1 0 0 1 2
0 0 -1 -1 0 -2
? 1 0 -1 0 0
? 0 -1 0 1 0

OOK
1 1 0 1
0 0 -1 -1

? ? ? ?

As you can see, the FSK matrix gives us more information than
the OOK matrix. The metrics are further apart. And note that
the erasure metric for OOK is indeterminate. These factors are
what gives FSK a signal space decision advantage. And this is
*regardless* of what code is used.

>The advantage of FSK is that the transmitter is on all
>the time instead of half the time. The advantage of FSK is 3 dB for this
>reason, if the transmitter is peak power limited. The advantage has been
>incorrectly called 6 dB. Not true. In fact some CW transmitters with 50%
>duty cycle can often run twice as much power (my 30L-1) as FSK.

Two points. As amateur radio operators we are limited by regulation
to a maximum peak power, so we must assume we are peak power
limited when we wish to maximize our communications capability.
In other words, we aren't limited to your 30L-1, we can use any
amplifier we like to maximize our communications effectiveness,
limited only by the PEP output regulation.

And second, as noted above, the larger decision matrix metrics of
FSK are what give it the extra 3 db of advantage over OOK beyond
the difference in average symbol power transmitted. (And again,
this neglects the further advantage use of a uniform code would
convey by allowing a matched channel filter before slicing. That
advantage exists whether the modulation is FSK or OOK, and it
can be quite substantial.)

>> We can do better if we can recover clocking information and sample
>> the baseband in the regions centered between transitions in order to map
>> the symbols into a symbol space where we can then make unambiguous
>> symbol decoding decisions. This transform mapping has a theoretical
>> equivalence to an ideal matched filter matrix, but lacks some of the
>> implementation deficits of actually trying to do a matrix of matched
>> filters for the recovered symbols.
>
>That's OK. Let's try to work aroud it.
>
>>
>> But of course 3 of the 5 Morse symbols can only be ambiguously
>> located in symbol space because we have no direct evidence of their
>> location. We can only *infer* it from the unambiguous locations of
>> the voiced symbols we can map.
>
>We will accept these kinds of limitations and do the best we can. By
>being smart in the circuit design we will try to minimize the impact of
>the disadvantages. My main goal, the only one I really care about, is
>to maintain the narrow bandwidth of CW on the often-crowded HF CW bands.
>That is *ALL* I care about. I say this with over 50 years of HF CW
>contesting, DXing (345 countries worked), Field Days and weak signal
>work with strong adjacent channel sigs. The HF CW bands are something

>that I know something about and I know that "efficiency" of the waveform
>is not the only thing that matters in this environment. Quite often it
>is not even the most important thing.

Well, I only have 34 years of experience as an amateur, but I do know
that I can maintain a *narrower* bandwidth with a phase continuous modulation
than I can with OOK for the same data rate. I also know I can use matched
channel filtering if I use a uniform code. Combining both techniques will be
superior to OOK Morse in a crowded band with poor propagation conditions.
So if that's what you are really after, then that's the way to do it.

If you don't care that you can occupy less spectrum and emit less signal
while maintaining an error free communications link with a uniform code
and a fully voiced modulation, but instead just want to maximize what
you can do with OOK Morse, then that's a different topic.

You've sharply limited what you can do, but I'll be happy to discuss
various ways you can do it better than what is common amateur practice,
and that does *not* include pseudo-match filtering an artifact of slicing.
I find the challenge of machine decoding of this suboptimal coding and
modulation interesting. In the spirit of Deep Blue, it would be amusing
to develop a computer algorithm which decodes Morse better than a
human can.

>> This is why uniform duration symbols are preferred.
>
>I know what is preferred. Do I have to keep on repeating myself?

Only as long as you claim you can match or beat the performance
with Morse.

>The rest is just repetition and I am going to quit now. Let me be clear
>about this subject:
>
>!) I have no quarrel with the superiority of various other waveforms. I
>am pretty well informed in these matters, more so than you may think.
>
>2) I want to preserve Morse CW mode in the crowded HF bands. There are
>already segments of these bands where wideband modes are used, and that
>is fine. I just want a status quo in this regard. I think that is reasonable.

I don't consider maintaining the status quo reasonable when I know we can
do better, and when I know that maintaining the status quo defacto means
that we *won't* do better. Note I'm not saying that everyone must abandon
methods they like, there is plenty of room for diversity in amateur radio, only
that we should be aware there are better methods, and adopt them as we see
fit instead of limiting ourselves to only status quo methods.

>3) Morse code CW is not being exploited to the maximum extent that is
>possible with today's technology. The exploitation that I am talking
>about is no piece of cake technically, by any means. I think Beezley has
>done some good work. It is also probably true that my specific
>suggestions may need to be reexamined in detail, but I think I am on the

>right track, in general. But to just be stubborn and say "it's
>worthless" does not reflect well on those who keep on propagandizing in
>this manner.

But I've never said it was worthless, only that we can do much better,
at a lower cost, and with a better sharing of the limited spectrum resource
with others, if we adopt a different strategy. It isn't necessary that
*everyone* adopt the new strategies for them to be beneficial in terms
of average communications effectiveness and average better utilization
of spectrum.

>4) I want to preserve Morse code because of its simplicity and world
>wide recognition. I do not have your revolutionary zeal in this matter,
>and I am proud to admit it. I want to preserve Morse code testing in
>some limited way.

I don't have a problem with your wish to preserve Morse code, nor do
I have a problem with those who want to preserve analog DSB AM
voice transmission. Both are suboptimal, but as I said, there is room
for diversity in amateur radio. But I do have a problem with involuntary
manual Morse speed testing as a barrier to licensing for use of the HF
spectrum. If that is the only way you can preserve Morse, then I think
the cost is too high.

(And BTW, I don't think Morse code would vanish from amateur radio
if manual Morse speed testing were eliminated as a licensing requirement.
I believe there are enough people with nostalgic leanings to keep it going
anyway, just as there are people who keep antique vacuum tube equipment
going despite there not being a mandated requirement to do so.)

>5) There are *very many* people who *want* to operate CW, and I think
>they are entitled to do it. There are many folks who, for one reason or
>another, want the simplicity of CW gear, especially QRP. They have
>rights also. That's right, isn't it? The drift that I get is that it
>doesn't matter what they want, it's what a certain "elite" group
>(clique) wants that matters. That is the kind of crap that I think we
>can all do without.

I don't see that at all. Virtually no one has called for the abolishment
of Morse code *use*. What has been called into question is the
Morse Myth of superiority over methods which are demonstrably
better. There has been no call for anyone who desires to use Morse
to abandon its use. Amateurs are not required to use only the best of
methods.

And what has been called into question is the mandate of manual
Morse speed testing as a prerequisite to access to the HF spectrum.
That is both unjustifiable and illegitimate as a use of government
power because the reason for such testing has become moot by
changes in the communications environment, IE we no longer need
a way to intercommunicate with life safety services sharing spectrum
with us so that they can tell us to cease interfering with their operations.

That was the original reason for the Morse testing requirement. But that day is gone. We no longer share spectrum with the life safety services, and they don't use Morse anymore anyway (or at least the last of them to do so are mandated to cease in 1999). That leaves Morse as a purely voluntary method of operation for those who desire to do so, and if that desire to use Morse isn't sufficient motivation to learn it, then it deserves to fall by the wayside.

Using government force to prop up a method which can't stand on its own in free and open competition with other methods is an illegitimate abuse of power. (As noted above, I'm confident sufficient people will want to voluntarily use Morse to keep it alive without an illegitimate government forced recruitment effort.)

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# 3404. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: n4jvp@ix.netcom.com
Message-ID: <343e1c9c.2736636@snews.zippo.com>
Source record: 90180

On Wed, 08 Oct 1997 04:31:01 GMT, orion@xyznycap.rr.com wrote:

>On 8 Oct 1997 00:27:45 GMT, "Carl R. Stevenson" <wa6vse@fast.net>
>wrote:
>>I am not going to "apologize" for stating the view that far too many
>>hams are technically backward and incompetent for the privileges
>>their licenses grant them ... that is, after all, why I have maintained
>>for a long time that the testing system needs to be fixed so that we
>>don't have "Extra Class" hams who don't know Ohm's Law or how
>>to cut a dipole to resonance ...
>
>Oh yes, but they can pound the brass, and copy the beep-beep. That
>excuses them from having to know anything else.
>
>

Hans has a list and I would like one as well. Name 'em fellas or dance
to a different tune

Extra class licensees who do not know either Ohm's Law or how to cut a
dipole to resonance:

1. ______

I'll just say 73's ;) de n4jvp
F.

# 3405. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <343BAFDE.408CC6F0@arrl.org>
Source record: 90181

William E. Sabin wrote:
> It just isn't worth it any more. If you want to put direct sequence or
> frequency hop or PSK on the low end of the 20 meter band because it is
> more "efficient", go ahead.

I don't want to do a blessed thing to the low end of the 20-meter band,
Bill.

> I want nothing more to do with this. All I hear is that the higher
> efficiency of wider bandwidth is all that matters.

Then you haven't heard what I've said. It is *not* my view that the
efficiency (in terms of throughput *or* spectral use) is all that
matters. But "efficiency" is often cited as a strength of CW. I mean
only to disabuse people of the notions that CW "gets through when
nothing else will" and maximizes the use of the available spectrum.
Those conclusions are wrong, period. They weren't wrong 40 years ago,
but they are now.

That *doesn't* mean I want to replace CW with some as-yet-undefined
digital mode. (If that eventually happens, it happens.) But if CW is to
retain a significant place in Amateur Radio, let's make sure we're
keeping it for the right reasons, not because we mistake it for the best
system that communications technology can provide.

> All that matters is
> the revolution in communications that imitates what the military and
> commercial people are doing. Whether it makes any sense for Amateur
> Radio or not is immaterial. So be it, then.

The question is very much what makes sense for Amateur Radio. But what
other services are doing certainly provides a useful yardstick against
which to measure our capabilities.

Jon
--
Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League | Amateur Radio info:
225 Main St., Newington CT 06111 | http://www.arrl.org/

# 3406. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343baf4f.74914717@news.atl.bellsouth.net>
Source record: 90182

On Sat, 04 Oct 1997 16:47:04 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>The important thing for Morse is to try to determine, in an optimal
>manner in the presence of noise, the time lapse between 1/0 transitions.
>This is really what Morse machine decoding is all about.
>
>As part of that, correlation dot/dash filtering of an audio frequency
>tone, at the output of a product detector, is superior in terms of Eb/N0
>for 10^-3 bit error rate, to envelope detection. Envelope detection
>concerns the Rician distribution (weak signal plus noise) and the
>Rayleigh distribution (noise only), which are not really all that great.
>A product detector plus correlation filtering is practically the same as
>coherent, or synchronous, detection because we are looking at AWGN that
>is *translated* to baseband. The improvement is at least 1 dB.

So how do you locate the edges to time if you don't envelope detect?

>We also need an adaptive threshold detector that determines the 1/0
>transitions in this AWGN background. We then "time" the no-signal
>interval in an optimal manner using time domain filters.

This slicer *is* the envelope detector.

>To get any better than that, for a better channel capacity, according to
>Shannon's equation, we must increase the transmitted bandwidth, which in
>my opinion is a real bummer for the CW portions of the HF amateur bands.
>
>One thing that is not generally realized is that FSK is only 3 dB better
>than OOK but requires a considerably wider bandwidth.

Not true. We can produce a MSK signal which will have a smaller
power spectrum for the same information rate as a OOK Morse signal.
The narrowest possible spectrum for a 20 WPM rate OOK Morse
signal is 16.66 Hz (OOK is DSB so the power spectrum is double
sided). And in fact we can't decode 20 WPM Morse by ear in that
narrow a bandwidth because it is at the Nyquist limit and removes
the edge shaping which humans need to recover the timing information.
A machine could recover it, though.

But we can easily do a MSK modulated coding which can carry
20 WPM equivalent information in a bandwidth of 2.33 Hz. I
illustrated such a system on the policy group a while back. It
uses a 12-bit word length and common codebook compression
to deliver a 20 WPM QSO equivalent at 1.66 baud, which with
an off the shelf MSK modulator that measures 1.4 Hz/baud at
the 50 db down points, will fit in a 2.33 Hz bandwidth.

This also is a superior weak signal method because of the
extremely narrow bandwidth, coupled with the ability to do
a perfect matched filter in the demodulator before the slicer,
and because of the decision matrix gain of FSK over OOK.
We can even add a rate 1/2 FEC and still fit in 4.66 Hz.

I would note in fairness that maintaining such a narrow
bandwidth over skywave HF paths is difficult due to the
doppler introduced by the varying path length. That limits
the ultimate weak signal ability of any system premised
on going narrower in occupied bandwidth on HF. (You
have to go wider, IE SS, to approach the ultimate weak
signal limit in such an environment.)

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# 3407. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343bc147.79515150@news.atl.bellsouth.net>
Source record: 90183

On 7 Oct 1997 16:57:00 -0700, europa@primenet.com wrote:
>I will gleefully try out a new advanced communication mode if:
>
>1. I show it to some 12 year old kid and he doesn't laugh at me

He'll laugh at you anyway (even if only behind your back).

>2. its interesting enough that he/she wants more info about ham radio

But he might be curious how it works, and might want to dig into it
further. Thus he might develop an interest in ham radio, especially
if he can use his computer as part of it.

>3. the equipment can be bought for less than $1000

Bought? Shame! The thing that makes amateur radio unique
is that we get to build and modify. Buy? Pah!

>4. Its fun

You bet it is. Nothing beats the rush you get when your baby
fires up and does exactly what you expected it to do for the
first time. Especially for extreme weak signal work, it is like
dancing on a high wire without a net. You know that if you
did just one thing wrong, it's not going to work. But when
you see that text printing out on the screen when you can't
even hear anything but noise out of the receiver, you know
you've done something really slick.

Gary
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# 3408. Re: 5w PA plans?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <343B7297.1A5B@taxes.net>
Source record: 90184

Matthew Hone wrote:
>
> I'm looking for the plans for a 5w Power Amp that was supposed to be in
> the July 1987 QST. Pages 31-33. Does anyone have this or know of a
> source on the net of plans for a good qrp amplifier? Thanks!

Check out Harry's Home Brew Site at

http://user.tninet.se/~acz732k/

or the mirror site at

http://hem2.passagen.se/sm0vpo

73, N6OTQ

# 3409. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343BD3AC.60F8@crpl.cedar-rapids.lib.ia.us>
Source record: 90185

Gary Coffman wrote:

> All we *can* do is
> assume everything is a dot, and do a matched filter for that before
> slicing.

Not true. We can simultaneously test for a dot and a dash and "choose".
It's easy. Two bucket brigades and a comparator.

>
> Further, we are making an inference that there is no signal. It could have
> faded. And we may detect a signal, but it can be interference rather than the
> signal we are trying to copy. **WE CAN'T KNOW** at this point what it is.

In the presence of fading, stuff happens. Stuff happens with any
waveform. If we're smart we can do our best with the signal that is
available. I never said it was a rose garden. With FSK we have selective
fading. Sometimes the fading bandwidth is extremely narrow and
Mark/Space gets into trouble. I have seen this in HF frequency fast hop.

> With FSK (or other fully voiced modulation) we will know we have a fade
> because we must always have energy in one of the channels, or we'll know
> we have interference because we'll have signal in *both* channels at the
> same time. There is no ambiguity.

Sure. We all know that.

> achieve the same effective SNR with OOK that we can with FSK. This
> ambiguity cost is separate from the 3 db more signal we have simply
> due to the transmitter always being on. This ambiguity reduction gives
> us a 3 db improvement in signal space, IE it is the ratio of allowed
> versus disallowed vectors in signal space. This is why we have a total
> of 6 db better margin with FSK over plain OOK (without considering
> the advantage of being able to do full matched filtering on the FSK signal
> before demodulation if we use a uniform code).

Every reference that I have says 3 dB in AWGN. That other 3 dB sounds
like smoke and mirrors to me. I think we have to avoid embellishing
things here that seem to promote a particular point of view. The basic
problem is to distinguish noise in one channel from signal plus noise in
the other channel. In any particular short interval the noise measured
in one channel can easily be equal to or greater than the signal plus
noise in the other channel because of the statistics involved.

> some of which are better than FSK, IE BPSK).

I am extremely leery about phase coherent methods at HF over a skywave
path. Maintaining coherence over skywave is no piece of cake, by any
means. Dixon mentions this most emphatically and I have been through
this ordeal myself.

> Both of these
> latter items favor the uniform code.

Yeah, yeah, OK.

>> When the signal
> >reappears go back to looking at the signal and find out if it is a dot
> >or a dash.
>
> This doesn't accomplish anything.

Sure it does. In noise it is a little bit more info to work with. We can
learn how to exploit it. With OOK we can't afford to throw away anything
that might be useful. I believe I can make optimal measurements of the
"key up" intervals using the same kind of bucket brigades that are used
for dot/dash recognition. We can then write software that will do the
best possible job of choosing among the options a) what signal was sent
and b) what is the time interval between signals. Nuclear event detector
amplifiers look for both amplitude windows and time windows. The idea of
the optimum threshold is important. This must be done "on the fly".

> > I am *not*
> >going to use envelope detection.
>
> You must. You cannot extract timing information from the signal
> until you demodulate it and recover the modulating waveform.

This is definitely not true. Envelope detection is a bummer. Product
detection followed by operations on the audio tone is definitely
superior. Ref: Schwartz "Information Transmission, Modulation and Noise"
3d edition, chapter 5. You can do all the "slicing" and "timing" you
want with this signal. The DSP-filtered audio is a beautiful signal to
work with if it is done properly. It's almost identical to coherent
detection. Very close frequency correspondence is needed.

>
>
> I don't consider maintaining the status quo reasonable when I know we can
> do better, and when I know that maintaining the status quo defacto means
> that we *won't* do better.

That is a non-sequitor. Things are going to get better, technically, but
not on your timetable. You have to literally "change the entire world"
and that is not going to happen on your watch. The HF bands have quite a
bit of data mode stuff going on, even now, but there is strong world
wide interest in CW and you are not going to change that.

> That was the original reason for the Morse testing requirement. But
> that day is gone. We no longer share spectrum with the life safety

> services, and they don't use Morse anymore anyway (or at least the
> last of them to do so are mandated to cease in 1999). That leaves
> Morse as a purely voluntary method of operation for those who
> desire to do so, and if that desire to use Morse isn't sufficient
> motivation to learn it, then it deserves to fall by the wayside.
>
> Using government force to prop up a method which can't stand
> on its own in free and open competition with other methods is an
> illegitimate abuse of power. (As noted above, I'm confident
> sufficient people will want to voluntarily use Morse to keep
> it alive without an illegitimate government forced recruitment
> effort.)

That is just soap box oratory, and I really think you should lighten up a little on this subject. We want to retain Morse because it suits our particular purposes. We want to test for Morse because it is an important "gateway" for global communication and also emergency (in certain situations) communication. All of this knee-jerk opposition to CW and testing for it is counterproductive and makes no real sense, in my opinion. And I am not just being a "fanatic stick-in-the-mud".

Bill W0IYH
>

# 3410. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343BC0A6.7A87@crpl.cedar-rapids.lib.ia.us>
Source record: 90186

Jon Bloom wrote:
>
> William E. Sabin wrote:
> > It just isn't worth it any more. If you want to put direct sequence or
> > frequency hop or PSK on the low end of the 20 meter band because it is
> > more "efficient", go ahead.
>
> I don't want to do a blessed thing to the low end of the 20-meter band,
> Bill.

Thanks, Jon. I always knew you are a good guy.

>
> > All I hear is that the higher
> > efficiency of wider bandwidth is all that matters.
>
> Then you haven't heard what I've said. It is *not* my view that the
> efficiency (in terms of throughput *or* spectral use) is all that
> matters. But "efficiency" is often cited as a strength of CW. I mean
> only to disabuse people of the notions that CW "gets through when
> nothing else will" and maximizes the use of the available spectrum.
> Those conclusions are wrong, period. They weren't wrong 40 years ago,
> but they are now.
>
> That *doesn't* mean I want to replace CW with some as-yet-undefined
> digital mode. (If that eventually happens, it happens.) But if CW is to
> retain a significant place in Amateur Radio, let's make sure we're
> keeping it for the right reasons, not because we mistake it for the best
> system that communications technology can provide.
>

> The question is very much what makes sense for Amateur Radio. But what
> other services are doing certainly provides a useful yardstick against
> which to measure our capabilities.

But we don't have to imitate them.

This all sounds good to me. I have never advocated the technical
superiority of CW Morse code as a signalling waveform.

Bill W0IYH

## 3411. 6 Meter Amp Kit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <343BDB1E.2B13@erols.com>
Source record: 90187

Does anyone make a 6 Meter SSB amplifier Kit for about 10 watts in and
50 to 100 watts out?

## 3412. Re: Any info for a school starting up a radio station?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: William Phinizy <wphinizy@connect3.com>
Message-ID: <343BFA6A.659FF9DA@connect3.com>
Source record: 90188
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

..I remember an article appearing in the now-defunct 'HamBrew' magazine on just this subject. It pointed out the legal requirements (although maybe not in such detail) but also described how to construct an FM station from a kit offered by Ramsey Electronics. I will look for it and pass along the information if I can find it.

> Ian the Grate wrote:
> >
> > Hi Everybody!
> > My highschool seems to have developed an interest in the idea of
> > building an on-campus local FM radio station. So I, being a bit of a
> geek,
> > have decided to take it upon myself to attempt to compile all
> information
> > possible on the subject- what equipment is needed, what FCC
> liscences are
> > necessary, where we could possibly look for grants, etc. So, if
> anyone has
> > any useful and valid information on the subject, please reply.
> Thanks.

## 3413. Antenna for Attic????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: John <johnr@flinet.com>
Message-ID: <343BF89F.5B53@flinet.com>
Source record: 90189
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec,radio.shortwave,rec,radio.scanner

I am interested in putting a wire antenna in attic for listening only on the "world bands". My usable space in attic is approx 25 ft wide by 70ft long. Can anybody help me out with some ideas??? I will be getting a Radio Shack DX-394 soon and want to be ready.

# 3414. fs-B&W TVL -MEL -MC Coils!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19971008215000.RAA17703@ladder02.news.aol.com>
Source record: 90190

Hi Fellows;
I have for SALE:
B&W Air Inductor 40TVL coil, new in box!
B&W Air Inductor TVL base, Female ceramic jack bar w/swinging link, new in the box!
ALL BELOW ARE B&W "baby" air inductors, 25 watt, in thier boxes!
80MC
40MC
80MEL
40MEL
20MEL
10MEL
40JVL B&W Junior Air inductor
Price for all is $75- shipped Conus! Any Builders or takers out there?

Thanks es 73.....RICH RLUCCH2098@aol.com

## 3415. 6 Meter Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: wwhite@southwind.net
Message-ID: <MPG.ea5e69c2e918774989684@news.southwind.net>
Source record: 90191

I am hoping to soon increase my power output on 6m. I would like to construct a tuner capable of handling 1200 to 1500 watts. Where should I start looking for information on a project like this? Can it even be done. All help greatly appreciated.

73

Wayne

# 3416. WTB high power AM xmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: William Gittere <wgittere@buffnet.net>
Message-ID: <343C1FC6.BF03E593@buffnet.net>
Source record: 90192

I am looking for a high power AM transmitter for use on 160 and 75 meters. It should be in the KW range with high quality plate modulation. I will consider a well built homebrew, commercial or broadcast rig. I would like it to be within driving distance of Buffalo NY. Please respond to me on e-mail or call 716 741 3776.

Thanks and 73's

Bill Gittere K2LNU

# 3417. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <Un+V1DAPT9O0Ewp$@pacsat.demon.co.uk>
Source record: 90193

In article <europa-ya023580000810970530060001@news.primenet.com>,
europa@primenet.com writes
>I'm not certain where the idea came from that code proponents are
>technically incompetent. I guess somebody just made it up to fit their own
>agenda. The discussion in this thread is the first time in my life I have
>heard such a silly idea.
>
>My experience has been the exact opposite. The hams I have know over the
>years who have been avid CW ops have also been the most technically astute.
>Don't ask my why- I don't know know- but it certainly has been true in my
>experience.
>
>Rob.

Dunno about the US, but in the UK I would say a great proportion of
Class A amateurs learn the code and never do anything more than pick up
a mic and talk. Its certainly not a silly idea and I can't see it being
any different in the US than in the UK. Does learning the code make you
technically proficient? The ability to receive audible tones and decode
them does not make anybody a better operator or give them a better
technical know how. Certainly here in the UK its simply used to control
the amount of operators getting through onto the HF bands - end of
story.

As for technically proficient, I would put my money on any amateur who
is capable of setting up a satellite or eme station using low power, or
building a microwave transverter and using it. Anyone can put up a half
decent HF station on the air simply by visiting his local ham store with
a fat cheque book.

If the US is anything like the UK, you guys should be looking at how you
can encourage young people into the hobby, else by the middle of next
century we might not have amateur bands to play on.

Instead of fighting amongst yourself, try and persuade the government
that the bands are used, but don't get so narrow minded to think that
life ends with morse. It is without a doubt a dying, outdated mode. Yes
its fun, but does it really have a place in modern radio licencing? And
what is our current public image like? How do others view our hobby?

Certainly here in the UK our image is poor and we are doing nothing to
alter it. At the moment we are simply an extended CB service with little
to offer newcomers. We either change or die, simple.

73 Simon GM4PLM
+--------------------------------------------------------------------+

| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------------+

# 3418. Re: Soundblaster and CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: Hugo@vncomm.com
Message-ID: <343ba209.10245566@news.vncomm.com>
Source record: 90194

Don Ward <don@kay-dee.demon.co.uk> wrote:

>My morse tutor program uses the internal PC speaker. I would like to use
>the Soundblaster card but I have no interface details. How is the card
>detected and how can I generate a simple sine wave. Anyone help?
>--
>Don Ward G0MDO

Hi Don

Try to find Super Morse dos program on Shareware.com. Using CW or
MORSE for search keyword should get you there.

It is nice an all in one program you can use for learning and building
your cw skill. Uses pc spker or sndboard.

Beside, excellent documentation and help files describe a simple Rx
interface (1- 747 op-amp) btwn receiver and pc com port, to decode
live incoming signal (can also be bought), as well as an interface to
a Tx that can use a keyboard or a bug at will.

Still rated as one of the best of its trade by many readers in this an
other groups.

Hope it helps,

H.C.

# 3419. Re: Tuning with large cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <343C3E42.ED1@isrc.net>
Source record: 90195

Tim wrote:
>
> Most plans I see for air variable caps in a VFO are somewhere in the 15
> or 20pf range
> would using a 365pf variable then putting a 10pf +/- in series give
> basically the same results or am I missing something?
>
> Tim

Howdy, Tim! Well, the equivalent capacitance of any two series capacitors will be less than the lower value. You could try removing some of the plates to lower the 365 pf capacitance. Are the 10-20 pf jobs you're looking at very small, or are they just as physically large as the one you want to use?

Matt J. McCullar, KJ5BA
Arlington, TX

# 3420. Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: s56a@s55tcp.ampr.ORG
Message-ID: <14166@s55tcp.ampr.org>
Source record: 90196

Gary, KE4ZV keeps emphasizing asynchronous nature of Morse code as a great dis-
advantage in machine decoding. This is absolutely not a case in machine gene-
rated code which has a master clock and all the elements are generated from it
in 1:3:5 fashion. Once we estimate basic dot length and detect decent signal
above the noise, we can start synhronous detection by accurately estimating
following element. If it happends to be signal again, we KNOW that we hit dash
and the next element MUST be signal again. If we detect pause (noise) than
there are 2 choices following it: signal or pause. If signal comes we detected
intersymbol pause and we go back to signal flowchart. If pause follows pause
than we KNOW again that we MUST have at least one more pause for character of
more than that (5 or 7) for word. This simple state machine helps a lot...
Even with hand sent Morse, slight variations occur only in long pauses which
do not affect character decoding much. We usually end up with few extra spaces

For a few DX-ers which expressed doubts about the abilities of machines to do
Morse decoding in pile-ups, let me tell you that PC & DSP achieved 80% score
on simulated 5 min. tape while I did about 60% after winning EU championship
twice and being #6 in Dayton 1995 (#1 EU with G3SXW). On the air test in ARRL
DX contest with about 200 CW QSO exceeded all my expectations once PC worked
Kansas on 80m which I could barely detect in QRM. One becomes very humble
after such an expierence just like world chess champ after being beaten by
computer recently. I have seen the future and I stoped my research...

73 de Mario, S56A, N1YU.

## 3421. Now that Doug's gone...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <343B49AB.4368@mwt.net>
Source record: 90262

Sorry to hear Doug DeMaw is an SK...Hopefully another will come along
giving us some new, great QRP designs. I will sure miss him!
Scott, N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

amended 8-29-97: Now after feeling the "Need for Speed", building an
RV-4!
No, the Super Chief is NOT for sale :)

# 3422. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-08 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd380$cf8f9760$0100005a@wa6vse>
Source record: 90263
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<343A2822.212E@crpl.cedar-rapids.lib.ia.us>...
> Peter Parker wrote:
>
> > Our objective as hams has nothing to
> > do with making money, so I for one will continue to build gear for this
> > obsolete mode until someone comes up with a mode easier/cheaper to
> > construct equipment for.
>
> I really think that many of us are not aware of the *real* agenda in
> this discussion of Morse CW vs other modes. These other modes are
> presently available to anyone who wants to experiment with and use them.
> Or, STAs from FCC are available.

Correction ... those modes are NOT available on the HF bands for
those who have not submitted to the Morse hazing ritual. And STAs
are not so easy to get ... I doubt seriously that the FCC would grant
an STA for a tech, no matter how technically qualified, to use HF
for experimentation with the advanced digital modes.

> The name of the game is "control", where a certain small but strident
> and militant group is not satisfied to do what they want to do, they
> want to tell everyone else what to do. And anyone who doesn't want to
> fall into line is subjected to ridicule and name calling, such as

Up to this point in the paragraph, I would have sworn that you were talking
about the pro-coders ... after all *they* are the ones who insist on forcing
everyone to practice *their* mode ... *that* position sounds a LOT more
like "the name of the game is control" than the anit-code-TEST folks who
say, in effect, "let everyone choose their own mode preferences voluntarily."

> "fanatic", "stick in the mud", "old fart" and so forth, and is subjected
> to other curmudgeonly behavior.

Now these labels, I must admit have been used by myself (and others)
against rabid pro-coders ... I have been publicly chastised by Gary for
this sort of behavior and I respect Gary's opinion, so I am going to *make
an effort* to "tone it down a bit" ... only time will tell if some of the more
strident pro-coders will follow suit ... (Ed has also influenced me to a
degree in this direction, despite the fact that we don't always agree and
I have given him a hard time on occasion ... but he deserves some credit
for influencing my impending attempt at moderation ...)

> The buzz word for them is "educate".
> They are going to educate the ignorant mob.

I am not going to "apologize" for stating the view that far too many
hams are technically backward and incompetent for the privileges
their licenses grant them ... that is, after all, why I have maintained
for a long time that the testing system needs to be fixed so that we
don't have "Extra Class" hams who don't know Ohm's Law or how
to cut a dipole to resonance ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

p.s. Bill ... like the other guy, whose name I can't recall at the moment,
I am still waiting to hear your explanations of the Morse receiver with
"5 matched filters" (three of which operate on *noise* since there is no
signal there during those intervals)

# 3423. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343d131d.166014210@news.atl.bellsouth.net>
Source record: 90064

On Tue, 7 Oct 1997 14:57:00 GMT, Ralph Reinhold <ralph.r.reinhold@boeing.com>
wrote:
>I would like to see sub-bands preserved for Morse only. Preferable the
>lowest 10 kHz of each HF ham band or even the guard band below it.
>Power would be limited to 5 W or some other small power. A special
>class of license which requires a code test would be needed to operate
>in these bands. 5 wpm would be adequate with a strong enough technical
>test to ensure understanding of the band's rules. Morse at full band
>power would be allowed in any other digital sub-band. No test would be
>needed for this as it would be self testing in use. If a person's code
>was bad enough, no-one would answer him or her and they would give up
>using it.

Your rationale for the lack of need for Morse speed testing in the general
data portion of the bands also applies to the special Morse-only sub-bands
you want to create. To repeat the obvious, if you can't do it, you won't,
and if you can, you will, no other test is necessary.

But having said that, I have no objection to the creation of Morse only
preserves, I prefer to call them sanctuaries, where those who want to
operate Morse can do so in peace without having to compete with other
signaling methods. I'd even suggest using the existing Extra segments
at the lower ends of the HF bands for this purpose. And I'm not sure
that a QRP power limit is necessary. Of course Morse operators could
continue to use any other part of the bands too, but on a fully open
competitive basis with other methods.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3424. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <343D1294.6248@ccm.intel.com>
Source record: 90065

Gary Coffman wrote:
> The *only* real justification for dealing with that at all
> is to accomodate the current large installed base of OOK Morse
> trained operators who don't want to learn something even slightly
> different.

Hi Gary, it's a lot like our keyboard layout which was originally
designed to slow typists down so the mechanical keys wouldn't jam.
Whatever happened to the superior Dvorak keyboard layout?
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3425. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: "Ed Hare, W1RFI" <ehare@arrl.org>
Message-ID: <61j74j$f5n@mgate.arrl.org>
Source record: 90066

ke4zv@bellsouth.net (Gary Coffman) wrote:

>But having said that, I have no objection to the creation of Morse only
>preserves, I prefer to call them sanctuaries, where those who want to
>operate Morse can do so in peace without having to compete with other
>signaling methods. I'd even suggest using the existing Extra segments
>at the lower ends of the HF bands for this purpose. And I'm not sure
>that a QRP power limit is necessary. Of course Morse operators could
>continue to use any other part of the bands too, but on a fully open
>competitive basis with other methods.

Speaking entirely personally, as a CW op, I see no reason not to
continue to have CW shared with those other modes with which we have a
demonstrated reasonable compatibility (translate: the modes we are
currently sharing on HF). If FH SS turns out after further study by
the amateur community to be compatible with existing amateur CW and other
digital operation, I would see no reason not to share spectrum with that,
too.

--

73 from ARRL HQ,
Ed Hare, W1RFI
ARRL Laboratory Supervisor

# 3426. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcd4e1$56757680$6bdc24ca@not-applicable>
Source record: 90067

philip de cadenet <phil@two-way.demon.co.uk> wrote in article
<H+$+iwACxOP0EwSL@two-way.demon.co.uk>...
> Rod,
<cut>
> >> I need an output of around 1KW at 50V.

<cut>

We have discussed the possibility of using a modified car/truck alternator and I believe you will easily achieve your goal of 20-30 amps (1KW @ 50V) as most of these are rated standard at 60-80 amps. I suggested looking for a 24V unit to modify (common in small trucks round here) for the simple reason that they will be better suited for the higher voltages than an overdriven 12V type. Our relative costs for a good S/H unit is about the same as a new car battery.

Another option you did not comment on was a commercial inverter feeding a regular power supply. To realise 1KW from a 12V source with typical inefficiencies the draw is probably nearer 100-120 Amps. A friend has just equipped a bus with 2x 5KW inverters which power his mobile computer system in connection with his business. It was not a cheap exercise. I believe he has a small diesel generator fitted underneath the bus to maintain the second set of batteries.

Yet another option could be the purchase of one of the small Honda type petrol driven portable generators if you do not need to be mobile when operating. These come in all sorts of standard sizes suitable for you needs. They are common in the bush out here where regular power is not available.
Garth ZL4PY

# 3427. TIRIS Antenna design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Marius van Wyk <jsm@intekom.co.za>
Message-ID: <01bcd4ff$01bace60$9e6f19c4@Intekom4272>
Source record: 90068

Hi.

Could someone please provide me with information about the design of a loop antenna for use with the TIRIS RFID Microreader?

The antenna must have a Q factor of between 10 and 20, and must have an inductance of 47uF. What I need is the steps how to design this loop, or rectangular loop antenna.

Any help would be greatly appreciated!

Greetings
Marius

# 3428. Re: Antenna for Attic????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <343d2729.17303057@news.crosslink.net>
Source record: 90069
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec,radio.shortwave,rec,radio.scanner

On Wed, 08 Oct 1997 17:18:23 -0400, John <johnr@flinet.com> wrote:

>I am interested in putting a wire antenna in attic for listening only on
>the "world bands". My usable space in attic is approx 25 ft wide by 70ft
>long. Can anybody help me out with some ideas??? I will be getting a
>Radio Shack DX-394 soon and want to be ready.

I recommend an antenna 70 feet long and fet with ladder line. Put a
cheap, simple tuner with tapped inductor on your end of the ladder
line to tune the system. This will improve the signal to noise ratio.

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

## 3429. CATV tuner surplus source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Dave McQuate <mcquate@sr.hp.com>
Message-ID: <343D4BBD.6A1E@sr.hp.com>
Source record: 90070

Where might I purchase a surplus CATV tuner, which might be used to
build a ~0 to 500MHz (or more) spectrum analyzer, as in recent issue of
Communications Quarterly?
Thanks,
Dave

# 3430. YO and KLM antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: pe1khp <pe1khp@pi.net>
Message-ID: <343DCCDD.177F@pi.net>
Source record: 90071

```
This is a multi-part message in MIME format.

--------------7A1E525A582C
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

////
(o o)
----------------------------------------ooOO--(_)--OOoo-------
VHF DX AmateurRadio Station PE1KHP JO22XE
-----------------------------------------------------------------
Ham site Apeldoorn http://home.pi.net/~adpe1khp/home.htm
Veron Afdeling Apeldoorn http://home.pi.net/~adpe1khp/v05.htm
VERON VHF-UHF commissie http://home.pi.net/~adpe1khp/vhf.htm
-----------------------------------------------------------------
Waar een wil is, is een weg. Waar meer willen zijn, een file.
Programmers don't die, they just GOSUB without RETURN
-----------------------------------------------------------------

--------------7A1E525A582C
Content-Type: text/plain; charset=us-ascii; name="ANTENNA.TXT"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="ANTENNA.TXT"

Hi,

I am looking for details of a 16 LBX KLM antenna for 2 meter.
I wanted to made it my self.

I am looking too for a yagi optimizer programme. I have version 1.02
of Brain Beezley K6STI. If you can help me with that programme, please
give me then a email.

Thanks for reading this msg.

Adriaan PE1KHP.

--------------7A1E525A582C--
```

## 3431. Tuning with large cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <343D737E.1274@flash.net>
Source record: 90072

Most plans I see for air variable caps in a VFO are somewhere in the 15
or 20pf range
would using a 365pf variable then putting a 10pf +/- in series give
basically the same results or am I missing something?

Tim

# 3432. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: NHCPL@COUPLE.COM
Message-ID: <343d5442.6228420@nntp.interramp.com>
Source record: 90073
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

If you would just sit back and think for 2 minutes - you will see that
Americans are loosing thier rights "ONE-BY-ONE"....This is just one
more piece.

Just think about it.

(and the only reason this came about is that ole' NEWT got burnt)

On Thu, 09 Oct 1997 13:13:06 GMT, sco@sco-inc.com (SCO) wrote:

>Erv <kb8tnq@voyager.net> wrote:
>
>>Hi Gang!
>>
>>Well, our elected officials are trying again! And this time, they are
>>out to do some serious Damage to the Amateur Radio Hobby!!!
>>
>>Bill HR2369 is a vicious pack of poison, which, if passed, will end
>>Amateur Radio as we know it....making the buying and selling of scanners
>>and wide-banded ham gear ILLEGAL!
>>
>>For more information, visit the information page, which is located at:
>>http://www.kb8uyz.com/kb8tnq/scan.htm Tell your friends about this and
>>let them know we have included a link to find your
>>representatives.....and email them. Let's stop this thing before it
>>gets any farther!!!
>>
>>7-3,
>>Erv KB8TNQ
>
>As far as I know HAM radio is exempted.
>I am in favor of any bill that blocks the monitoring of "private
>conversations". HAM radio is not "private communications" ...
>HAM radio is on the public airwaves and can be heard by anyone with a
>radio that can tune the ham bands. Hams at my ham clubs are in favor
>of this bill's idea (I have not seen the actual bill ... just heard it
>talked about at our club meetings).
>
>W4SCO
>
>I am also a private pilot and communications on the aviation bands is
>also not "private" so it should not be affected either.

## 3433. Re: Now that Doug's gone...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Sid Boyce <szb50@amdahl.com>
Message-ID: <343D5E54.F8E6D63@amdahl.com>
Source record: 90074

scott wrote:
>
> Sorry to hear Doug DeMaw is an SK...Hopefully another will come along
> giving us some new, great QRP designs. I will sure miss him!
> Scott, N0EDV
Sad to hear, I've always found his designs refreshing and to many avid
homebrewers anything he did was always a delight.
> --
> Gotta Fly or
> Gonna Die !
With this weather
Looks like I'll never

> --Ask me about my
> Aeronca Super Chief--
Vaguely heard of it, do tell more on this dream beast.

> amended 8-29-97: Now after feeling the "Need for Speed", building an
> RV-4!
> No, the Super Chief is NOT for sale :)
Pity indeed, but as my flight school owner used to say (and probably
still does), the bigger the boys, the bigger the toys.
------73--G3VBV---- 90 knots my top whack!
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375
---
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

## 3434. What is this tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <343DA800.1F48@isrc.net>
Source record: 90075

A friend of mine bought a gizmo at a Kentucky surplus sale and sent it to me. It looks much like a vacuum tube, but you can't see into it except from the top. It's got only two legs on the base.

Here are the numbers printed on the base:

JAN-CHS-1B59/R1130B
MADE IN U.S.A.
SYLVANIA

Can someone please identify this "tube," please? Thanks!

Matt J. McCullar, KJ5BA
Arlington, TX

# 3435. Re: Custom Meter Faces?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: CJ <cj@boi.hp.com>
Message-ID: <343CF565.77AE@boi.hp.com>
Source record: 90076

Denis R. McKay wrote:
>
> David R. Smith <wa6ydi.telis@telis.org> wrote in article
> <343A5B03.C10@telis.org>...
> > Does any one know of a company that can make a custom face or re-scale
> > one for panel meters?
>
> Where's the old ham ingenuity(sic). Unscrew the face from it's backing
> plate (carefully!!!), remove the old lettering with an eraser (in OZ we
> call them rubbers :-))
> Put on your own letter etc with Letraset or similar rub-on lettering and
> reassemble.
>
> Save yourself some money!!! oy vay and och aye
>
> Denis
> VK2DMR

Or, in this new high tech world, all it takes is a computer and a simple
drawing program and you can make really professional looking meter
faces!

-cj
--
---
|cj@boi.hp.com |
KD6AEG |
|=====|
|Hewlett-Packard | Give a man a
beer |
|Enterprise Storage Solutions Div.| and he'll waste an
hour |
|11413 Chinden Blvd. M/S 831 | Teach him to
brew |
|Boise, ID 83714 | and he'll waste the rest of his
life.|
---

# 3436. Article needed from Sept. 1967 issue of Electronics World

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <61hh37$t9c@news.Hawaii.Edu>
Source record: 90197
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

That issue is not in our research library; if you have access to that
particular issue, please contact me. I'd like a copy of the article
titled Tone-Selective Signaling - The New Look, written by L. Solomon,
on pages 88-90. I'll gladly pay copying, postage, and "handling" fees!
Thank-you in advance,
Jeff KH2PZ / KH6

# 3437. Re: 6 Meter Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19971009043301.AAA24253@ladder02.news.aol.com>
Source record: 90198

An article in July '97 Nuts & Volts
featured a small tuner you might
want to consider perhaps in an proto
unit.

Try something similar
for your purpose. Considerable
thought should be taken to
increase the power handing
capabilities of all components.

Carl
N9EFJ

# 3438. Re: Antenna for Attic????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: gelleric@goethe.informatik.uni-stuttgart.de
Message-ID: <61i6ql$a3h@zdi.informatik.uni-stuttgart.de>
Source record: 90199
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec,radio.shortwave,rec,radio.scanner

Hi John,

For receiving only and under some space limitations you should
try a tuned loop. The ARRL Antenna Book has a whole chapter about
that... I made one for receining and transmitting on 15..20m and
it works fine, even indoor.

73, Wolfgang DJ3TZ

# 3439. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <343CBE2A.4763@antispam.trader.com>
Source record: 90200

> ...how come I can't find a decent Pentium-2 based emulator for my Commodore Vic-20

> The real question is how much longer will analog voice transmissions be
> allowed on any frequency? Chuckle now....do you realy think you will be in
> 10 years?

I expect there will still be small hunks of spectrum around for analog FM _and_
CW 100 years from now. The really important (read money) stuff will be above
70cm, and below will be scientific heirlooms (read historical societies
and national parks).
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3440. Re: Custom Meter Faces?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: "Denis R. McKay" <vk2dmr@mpx.com.au>
Message-ID: <01bcd49b$7ec09160$26c71dcb@dialup.mpx.com.au>
Source record: 90201

David R. Smith <wa6ydi.telis@telis.org> wrote in article
<343A5B03.C10@telis.org>...
> Does any one know of a company that can make a custom face or re-scale
> one for panel meters?

Where's the old ham ingenuity(sic). Unscrew the face from it's backing plate (carefully!!!), remove the old lettering with an eraser (in OZ we call them rubbers :-))
Put on your own letter etc with Letraset or similar rub-on lettering and reassemble.

Save yourself some money!!! oy vay and och aye

Denis
VK2DMR

## 3441. Motorola house numbering of transistors (Syntor PA)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: jedc@key.net.au
Message-ID: <343cc0af.16571120@news.key.net.au>
Source record: 90202

Any one out there able to help me with info on PA transistors in a
Motorola UHF Syntor tx/rx ?
PA transistors are marked M1107 amd driver M1108

Any info on what they are equivalent to much appreciated

# 3442. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343ce5e3.154434753@news.atl.bellsouth.net>
Source record: 90203

On Wed, 08 Oct 1997 14:53:43 GMT, mud@rtrower.com (mud) wrote:

>In the second place, why try to decipher hand-morse as if it
>was machine language? You all seem to be trying to force it
>into the model of async data communications. Would it not
>be better to apply the technologies which have been
>developed for 'understanding' speech and handwriting?
>
>Those people have invested enormous resources into solving
>the very problems you're all talking about, i.e. variable
>spacing, variable levels, varying everything, etc., and
>their efforts have paid off quite well recently. There have
>been many advances in that field in the past few years.

This isn't a bad suggestion, but Morse doesn't have as much
redundancy as speech, so there isn't as much for the algorithms
to get their teeth into. The recursive trellis I suggested in another
note uses almost all of the available information in the signal, so
it is about as close as we can come to implementing the ideas
involved in the speech recognition systems.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3443. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <343dd763.786346@news.mindspring.com>
Source record: 90204
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Erv <kb8tnq@voyager.net> wrote:

>Hi Gang!
>
>Well, our elected officials are trying again! And this time, they are
>out to do some serious Damage to the Amateur Radio Hobby!!!
>
>Bill HR2369 is a vicious pack of poison, which, if passed, will end
>Amateur Radio as we know it....making the buying and selling of scanners
>and wide-banded ham gear ILLEGAL!
>
>For more information, visit the information page, which is located at:
>http://www.kb8uyz.com/kb8tnq/scan.htm Tell your friends about this and
>let them know we have included a link to find your
>representatives.....and email them. Let's stop this thing before it
>gets any farther!!!
>
>7-3,
>Erv KB8TNQ

As far as I know HAM radio is exempted.
I am in favor of any bill that blocks the monitoring of "private
conversations". HAM radio is not "private communications" ...
HAM radio is on the public airwaves and can be heard by anyone with a
radio that can tune the ham bands. Hams at my ham clubs are in favor
of this bill's idea (I have not seen the actual bill ... just heard it
talked about at our club meetings).

W4SCO

I am also a private pilot and communications on the aviation bands is
also not "private" so it should not be affected either.

# 3444. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343ce7ee.154957715@news.atl.bellsouth.net>
Source record: 90205

On Wed, 08 Oct 1997 12:26:49 -0500, Lyle Koehler <k0lr@emily.net> wrote:
>Am I missing something, or is this discussion about re-inventing
>"Coherent CW" (CCW)?
>
>People have been experimenting for many years with hardware and software
>schemes that take advantage of a precisely determined sending speed and
>transmitter frequency to "improve" reception of Morse code. Two software
>programs that do this are "PCW" by Ernst Schroeder, DJ7HS and "COHERENT"
>by Bill de Carle, VE2IQ. Both programs require an inexpensive
>"sigma-delta" interface board that performs the A-D conversion of the
>receiver's audio output. When the signal to noise ratio is really
>marginal, I find that I can still copy better by ear rather than with
>the help of the CCW software. Apparently others have reached this
>conclusion as well, and I think the current interest in CCW is very low.
>Bill de Carle no longer provides a CCW mode in recent versions of
>COHERENT. Instead, he has been concentrating on binary phase shift
>keying (BPSK) implementations which really *are* able to decode signals
>that are too weak to be detected by ear.

Yes, VE2IQ (and group) are getting very good results with BPSK on
3591. But don't write off CCW quite yet. What Bill's program did
was not quite the same thing as what Petit had in mind for CCW.
It had the external clocking reference, but it lacked the RF coherency
of Petit's scheme. The latter is what made that a really superior
technique. Most amateurs found it too hard to implement in practice,
however, so it has fallen by the wayside. (And dynamic path length
changes also doomed maintenance of RF coherency for HF skywave,
though it works well for LOS VHF and for Part 15 VLF groundwave.)

>Computer decoding of Morse signals is an interesting challenge and I
>expect that further improvements can be made. However, I'm kinda happy
>that there is still one thing I can do better than a computer, even if a
>lot of folks think it's obsolete.

Well, I think it would be neat to pull a Deep Blue and beat the human
wetware modem in its last bastion. It is unlikely to be a popular technique,
however, because if you're going to throw that much computer power at
a communications problem, you'll get much better results by changing to
a better code and modulation than OOK Morse. So there's no real utilitarian
reason to do it, but it is a fun challenge.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or

Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3445. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343ceaf4.155731914@news.atl.bellsouth.net>
Source record: 90206

On Wed, 08 Oct 1997 13:40:44 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Gary Coffman wrote:
>
>> All we *can* do is
>> assume everything is a dot, and do a matched filter for that before
>> slicing.
>
>Not true. We can simultaneously test for a dot and a dash and "choose".
>It's easy. Two bucket brigades and a comparator.

How are you going to do that? All a bucket brigade can do is delay the
modulated carrier. And splitting the signal power into two paths is going
to cost you 3 db. I'd think that would be the *last* thing you'd want in
a weak signal system.

>> Further, we are making an inference that there is no signal. It could have
>> faded. And we may detect a signal, but it can be interference rather than the
>> signal we are trying to copy. **WE CAN'T KNOW** at this point what it is.
>
>In the presence of fading, stuff happens. Stuff happens with any
>waveform. If we're smart we can do our best with the signal that is
>available. I never said it was a rose garden. With FSK we have selective
>fading. Sometimes the fading bandwidth is extremely narrow and
>Mark/Space gets into trouble. I have seen this in HF frequency fast hop.

Yep, it can be a problem if you use symbols with lengths similar to the
fade rate. That's why you don't do that.

>> With FSK (or other fully voiced modulation) we will know we have a fade
>> because we must always have energy in one of the channels, or we'll know
>> we have interference because we'll have signal in *both* channels at the
>> same time. There is no ambiguity.
>
>Sure. We all know that.

Yep, it gives us a decoding advantage.

>> achieve the same effective SNR with OOK that we can with FSK. This
>> ambiguity cost is separate from the 3 db more signal we have simply
>> due to the transmitter always being on. This ambiguity reduction gives
>> us a 3 db improvement in signal space, IE it is the ratio of allowed
>> versus disallowed vectors in signal space. This is why we have a total
>> of 6 db better margin with FSK over plain OOK (without considering
>> the advantage of being able to do full matched filtering on the FSK signal
>> before demodulation if we use a uniform code).

>
>Every reference that I have says 3 dB in AWGN. That other 3 dB sounds
>like smoke and mirrors to me. I think we have to avoid embellishing
>things here that seem to promote a particular point of view. The basic
>problem is to distinguish noise in one channel from signal plus noise in
>the other channel. In any particular short interval the noise measured
>in one channel can easily be equal to or greater than the signal plus
>noise in the other channel because of the statistics involved.

I refer you to Wilson, _Digital Modulation and Coding_ , for the derivation
of this signal space decoding gain. He devotes a full chapter to developing
the ideas which lead to this gain, but the decision matrix I posted gives the
basic idea clearly enough. There is no smoke or mirrors involved, just sound
information theory applied to FSK signaling.

>> some of which are better than FSK, IE BPSK).
>
>I am extremely leery about phase coherent methods at HF over a skywave
>path. Maintaining coherence over skywave is no piece of cake, by any
>means. Dixon mentions this most emphatically and I have been through
>this ordeal myself.

Yes, I agree. The path dynamics introduce a pseudo-doppler to the signal
which makes phase tracking a very difficult problem. It can be solved, but
it requires considerably more signal processing than for incoherent FSK.
VE2IQ successfully addresses it in Coherent (which uses BPSK), however.
The 3591 gang has to deal with the worst multipath environment on HF,
nighttime 80m short skip skywave. And he does it on an original PC-XT!!!

>> Both of these
>> latter items favor the uniform code.
>
>Yeah, yeah, OK.

And note that we pay no penalty for using a uniform code. We can
even use a uniform code with OOK modulation, though obviously
we do better with a fully voiced modulation such as FSK. Years
ago, we did RTTY by OOK. Most of us who have done RTTY
for many years can read some of it by ear, and it is at 60 WPM.
Slow it down, and it is no harder to read than Morse, and we can
use optimum filters for it. So if you want to keep OOK, you can
still do better with it if you don't use Morse as the encoding.

And experience from many years ago (arc transmitter days) shows
that operators have no trouble reading Morse sent via FSK modulation.
In fact, psycho-acoustic research done as a doctoral thesis recently at the
University of Lund shows that the human ear/brain is more sensitive to
pitch variations than to amplitude variations, so FSK Morse should be
easier to read in noise than OOK Morse. Thus if you want to keep
the Morse encoding, you'll still do better if you transmit it by FSK
modulation.

Either way, the worst combination is OOK modulation with Morse
encoding. The *only* real justification for dealing with that at all
is to accomodate the current large installed base of OOK Morse
trained operators who don't want to learn something even slightly
different.

>>> When the signal
>> >reappears go back to looking at the signal and find out if it is a dot
>> >or a dash.
>>
>> This doesn't accomplish anything.
>
>Sure it does. In noise it is a little bit more info to work with. We can
>learn how to exploit it. With OOK we can't afford to throw away anything
>that might be useful. I believe I can make optimal measurements of the
>"key up" intervals using the same kind of bucket brigades that are used
>for dot/dash recognition. We can then write software that will do the
>best possible job of choosing among the options a) what signal was sent
>and b) what is the time interval between signals. Nuclear event detector
>amplifiers look for both amplitude windows and time windows. The idea of
>the optimum threshold is important. This must be done "on the fly".

You cut a lot of context there. I'll let that pass. What you say above is
very true, we can't afford to throw any information about the signal
away, but your method isn't preserving the maximum information
about the signal, and it isn't using it in an optimum way. See my reply
to Paul for a better scheme.

>> > I am *not*
>> >going to use envelope detection.
>>
>> You must. You cannot extract timing information from the signal
>> until you demodulate it and recover the modulating waveform.
>
>This is definitely not true. Envelope detection is a bummer. Product
>detection followed by operations on the audio tone is definitely
>superior. Ref: Schwartz "Information Transmission, Modulation and Noise"
>3d edition, chapter 5. You can do all the "slicing" and "timing" you
>want with this signal. The DSP-filtered audio is a beautiful signal to
>work with if it is done properly. It's almost identical to coherent
>detection. Very close frequency correspondence is needed.

The "tone" is still an IF frequency. You can IF filter it all you like
(within the constraints of still passing the modulation sidebands),
but you haven't demodulated it until you slice it. Slicing *is*
envelope detection, and that's what recovers the modulating
waveform you need in order to recover the Morse timing sent
by the key at the other end. This is basic and fundamental.
Your "product detector" is just another IF mixer to this AM
modulated carrier. The signal isn't demodulated until you slice it.

Gary
Gary Coffman KE4ZV | You Make It | Email:

Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3446. Re: CB to 6m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: dickrb@lsid.hp.com
Message-ID: <61isjm$h07@hpcvsnz.cv.hp.com>
Source record: 90207

Greetings

It is rather easy to convert some of the CB gear to 6meters. I have converted the old Sears "Roadtalker-40" without having to buy any new parts. All that was required was to use the LO+IF mix term instead of the LO-IF product. Had to retune the RF related coils to '6' from '10' and it worked great (still does).

Get a schematic and dig-in to that old rig - have fun too.

73 de w7wkr - dick

# 3447. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <343CB6B0.47A3@atl.org>
Source record: 90208

Back when I studied a wee bit of signal processing, there was a
clear distinction between the information and the code. I read
'understand' as something like context analysis. IE, 'th' followed
by enough space for the character 'e' and a word space followed
by a word that 'makes sense' is very likely to be 'the'.
A somewhat simplistic example but that's about my speed.

I believe more modern coding takes things like this into account
as part of the code generation and so wouldn't benefit from post
processing for context. An extreme example would be a fractal
representation of a message. If any part of the polynomial is missing
the message can not be decoded. That is, it's all or nothing, up front.

Some of what morse sacrifices in efficiency as a code appears to be
retained in that there is more there to work with 'at the other end'

I'm not defending morse as the best code or anything here, just
curious as to how things look from an efficiency standpoint
when the contextual and timing clues one is stuck with in morse are
considered.

I'll leave the math to someone who has been practicing or might
possess some innate SP skills that I do not :-)

-bob

Gary Coffman wrote:
>
> On Wed, 08 Oct 1997 14:53:43 GMT, mud@rtrower.com (mud) wrote:
>
> >In the second place, why try to decipher hand-morse as if it
> >was machine language? You all seem to be trying to force it
> >into the model of async data communications. Would it not
> >be better to apply the technologies which have been
> >developed for 'understanding' speech and handwriting?
> >
> This isn't a bad suggestion, but Morse doesn't have as much
> redundancy as speech, so there isn't as much for the algorithms
> to get their teeth into. The recursive trellis I suggested in another
> note uses almost all of the available information in the signal, so
> it is about as close as we can come to implementing the ideas
> involved in the speech recognition systems.
>

# 3448. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <H+$+iwACxOP0EwSL@two-way.demon.co.uk>
Source record: 90209

Rod,
> I'm looking at generating a high current charger for a 48V battery bank
>> from a 12V source. This is for a QRO 50V FET HF mobile amplifier.
>> Two routes have come to mind, a 48V alternator or a DC to DC inverter.
>> Well AFAIK niether Leece Neville or Lestek produce alternators with this
>> output voltage so can anyone recommend another company?
>> Alternatively I'm after an inverter, either a circuit design or a
>> complete unit, I don't feel comfortable designing one of these switching
>> rascals.
>> I need an output of around 1KW at 50V.
>> Any ideas, suggestions or constructive comments greatly appreciated.
>>
>> Phil G4ZOW/M
>
>
>So what does anyone think of using a DC-DC converter section out of a
>mobile audio amp. I worked on a one for a friend and it put out about 3
>amps at +-50V. A blown up audio amp might be a great source of parts
>and boards.
>
>de Rod N1FNE
I was kind of looking for more than 3A, please read above.

Phil G4ZOW/M

# 3449. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343CFBC7.650C@crpl.cedar-rapids.lib.ia.us>
Source record: 90210

Gary Coffman wrote:
>
> As Mathew noted, we can't
> really match filter or correlate (they are conceptually the same
> thing) anything but the dot interval with any reliability.

Not true. The dash can also be determined. I keep hearing "dots only". It ain't so. I wish we would all break away from that idea. The dash is exactly 3 dots long and can easily be separated from a dot, and its on/off transitions can easily provide inputs into the clock synch process. For a Morse OOK system we cannot throw away *anything* that might be useful.

> Word space will present a
> problem for us if it is extended too long, but if we can assume
> that the operator is keeping the que full, it will suffice.

Word space must be an integral number of dots plus spaces. One other thing: the clock synchronization process can be "attenuated" or "weighted down" (but not completely turned off) during periods of uncertainty about the signal. In other words, only well defined on/off transitions are given top billing. As part of this process, the adaptive threshold level calculation is crucial.

> If we reach a dead end, IE an
> illegal decoding, before reaching the end of the trellis, we can prune
> the decision tree, backtrack, and try a path with a lower total metric
> until we reach the end of the trellis with a legal path. That will have
> the highest probability of being a correct decoding.

Before a dead end or a long pause, automatically send a termination sequence, like some other data guys do, if there is a break longer than say 10 dot + space lengths. A manual operator will also recognize this.

Also, take advantage of one of CW's greatest assets, full QSK break-in. Insert a capability for an automatic ACK process. QSK CW operators routinely use redundancy in this manner for error correction. The machine must, at the very least, duplicate everything that skilled operators do. The interrupting code can be a string of dots that the receiving machine can recognize, which is what operators often do.

Bill W0IYH

# 3450. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <343D1B2E.7E3D@ccm.intel.com>
Source record: 90211

William E. Sabin wrote:
> Time domain DSP filters (correlators) are used all the time
> to make timing decisions, and it is not envelope detection.

Hi Bill, If the envelope contains the modulation, then de-modulation
*is* envelope detection. Consider a correlator where the sample
rate/phase is synchronized to the peaks of the IF signal. That is
certainly envelop detection. Asynchronous sampling plus correlation
is just a mathematical manipulation of exactly the same concept.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3451. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343D0960.67BF@crpl.cedar-rapids.lib.ia.us>
Source record: 90212

Gary Coffman wrote:

> >Not true. We can simultaneously test for a dot and a dash and "choose".
> >It's easy. Two bucket brigades and a comparator.
>
> How are you going to do that? All a bucket brigade can do is delay the
> modulated carrier. And splitting the signal power into two paths is going
> to cost you 3 db. I'd think that would be the *last* thing you'd want in
> a weak signal system.

Two bucket brigades, operating *in parallel* will not degrade anything. The outputs of the two can be sampled simultaneously to make the decision "dot" or "dash". This is not the big deal that you keep insisting on.

I keep trying to see your viewpoints, and I would like to see some reciprocity. I'm not as wrong about almost everything as you try to make it appear. If this is just some kind of pissing contest, then I don't want to be bothered with it any more.

>
> You cut a lot of context there. I'll let that pass.

This stuff is growing exponentially and I'm not going to get into a quagmire about it. If it grows out of hand, I'm the one who is going to let stuff pass. You will do what you like.

> What you say above is
> very true, we can't afford to throw any information about the signal
> away, but your method isn't preserving the maximum information
> about the signal, and it isn't using it in an optimum way.

That's your opinion, it is not my opinion.

> The "tone" is still an IF frequency.

Wrong. It is the *final* signal and it is *not* the same as envelope detection. Time domain DSP filters (correlators) are used all the time to make timing decisions, and it is not envelope detection. I think you should hit the books on that topic. There is a time delay involved. So what?

Bill W0IYH

# 3452. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343d1089.165354926@news.atl.bellsouth.net>
Source record: 90213

On 9 Oct 1997 00:01:37 GMT, "Carl R. Stevenson" <wa6vse@fast.net> wrote:
>Jon Bloom <jbloom@arrl.org> wrote in article <343AB344.9419736C@arrl.org>...
>
>> Costas showed in 1957 (if memory serves) that spectrum use is maximized
>> by use of *wideband* signals (properly done, of course), and the math
>> hasn't changed since then.
>
>Er, I think this concept first came from Shannon in the 1940s ...

Shannon's work is the basis for so much of modern communications system design that it is tempting to say he thought of everything. But Jon is right, Costas was the first to specifically point out the time-bandwidth product of the entire system was the thing we must optimize to maximize aggregate spectrum usage efficiency.

That's one of the problems here, many of the advocates aren't concerned with their impact on others, only with their own operation. Thus the benefits of things like SS aren't readily apparent to them. But we *must* share, the FCC makes that very plain, so we have to look at the effect of our operation on aggregate spectrum usage efficiency, both in the time domain as well as the frequency domain.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3453. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: BLACKEAGLE <user@isp.net>
Message-ID: <61k4kp$doj$1@gte1.gte.net>
Source record: 90077
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

SCO wrote:
>
> Erv <kb8tnq@voyager.net> wrote:
>
> >Hi Gang!
> >
> >Well, our elected officials are trying again! And this time, they are
> >out to do some serious Damage to the Amateur Radio Hobby!!!
> >
> >Bill HR2369 is a vicious pack of poison, which, if passed, will end
> >Amateur Radio as we know it....making the buying and selling of scanners
> >and wide-banded ham gear ILLEGAL!
> >
> >For more information, visit the information page, which is located at:
> >http://www.kb8uyz.com/kb8tnq/scan.htm Tell your friends about this and
> >let them know we have included a link to find your
> >representatives.....and email them. Let's stop this thing before it
> >gets any farther!!!
> >
> >7-3,
> >Erv KB8TNQ
>
> As far as I know HAM radio is exempted.
> I am in favor of any bill that blocks the monitoring of "private
> conversations". HAM radio is not "private communications" ...
> HAM radio is on the public airwaves and can be heard by anyone with a
> radio that can tune the ham bands. Hams at my ham clubs are in favor
> of this bill's idea (I have not seen the actual bill ... just heard it
> talked about at our club meetings).
>
> W4SCO
>
> I am also a private pilot and communications on the aviation bands is
> also not "private" so it should not be affected either.

A cellular "phone" is a RADIO. It's frequencies are no different than
the ham bands or the aviation bands. It's interface is very similar to
a telephone, but it's a RADIO. More to the point, I hope you don't
really think this bill is about protecting cell phone users. If you do,
then you won't mind giving up your ham radio or your pilot's license
when they are considered to violate someone elses civil rights. After
all, you can spy on me in my back yard with that Cessna, and you can

plan the demise of our government with your ham buddies. You say that ham radio is on the private airwaves. How do you think a cellular phone works?

# 3454. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <343edc65.61176186@news.sci.fi>
Source record: 90078

ke4zv@bellsouth.net (Gary Coffman) wrote:

>On Wed, 08 Oct 1997 13:40:44 -0500, "William E. Sabin"
><sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>>Gary Coffman wrote:
>>
>>> All we *can* do is
>>> assume everything is a dot, and do a matched filter for that before
>>> slicing.
>>
>>Not true. We can simultaneously test for a dot and a dash and "choose".
>>It's easy. Two bucket brigades and a comparator.
>
>How are you going to do that? All a bucket brigade can do is delay the
>modulated carrier.

Unless you have a reliable phase lock with the incoming (audio-IF)
carrier and use it to clock the bucket brigade, I see no point of
feeding the IF signal into the bucket brigade. However, if you take
the absolute value of the signal (full wave rectification without
filtering) and feed it to the matched filter would make more sense.
(There might even be some advantage of squaring the input signal, e.g.
for determining the SNR and feeding a signal proportional to the
instantaneous _power_ into the matched filter. Absolute value and
squaring can be generated in a single 4 quadrant multiplier feeding
both inputs with the IF signal). Feeding unipolar signals into the
matched filter requires that negative coefficients has to be used to
match the space. To detect a dot, which is space, mark, space, the
coefficients -1, +1, -1 will be needed. A dash is space, mark, mark,
mark, space and thus coefficients -1, +1, +1, +1, -1 would have to be
used.

>And splitting the signal power into two paths is going
>to cost you 3 db. I'd think that would be the *last* thing you'd want in
>a weak signal system.

While splitting the antenna terminal signal power into two paths in
equipment limited environments will degrade the SNR by 3 dB, I do not
see how this is relevant in this case, when we typically have several
stages of amplification (that determine the noise figure) ahead of the
splitter.

Paul OH3LWR

## 3455. Bran New Cheerleader Pictures

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: 933432@drifters.com
Message-ID: <61ktr1$q6j$49@PaperBoy.livenet.net>
Source record: 90079

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100+ pics of Racquel Darrian - *WOW*
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80+ pics of Paulina Poriskova, sexy supermodel!
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50+ pics of TRACI LORDS, yes! ***6 Celeb CDs in One!***
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50+ pics of Salma Hayek, sexy latina actress! ORDER NOW!
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* CD is BBS ready, with descriptions of files! And its Mac readable!
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* Directories are arranged in NUDE/NON NUDE format for easy use!
* Graphics viewing software for Windows/DOS/Win95
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* It's truly BBS-ready with detailed descriptions of all files!

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If you have any further questions feel free to email us!

(*) Wholesale/Dealer/Bulk information/prices available upon request.

ME#3 ..'~ Midnight Escape ~'..

# 3456. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343E09B7.7330@crpl.cedar-rapids.lib.ia.us>
Source record: 90080

Marijan Miletic wrote:
>
> Gary, KE4ZV keeps emphasizing asynchronous nature of Morse code as a great dis-
> advantage in machine decoding. This is absolutely not a case in machine gene-
> rated code which has a master clock and all the elements are generated from it
> in 1:3:5 fashion. Once we estimate basic dot length and detect decent signal
> above the noise, we can start synhronous detection by accurately estimating
> following element. If it happends to be signal again, we KNOW that we hit dash
> and the next element MUST be signal again. If we detect pause (noise) than
> there are 2 choices following it: signal or pause. If signal comes we detected
> intersymbol pause and we go back to signal flowchart. If pause follows pause
> than we KNOW again that we MUST have at least one more pause for character of
> more than that (5 or 7) for word. This simple state machine helps a lot...
> Even with hand sent Morse, slight variations occur only in long pauses which
> do not affect character decoding much. We usually end up with few extra spaces
>
> For a few DX-ers which expressed doubts about the abilities of machines to do
> Morse decoding in pile-ups, let me tell you that PC & DSP achieved 80% score
> on simulated 5 min. tape while I did about 60% after winning EU championship
> twice and being #6 in Dayton 1995 (#1 EU with G3SXW). On the air test in ARRL
> DX contest with about 200 CW QSO exceeded all my expectations once PC worked
> Kansas on 80m which I could barely detect in QRM. One becomes very humble
> after such an expierence just like world chess champ after being beaten by
> computer recently. I have seen the future and I stoped my research...

Thanks for this very interesting and useful input. I agree that it can
be done once the techniques are worked out.

Bill W0IYH

# 3457. Re: Soundblaster and CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <343E0A2B.7411@erols.com>
Source record: 90081

H. Caron wrote:
> 
> Don Ward <don@kay-dee.demon.co.uk> wrote:
> 
> >My morse tutor program uses the internal PC speaker. I would like to use
> >the Soundblaster card but I have no interface details. How is the card
> >detected and how can I generate a simple sine wave. Anyone help?
> >--
> >Don Ward G0MDO
> 
> Hi Don
> 
> Try to find Super Morse dos program on Shareware.com. Using CW or
> MORSE for search keyword should get you there.
> 
> It is nice an all in one program you can use for learning and building
> your cw skill. Uses pc spker or sndboard.
> 
> Beside, excellent documentation and help files describe a simple Rx
> interface (1- 747 op-amp) btwn receiver and pc com port, to decode
> live incoming signal (can also be bought), as well as an interface to
> a Tx that can use a keyboard or a bug at will.
> 
> Still rated as one of the best of its trade by many readers in this an
> other groups.
> 
> Hope it helps,
> 
> H.C.

Soundblaster cards have a PC speaker input connector. Disconnect the PC speaker and connect a jumper cable between the speaker connector on the mother board and the speaker connector on the Soundblaster card. Now all PC speaker beeps, etc come through the Soundblaster card and speakers.

## 3458. Listening to Cell phone on a scanner.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: "Peter D. Richeson" <peter.d.richeson@boeing.com>
Message-ID: <343E16C0.154F@boeing.com>
Source record: 90082
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

First, yes I know it is illegal to do it ( and I don't).
Second, I know there is probably a better group but I can't find it on the list I have.

But, at our ham meeting last night we got to talking about the scanner bill that is in congress and to subject came up.

Now here is the question: Is it possable to hear both sides of a cell phone conversation on a single freq. I say no. Cell phones are full duplex, one freq. goes from the radio to the tower and the other frome the tower to the radio. Two of the people there said that in %90 of the time they can here both sides of the conversation. What is going on.

Thanks
Peter/KA5COI

# 3459. Re: I need 48V from a 12V source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <JPUteGAsyfP0EwhI@two-way.demon.co.uk>
Source record: 90083

Hi Garth,
>> >> I need an output of around 1KW at 50V.
>
><cut>
>
>We have discussed the possibility of using a modified car/truck alternator
>and I believe you will easily achieve your goal of 20-30 amps (1KW @ 50V)
>as most of these are rated standard at 60-80 amps. I suggested looking for
>a 24V unit to modify (common in small trucks round here) for the simple
>reason that they will be better suited for the higher voltages than an
>overdriven 12V type. Our relative costs for a good S/H unit is about the
>same as a new car battery.
>
>Another option you did not comment on was a commercial inverter feeding a
>regular power supply. To realise 1KW from a 12V source with typical
>inefficiencies the draw is probably nearer 100-120 Amps. A friend has just
>equipped a bus with 2x 5KW inverters which power his mobile computer system
>in connection with his business. It was not a cheap exercise. I believe he
>has a small diesel generator fitted underneath the bus to maintain the
>second set of batteries.
>
>Yet another option could be the purchase of one of the small Honda type
>petrol driven portable generators if you do not need to be mobile when
>operating. These come in all sorts of standard sizes suitable for you
>needs. They are common in the bush out here where regular power is not
>available.
I wanted to try and stay clear of generators due to the noise.
I like the inverter route but have been unable to find a high wattage dc
to dc inverter at my required power level.
The 24v alternator is something to consider, thanks.
Part of my challenge is wanting to actually stay mobile, I have several
other QRO mobile friends but several of them are limited to stationary
operation, like we're talking 19 foot high antennas:-)

Thanks again for your feedback.

(((73)))

Phil G4ZOW/M

# 3460. Heath SA-2040 2kW tuner $225

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcd63d$c1a81ae0$75ddd8cc@km3g.cts.com>
Source record: 90084
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Easily handles 1500 watts. 4500 volt air variables. Large roller inductor. 4:1 balun. Works with coax, open wire, long wire, etc.. Built like a battleship.

$225.00 shipped CONUS.

Lane
Kilo Mexico Three Germany
San Diego

# 3461. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: raypfaff@erols.com
Message-ID: <343e46b2.3046140@news.erols.com>
Source record: 90085
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

sco@sco-inc.com (SCO) wrote:

>Erv <kb8tnq@voyager.net> wrote:
>
>>Hi Gang!
>>
>>Well, our elected officials are trying again! And this time, they are
>>out to do some serious Damage to the Amateur Radio Hobby!!!
>>
>>Bill HR2369 is a vicious pack of poison, which, if passed, will end
>>Amateur Radio as we know it....making the buying and selling of scanners
>>and wide-banded ham gear ILLEGAL!
>>
>
>As far as I know HAM radio is exempted.
>I am in favor of any bill that blocks the monitoring of "private
>conversations". HAM radio is not "private communications" ...
>HAM radio is on the public airwaves and can be heard by anyone with a
>radio that can tune the ham bands. Hams at my ham clubs are in favor
>of this bill's idea (I have not seen the actual bill ... just heard it
>talked about at our club meetings).
>
>W4SCO
>
>I am also a private pilot and communications on the aviation bands is
>also not "private" so it should not be affected either.
I suggest that you read the bill and not make judgements without
reading it. I should preface this with the fact that HR2369 is being
"reworked" as the author admits that it was "flawed", but the bill
would have changed the 1934 Commuications Act to read "intercept and
divulge" to "intercept or divulge". It would be illegal to listen to
anything as a third party that was not exempted. The exemptions are
public radio and TV, ham, CB, and unencrypted TVRO. As such,
listening to the aviation bands would indeed be illegal.
*I* am in favor of the cellular telephone industry either going
digital encrypted or informing people that they are,in effect, talking
on a radio and their conversations are capable of being intercepted.

# 3462. Re: Foxhole Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <343E3F7A.47BA@erols.com>
Source record: 90086

JohnsonHE wrote:
>
>< snip ><
> GOD! I didn't realize I was getting that old. Maybe I'm the only guy on the
> thread that's actually built one of the things. Many actually! You take an old
> razor blade, rusty is better, and screw it down to a piece of board with a
> screw under which you capture a piece of wire. You take 1 large safety pin,
> cut the "head" off it, and stick the cut off end in the board capturing
> another piece of wire. You cut a piece of tinfoil from a pack of cigarettes
> into strips and stack them to make a capacitor.
> You move the safety pin so that the sharp point is in contact with the razor
> blade, preferably somewhere along the sharpened edge where the surface has
> been abraded, and attach earphones to one of the wires to ground with the
> "capacitor" in parallel with them. If you don't smoke, you can substitute a
> .001 with some degradation in authenticity. Hook as much wire as you can get
> hold of for an antenna to the other terminal.
>
> Finding a "sensitive" place on the razor blade is tricky, but there are lots of
> them, so keep trying. If you're anywhere close to a BC station, you'll hear
> it. Whole thing is called a "point contact" diode and is what made the first
> semi-conductors.
>
> W4ZCB

= = = = = = =

There is also a variation that used a sharpened pencil
lead (graphite?) instead of the safety pin to contact the
razor blade. Another method had a sewing needle balanced
on two pieces of carbon.

Kinda makes you wonder about all this new gadgetry!

;^} dave K7HMP / 3W8PE1B

# 3463. Re: Antenna for Attic????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <343E3E39.599B@erols.com>
Source record: 90087
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec,radio.shortwave,rec,radio.scanner

John,

Depending on how concerned you might be to any
directional nature of the antenna, you might
consider a multiple dipole arrangement. I've
done this for the Ham Bands at 40, 20, 15 & 10 Meters,
and it worked well.

Run coax to center of roof reak beam on longest axis
of roof (assume that is the 70' measurement). Depending
on which side of the argument you subscribe to, you
may want to use a balun. The same goes for the utility
of using a tuner at the receiver end.

Cut dipoles for each "World Band" you wish to receive and
connect to the center insulator/balun.

Dipoles should end up as either straight dipoles or
inverted "V" antennas. One can run the length of the
roof beam, two to opposing corners (e.g., NW-SE and NE-SW),
one could run perpendicular to the center roof beam, and
the others can be installed to provide a broad
Fan Dipole type arrangement.

This will give you a pretty broad banded antenna, with some
directional impact, and still have some benefits from the
individual elements being cut to length.

The coax run might avoid some noise pick up in the house.

FYI - Some insulation is foil backed and may cause some
shielding problems if installed on the roof portion, rather
than on the attic floor.

Have Fun! Dave K7HMP

John wrote:
>
> I am interested in putting a wire antenna in attic for listening only on
> the "world bands". My usable space in attic is approx 25 ft wide by 70ft
> long. Can anybody help me out with some ideas??? I will be getting a
> Radio Shack DX-394 soon and want to be ready.

# 3464. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343e1eff.234602652@news.atl.bellsouth.net>
Source record: 90088

On Thu, 09 Oct 1997 11:49:20 +0100, BOB DUCKWORTH <bob@atl.org> wrote:

>Back when I studied a wee bit of signal processing, there was a
>clear distinction between the information and the code. I read
>'understand' as something like context analysis. IE, 'th' followed
>by enough space for the character 'e' and a word space followed
>by a word that 'makes sense' is very likely to be 'the'.
>A somewhat simplistic example but that's about my speed.

Bob, there is information on several different levels here. The
first level of information is information about the signal being
received. In a coherent system this includes amplitude and phase
information about the carrier, and in any system it includes
information about the amplitude and phase of the modulation
envelope.

The next level of information is information about the elements
making up the code symbols, IE in the case of Morse, the dot,
the dash, the intracharacter space, the intercharacter space, and
the word space timing edges. From this information, we can then
build up the symbols for the alphanumerics being received.

And finally, at the top level is the information contained in the
message itself. This information is not dependent on the modulation
or coding being used. For our amateur uses, this information is
usually English text. So contextual decoding has nothing to do
with the underlying modulation or coding system being used.
It is solely dependent on our knowledge of English spelling and
grammar, and dependent on our knowledge of the usual content
of amateur QSOs.

>I believe more modern coding takes things like this into account
>as part of the code generation and so wouldn't benefit from post
>processing for context. An extreme example would be a fractal
>representation of a message. If any part of the polynomial is missing
>the message can not be decoded. That is, it's all or nothing, up front.

Modern codes generally contain redundancy in the form of uniform
code lengths and forward error correction bits to enable you to detect
and correct transmission errors. If the channel errors are so great that
they overwhelm the FEC, you still aren't left with nothing. You still get
the corrupted message, and you know *where* it is corrupt. There may
be enough fragments of valid text in the message that you can apply
contextual clues to make an informed guess about what the message
was supposed to say. You have no guarantee that your guess will be
correct, of course.

>Some of what morse sacrifices in efficiency as a code appears to be
>retained in that there is more there to work with 'at the other end'

No, Morse has *less* redundancy than many other codes. That's
partially inherent in the nature of the variable length coding used.
The codes are variable length because redundancy has been *removed*
in order to shorten the code. This *reduces* the information being
transmitted in the first two senses listed above. So it reduces the
probability of being able to do a correct decoding.

In another sense however, there is more information per code bit in
Morse, because of the lack of redundancies which would have been
useful for error correction. This is the information in the Shannon
sense, IE the novel message content. Because this information is
relatively "naked", it is much more vulnerable to channel errors
and decoding errors than if it were transmitted by a code with
more redundancy.

>I'm not defending morse as the best code or anything here, just
>curious as to how things look from an efficiency standpoint
>when the contextual and timing clues one is stuck with in morse are
>considered.

With Morse, you only have two clues you can use for error detection
and correction. If you receive an illegal code element sequence, you
know you have an error. And if the novel message content makes
no contextual sense, you can also expect that there has been an
error. There aren't that many illegal code sequences in Morse,
however, because of the lack of redundancy due to it being a variable
length code, so you can easily have an error which changes a code
sequence from one legal sequence to another, thus this isn't a very
reliable error detection mechanism.

Contextual guesses based on content form your other defense against
errors, but so many amateurs can't spell, and don't use good grammar,
that this isn't a reliable mechanism either. The one saving grace is that
amateurs typically do "cookie cutter" contacts, so there really isn't
very much novel content in the message. Most of it is so pro forma
that you can easily regenerate it, even if you actually copied virtually
nothing from the signal.

Example, most Dx contacts only have one novel bit of information,
the call sign of the station calling the Dx station. Everything else is
known a priori, IE the RST is always 599, the Dx station's call was
extracted from the PacketCluster, etc. So all you have to do is get your
call sign repeated back by the Dx station and you're done. (And if you
are working list operation, even that is known a priori as well, so there
is *no* novel content, IE no information in the Shannon sense, being
exchanged at all. If you detect any sort of signal at all, even if it decodes
to gibberish, you still log the contact because you *know* he was
sending your call sign from the list because the listmaster said it
was your turn.)

Gary
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# 3465. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343e2e5d.238537443@news.atl.bellsouth.net>
Source record: 90089

On Thu, 09 Oct 1997 11:42:08 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Gary Coffman wrote:
>
>> >Not true. We can simultaneously test for a dot and a dash and "choose".
>> >It's easy. Two bucket brigades and a comparator.
>>
>> How are you going to do that? All a bucket brigade can do is delay the
>> modulated carrier. And splitting the signal power into two paths is going
>> to cost you 3 db. I'd think that would be the *last* thing you'd want in
>> a weak signal system.
>
>Two bucket brigades, operating *in parallel* will not degrade anything.
>The outputs of the two can be sampled simultaneously to make the
>decision "dot" or "dash". This is not the big deal that you keep
>insisting on.

You have very little signal power available, and it is buried in noise.
If you split that power into two paths, each path has 3 db less signal
power to work with than a single channel would. Now the receiver
bandwidth prior to the split has to be broad enough to pass the
widest modulation sidebands, and since you can't do matched filtering
of the (not known a priori) modulation before the split, there will be
excess noise power available at the point where you do the split.

Noise power comes from two sources, external noise, IE atmospheric
noise, and internal noise. The atmospheric noise splits into the two
channels equally, but internal noise in each channel adds to that. So
you degrade SNR, probably not by a full 3 db in the dot channel on
HF, but certainly by more than 3 db in the dash channel (which will
have excess noise compared to dash signal). If you were operating at
VHF+, it would be by almost a full 3 db in the dot channel too since
internal noise dominates, and analog bucket brigade devices are pretty
noisy, both in a thermal sense and also due to corruption by clocking
artifacts. The latter is often the killer with weak signals.

>I keep trying to see your viewpoints, and I would like to see some
>reciprocity. I'm not as wrong about almost everything as you try to make
>it appear. If this is just some kind of pissing contest, then I don't
>want to be bothered with it any more.

What Jon and Paul and Mathew (and even Carl) and I are telling you
is not some fairy tale. The demodulation problem and the decoding
problem are well understood today. There are many books available
which explain how various techniques affect the enthropy of the

system for various modulation forms and codings. Two in particular
I would suggest are "Modern Signals and Systems" by Kwakernaak
and Sivan, and "Digital Communications Techniques, Signal Design
and Detection" by Simon, Hinedi, and Lindsey. I'd also recomend
Wilson's "Digital Modulation and Coding" to you as the most readable
text I've found on the information theory underlying the signal design
and decoding problems we're attempting to address, and the locally
optimum techniques for solving them.

As you have acknowledged, there are penalties to be paid for using
OOK AM modulation, and for using Morse encoding, so there is no
longer any reason to fight with you. But accepting that, there are still
locally optimum ways to demodulate and decode signals using them.
You aren't doing that. In fact you seem to have a conceptual difficulty
with the idea that you must envelope detect the OOK modulation before
you can start to decode the coding it carries. At this point, most of us
are really trying to help you rather than just pick fights with you. If
it seems like we're fighting you, it is only because we are trying to
show you where you are going astray.

>> You cut a lot of context there. I'll let that pass.
>
>This stuff is growing exponentially and I'm not going to get into a
>quagmire about it. If it grows out of hand, I'm the one who is going to
>let stuff pass. You will do what you like.
>
>> What you say above is
>> very true, we can't afford to throw any information about the signal
>> away, but your method isn't preserving the maximum information
>> about the signal, and it isn't using it in an optimum way.
>
>That's your opinion, it is not my opinion.

Fine. But you are going to be the one lost in a quagmire if you don't
listen. Your approach is fundamentally muddled on a very basic level.
If we can clear up that muddle, you'll find you'll be able to do a much
better job of developing locally optimum ways of demodulating and
decoding OOK Morse signals buried in noise. You profess that to be
your purpose, so let us help you do it.

>> The "tone" is still an IF frequency.
>
>Wrong. It is the *final* signal and it is *not* the same as envelope
>detection. Time domain DSP filters (correlators) are used all the time
>to make timing decisions, and it is not envelope detection. I think you
>should hit the books on that topic. There is a time delay involved. So
>what?

Bill, a correlator used to extract timing edges *is exactly equivalent to* a
matched filter and envelope detector. Mathematically they are the same
thing, just implemented in different ways. The same principles apply, as
do the same limits. This is clearly explained in the books I mentioned.

You *are* envelope detecting whether you believe it or not. That's the only way to demodulate a DSBWC AM signal (short of synchronous demodulation). That would be better, but would require extracting a coherent carrier reference, and that would be difficult with an arbitrary OOK Morse signal because you'd have to find a way to maintain a tight coherent phase lock to the carrier during the <arbitrarily long> word space intervals over a skywave path.

That's a can of worms *I* wouldn't want to touch. Of course if you were to use a common external reference for carrier phase, as Petit attempted in his original CCW approach, you could do synchronous demodulation and pick up (almost) 3 db against the incoherent noise floor (compared to envelope detection) if you could deal with the dynamic path length changes in the ionosphere. But that means every contact would have to be prearranged, and I don't think that's what you have in mind.

Gary

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# 3466. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343e4672.244703434@news.atl.bellsouth.net>
Source record: 90090

On Thu, 09 Oct 1997 10:21:24 -0700, Cecil Moore <Cecil_A_Moore@ccm.intel.com>
wrote:
>Gary Coffman wrote:
>> The *only* real justification for dealing with that at all
>> is to accomodate the current large installed base of OOK Morse
>> trained operators who don't want to learn something even slightly
>> different.
>
>Hi Gary, it's a lot like our keyboard layout which was originally
>designed to slow typists down so the mechanical keys wouldn't jam.
>Whatever happened to the superior Dvorak keyboard layout?
>--
>73, Cecil, W6RCA, OOTC (not speaking for my employer)

IBM used to offer the Selectric with a Dvorak keyboard. The
problem was that you had to learn both systems if you also used
other people's typewriters. So it never caught on. But with
computers, it is a snap. There are Dvorak programs you
can use to rearrange the keys of a QWERTY keyboard (the
program alters the scan code to ASCII lookup table in the
computer). If you have that on your personal diskette along
with your other favorite tools (text editor, hex editor, etc),
you can make any computer work just like the one you
have at home.

Once you learn it, typing is markedly faster, and there is less
risk of injury (carpal tunnel syndrome) when using the Dvorak
layout too. (Actually, I use a *modified* Dvorak layout that
is somewhat better optimized for computer input.)

I am *very* picky about keyboard feel. I've thought about
burning a custom keyboard controller to generate the revised
scan codes directly for my favorite keyboard, so I can just
plug it into any computer and have both my favored layout
and my favored keyboard feel everywhere I go. But I haven't
done it yet. That may be taking customization a bit too far.

Gary
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# 3467. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <343e59a1.1973495@news.mindspring.com>
Source record: 90091
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

NHCPL@COUPLE.COM (nhcpl) wrote:

>If you would just sit back and think for 2 minutes - you will see that
>Americans are loosing thier rights "ONE-BY-ONE"....This is just one
>more piece.
>
>Just think about it.
>
>(and the only reason this came about is that ole' NEWT got burnt)
>
And the way Newt got burned is by a couple listening (against the law) in their car ... then making a tape (against the law) ... then sending that tape to a democrat congressman (against the law) ... who then committed a federal crime by playing that tape to the public. But because he played the tape on the floor of the House he is protected from prosecution.

I wonder ... has that couple been prosecuted under the federal statues yet? They certainly should be to the maximum extent of the law to set an example for others!!!!

# 3468. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343e4414.244097230@news.atl.bellsouth.net>
Source record: 90092

On Thu, 09 Oct 1997 10:58:06 -0700, Cecil Moore <Cecil_A_Moore@ccm.intel.com>
wrote:
>William E. Sabin wrote:
>> Time domain DSP filters (correlators) are used all the time
>> to make timing decisions, and it is not envelope detection.
>
>Hi Bill, If the envelope contains the modulation, then de-modulation
>*is* envelope detection. Consider a correlator where the sample
>rate/phase is synchronized to the peaks of the IF signal. That is
>certainly envelop detection. Asynchronous sampling plus correlation
>is just a mathematical manipulation of exactly the same concept.
>--
>73, Cecil, W6RCA, OOTC (not speaking for my employer)

Absolutely correct, Cecil. That seems to be the prime cause of
difficulty, IE getting Bill to see that he has to recover the modulation
before he can decode it. He's trying to do both things at once, and
that leaves him with suboptimal solutions to both problems.

Gary
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# 3469. Re: Tuning with large cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <61lq16$dfe@hpcvsnz.cv.hp.com>
Source record: 90093

Tim (Hynde@flash.net) wrote:
: Most plans I see for air variable caps in a VFO are somewhere in the 15
: or 20pf range
: would using a 365pf variable then putting a 10pf +/- in series give
: basically the same results or am I missing something?

Well, I think you are missing something, unless you want a really wierd tuning curve. Think about the total capacitance, versus rotation of the 365pF variable. When it's at 365pF, the net (w/10pF series) is 9.7333pF. When it's at 365/2 pF, the net is 9.4805pF. When it's at 365/4 pF, the net is 9.0123pF. When it's all the way open, it's probably still more than 10pF...if it was 10pF, the net would be 5.000 pF. So, most of the change comes in a tiny part of the range.

You can actually make it more linear tuning by paralleling it with something like 500pF and putting, say, 20pF in series with that... Suggest you get out your favorite spreadsheet and make a column of % rotation, variable capacitance, net capacitance, and resonant frequency. You can then plot frequency versus % rotation and see how (non)linear it is. Spreadsheets are quite handy for this sort of thing.

--
Cheers,
Tom
tomb@lsid.hp.com

# 3470. FS ARRL handbooks for radio amateur $14.5

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: frankf1056@aol.com
Message-ID: <19971010184700.OAA27948@ladder02.news.aol.com>
Source record: 90094

```
ARRL handbooks for radio amateurs 1995 edition brand new in shrinkwrap. $14.50
including shipping
frank kb0zfn
send for address
```

# 3471. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343E0E2B.302E@crpl.cedar-rapids.lib.ia.us>
Source record: 90095

Paul Kein&#65533;nen wrote:

> >>Not true. We can simultaneously test for a dot and a dash and "choose".
> >>It's easy. Two bucket brigades and a comparator.
> >
> >How are you going to do that? All a bucket brigade can do is delay the
> >modulated carrier.
>
> Unless you have a reliable phase lock with the incoming (audio-IF)
> carrier and use it to clock the bucket brigade, I see no point of
> feeding the IF signal into the bucket brigade. However, if you take
> the absolute value of the signal (full wave rectification without
> filtering) and feed it to the matched filter would make more sense.
> (There might even be some advantage of squaring the input signal, e.g.
> for determining the SNR and feeding a signal proportional to the
> instantaneous _power_ into the matched filter. Absolute value and
> squaring can be generated in a single 4 quadrant multiplier feeding
> both inputs with the IF signal). Feeding unipolar signals into the
> matched filter requires that negative coefficients has to be used to
> match the space. To detect a dot, which is space, mark, space, the
> coefficients -1, +1, -1 will be needed. A dash is space, mark, mark,
> mark, space and thus coefficients -1, +1, +1, +1, -1 would have to be
> used.

The dot filter consists of a bucket brigade with tap weights of +1-1+1-1
etc, say 10 taps per dot. A feedback loop (early/late detector) will
synchronize this bucket brigade with the incoming signal, just as in a
spread spectrum system. The dash filter has 30 taps and performs the
same function.

>
>
> >And splitting the signal power into two paths is going
> >to cost you 3 db. I'd think that would be the *last* thing you'd want in
> >a weak signal system.

It is not necessary to split the signal power. This possibility is being
ignored for some reason.

>
> While splitting the antenna terminal signal power into two paths in
> equipment limited environments will degrade the SNR by 3 dB, I do not
> see how this is relevant in this case, when we typically have several
> stages of amplification (that determine the noise figure) ahead of the
> splitter.

Again, I am sure that this "splitting" doesn't make any sense. It does not have to be done.

Thanks for these inputs.

Bill W0IYH

# 3472. How active is 2m SSB in UK?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <61ltcv$8es_001@leeds.ac.uk>
Source record: 90096

Hello everyone, I'm the one still working on the blasted tranverter (10m to 2m), there seems to be a dearth of 2m signals here in Leeds, UK. Can anyone confirm this? What is the best time to try 2m? I have only heard a couple of amateurs through my transverter, (thru' loss ca. 0-3dB) and never more than one per evening (not even digital or morse!). The antenna is a dipole on the ceiling of my basement flat (yes, I know, not optimal). TIA for any info on 2m

73 de Laurens M1CCO

# 3473. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343e7b6d.258268535@news.atl.bellsouth.net>
Source record: 90097

On Tue, 07 Oct 1997 18:55:42 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Jon Bloom wrote:
>>
>> William E. Sabin wrote:
>
>snip, snip.
>
>I have just finished a session of replying to these comments, and I find
>that I am just repeating everything over and over, like a tape machine.

That's what happens when you don't *listen* to what people are telling
you.

>It just isn't worth it any more. If you want to put direct sequence or
>frequency hop or PSK on the low end of the 20 meter band because it is
>more "efficient", go ahead.

Thanks. FCC willing, we will.

>I want nothing more to do with this. All I hear is that the higher
>efficiency of wider bandwidth is all that matters.

Like I said, you aren't listening. Wider bandwidth systems can
be more efficient in some cases, but we can do more efficient
*narrower* bandwidth systems too. At comparable information
rates, we can fit MSK systems in a narrower bandwidth than
you can a DSB AM (OOK) system. And we can operate them
at a lower noise margin too.

>All that matters is
>the revolution in communications that imitates what the military and
>commercial people are doing. Whether it makes any sense for Amateur
>Radio or not is immaterial. So be it, then.

Better techniques almost always make sense. That's why we aren't
all still using rotary spark gaps and coherers. At one time, amateurs
pioneered early deployment of better techniques (amateurs didn't
invent everything, but they were quick to exploit new techniques,
and often to make improvements to them). The military and
commerical worlds *lagged* amateur radio, and "borrowed"
(sometimes whole cloth) the best of amateur techniques at the
start of WWII. Even as recently as Desert Storm, the military was
forced into the open market to buy amateur data controllers to
supply them with tactical data communications. But that is no
longer the case. Amateurs now lag behind the commerical and

military worlds in virtually every area. That's arguably not good, not good at all, for the future of amateur radio.

Note very very carefully that I am *not* saying that amateur stations should become small copies of a military comm center, or that every amateur station should have the capabilities of a NASA DSN site. But we can all benefit from some of the techniques they use, and from some of the techniques which have found their way into consumer electronics. When I got started in amateur radio 34 years ago, I never dreamed that cheap consumer electronics would become more powerful and sophisticated than the equipment amateur radio operators would field. But that's happened. We've virtually stood still while they have rushed past us.

Gary
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Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3474. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <343E5168.47BE@ccm.intel.com>
Source record: 90098

Marijan Miletic wrote:
>
> Gary, KE4ZV keeps emphasizing asynchronous nature of Morse code as a great dis-
> advantage in machine decoding. This is absolutely not a case in machine gene-
> rated code which has a master clock and all the elements are generated from it
> in 1:3:5 fashion.

Hi Marijan, what you say is true but not very useful. If you must have a machine
on both ends then it is logical to improve the coding technique to FSK/PSK/MSK
using a fixed "word" length with framing/redundancy bits and FEC.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3475. Need QTH of Potter and Brumfield Relay Co.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: z0223 <bmyers@mailhost.primenet.com>
Message-ID: <01bcd5e3$61b251a0$b014a5ce@primenet.primenet.com>
Source record: 90099

Hi folks,

Anyone have the address, phone number or perhaps email address for Potter
and Brumfield, the relay manufacturer?

Please reply directly to: bmyers@primenet.com

Thank you.

73 Bob, W1XT

## 3476. Ceramic Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: Watts <watts@rgv.net>
Message-ID: <343E5E47.5A2A@rgv.net>
Source record: 90100
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.ham-radio.swap

I have moved enough times over the years and my junk box has gradually shrunk as result of these many moves, to a point where I have no good junk anymore. I am building a tuner and in need of a 3 pole double throw switch of the ceramic type (this is a 2 KW tuner). If you have one please let me know the price. Even junk has a value!

Gary K5XZ watts@rgv.net

# 3477. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <343E61F3.5BE3@crpl.cedar-rapids.lib.ia.us>
Source record: 90101

Gary Coffman wrote:

>
>
snip everything.
>
> etc.

Never in my life have I ever observed anyone so capable of inventing so much impressive sounding and utterly bizarre technical or political double talk. A carnival side show hustler couldn't do it any better.

Never have I observed anyone so absolutely *right* about everything under the sun. You got questions? Gary's got answers!

Starting now, I want nothing more to do with any of this. If I want to pursue this topic some more I will look for some *real* experts.

Go ahead, Gary and friends, take your best shot, and then stay away from me in the future, just as I intend to stay away from you. OK?

Bill W0IYH

# 3478. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343e8854.261572029@news.atl.bellsouth.net>
Source record: 90102

On 9 Oct 1997 18:17:55 GMT, "Ed Hare, W1RFI" <ehare@arrl.org> wrote:
>ke4zv@bellsouth.net (Gary Coffman) wrote:
>
>>But having said that, I have no objection to the creation of Morse only
>>preserves, I prefer to call them sanctuaries, where those who want to
>>operate Morse can do so in peace without having to compete with other
>>signaling methods. I'd even suggest using the existing Extra segments
>>at the lower ends of the HF bands for this purpose. And I'm not sure
>>that a QRP power limit is necessary. Of course Morse operators could
>>continue to use any other part of the bands too, but on a fully open
>>competitive basis with other methods.
>
>Speaking entirely personally, as a CW op, I see no reason not to
>continue to have CW shared with those other modes with which we have a
>demonstrated reasonable compatibility (translate: the modes we are
>currently sharing on HF). If FH SS turns out after further study by
>the amateur community to be compatible with existing amateur CW and other
>digital operation, I would see no reason not to share spectrum with that,
>too.

Ah, but you are a hardy soul, Ed. There are those who are complaining bitterly
of having to co-exist with other modes. Giving them a place of sanctuary where
they don't have to contend with anything but other OOK Morse operators should
make them happier.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 3479. Surplus goods in U.K.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: sdhe@aol.com
Message-ID: <19971010090801.FAA01194@ladder02.news.aol.com>
Source record: 90103

Thanks for all those people out of these newsgroups that have purchased, commented or otherwise shown an interest in our new venture.

For those of you who haven't seen earlier postings, we are company that specialises in several fields of electronics, namely :-

Marine Electronics ~ Sales and Repair
IBM Compatible Computer Systems ~ Sales, Repair, Upgrades, WAN, LAN, Web Page Design, etc..
** NEW ** Surplus Electronics ~ Sales and Purchases
(We have lots of DEC and HP Boards. Also many PDP boards.)

See our web page at http://members.aol.com/sdhe
or E-mail sdhe@aol.com for more info.

# 3480. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: Nicholas Geovanis <nickgeo@merle.acns.nwu.edu>
Message-ID: <Pine.HPP.3.93.971010114907.12468A-100000@merle.acns.nwu.edu>
Source record: 90104

On Wed, 8 Oct 1997, Jake Brodsky wrote:

> On 7 Oct 1997 16:57:00 -0700, europa@primenet.com wrote:
> >I'm not even sure that CW will pass #1 or #2, but perhaps. Digital modes
> >are nowadays just too similar to the internet to be much of a draw. Maybe
> >satellite communications would fit the bill.
>
> See the article I wrote in Ham Radio Online. Radio itself doesn't
> have much of a draw any more. Hell, even satellites don't have that
> magic they once had. What can you do to draw in interest? USE IT!
>
> The radio itself isn't the point, folks. It's what you do with it.
> Ever tried a DF hunt with a 12 year old? Ever tried building a radio
> with a 12 year old? They'll love it! Ever tried flying a kite with a
> wire antenna on it? They'll think it's the coolest thing. They'll
> fall all over themselves when they hear that inexpensive regenerative
> receiver they just assembled put out the BBC world service. Why?
>
> Because they built it, they found the transmitter, they flew the kite.
> The techie stuff about the radio isn't what draws them in. It's you.
>

Thank you very much for the most meaningful post, by orders of magnitude,
than any other in this very long discussion. I'm an outsider here (only
SWL). You people need to understand that the longer and more bitter this
argument gets, the more likely that you will ALL lose your spectrum. I see
no reason why all of the many motivations behind the use of amateur radio
cannot be accommodated. Technical arguments are interesting, instructive
and occasionally decisive. But I have spent my working life listening to
technical arguments which were being used to address, circumvent or ignore
non-technical problems. This is another such instance.

> 73,
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"
>
>

<----------------------------------------------------------------------------->
Necessity is the mother of futile dodges. | Nick Geovanis
- A.N. Whitehead | IT Computing Svcs.
Save children's lives: http://www.unicef.org | Northwestern Univ.
<-------------------------------------------------| 2020 Ridge Bldg.
pgp key available on request V n-geovanis@nwu.edu

# 3481. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343e4f54.246977789@news.atl.bellsouth.net>
Source record: 90105

On Mon, 06 Oct 1997 11:32:24 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>The problem that we face regarding CW operation is this:
>
>1) We all recognize that CW is not, technically speaking, a method of
>the greatest efficiency. My critics just refuse to let me alone on that
>subject. I get tired of hearing it.

Just keep making that disclaimer, and start *believing* it, and its
implications with regard to spectrum utilization, and you won't hear it.

>2) But there are other factors involved that we insist on ignoring, in
>our enthusiasm for technical perfection as the only issue that is
>allowed to be considered (it is politically correct, right?).

It is a technical hobby. Striving for technical perfection is a part
of that. With computing power cheaply at our disposal, arguments
of cost and complexity become moot (the radio equipment is not
significantly different in either case). Arguments of the sort that
end with "because I want to" are always still valid, of course.

You aren't *required* to use optimal systems if you don't want
to. You can use whatever you like for *fun*. The only limits
are Part 97, and good amateur practice. I doubt OOK Morse
will ever be prohibited by either of those. Unlike spark, use
of OOK Morse isn't very spectrum consumptive or damaging
to the operations of others, so there is no reason, aside from
lack of interest, for it to go away as an operating method.

>3) In amateur bands where spectrum space is not a critical issue, the
>more efficient data modes are certainly preferable. No one is arguing
>about that. I know the numbers as well as anyone.

And in bands where spectrum space *is* a critical issue, more efficient
modes are even more important because they allow greater occupancy
and sharing of the spectrum with others.

>4) The problem lies in the HF CW bands, which are narrow and are often
>crowded, especially during contests and during DXing activities. There
>are some who have a certain disdain for these activities, but I couldn't
>care less about that. For example the 20 meter CW band is only 100 kHz
>wide, and half of that is occupied by data stations (which is OK).

Carl will probably ping you vigorously about the "HF CW bands" phrase.
I know that you mean the portions of the data segments of the HF bands
where CW has been traditionally used, however, and won't make an
issue of it. But I will note that we can go narrower with some digital

modulations and codings than we can with OOK Morse, so if packing them in like sardines is what you want, that's the way to do it. But we have to lower the data rate down near that of OOK Morse to do so. And that's just what VE2IQ and his gang are doing.

But there are other ways to multiplex use of scarce spectrum than by going narrower. Especially for things like working Dxpeditions where speed and number of contacts per hour are important, use of relatively high speed digital techniques in an ordered TDMA que is much better, and much less chaotic. This does require cooperation, however, something often lacking on the HF bands.

Or, use of SS technique can allow us to share the spectrum in a more efficient way while also giving us another tool to deal with severe multipath problems. The spreading bandwidth is too small to give us huge coding gains at HF, but other attributes of SS still make it attractive as an alternative to packing narrowband signals into a slice of spectrum as densely as we possibly can. The latter requires an extremely high, and very dynamic, degree of operator cooperation, which as noted, is often lacking on our HF bands. SS maintains packing density automatically by maintaining a flat spectrum across the band, so less overt operator cooperation and coordination are required to maximally exploit the available spectrum resource.

>5) In this scenario, it is vitally important to restrict bandwidth as
>much as possible, just simply because it is a precious commodity. Let me
>give you an example of what I mean. At one time there was a very similar
>rather strident and noisy and opinionated group who promoted
>Double-Sideband-Suppressed-Carrier speech, because it offers a 3 dB S/N
>advantage over SSB. In just a very short time it was realized that the
>narrower bandwidth of SSB was a greater benefit because of the crowded
>HF bands and also because it was easier to receive (phase coherent
>detection not needed). Since that decision was made there has been very
>little looking back, at least as far as the HF ham bands are concerned.

Yeah, 3 db isn't worth a doubling of occupied spectrum. But if the coding gain were 20-30 db, as it can be with some digital techniques, *then* the issue is much different.

>8) The approach that I and others are advocating is to **OPTIMIZE**
>Morse code usage as a desirable alternative to eliminating it, for the
>very precise reason that in the crowded HF CW bands it makes a lot more
>sense than the wider bandwidth alternatives. If you listen on 20 meters
>or on the commercial/military frequencies you find that a data station
>takes up much more spectrum than a CW station. This illustrates the
>problem very clearly. A high speed data stations completes a message
>faster, but creates wideband interference. A CW station takes longer but
>creates less interference. The wideband interference is a greater
>problem, in practice.

See above. Data stations don't *have* to be high speed. When you slow the rate, you also reduce the necessary occupied bandwidth.

There's nothing unique about OOK Morse in this regard. And an *ordered* TDMA arrangement can make high speed data stations more spectrum efficient as well in certain applications, like working Dxpeditions. Those may spread OOK Morse (or SSB) stations over a 10 or 20 kHz bandwidth, all calling at once. But a single 1 kHz channel, operated in an ordered TDMA fashion, could accomplish the same task in the same time without the chaos and wasteful spectrum consumption of the more traditional methods.

Note that Dxers might say such operation wouldn't be as much *fun*. That may be true, but then they'd likely say the same thing about your machine Morse scheme too. In either case, you're removing some of the macho feel from the operation. Unless you are actively designing or building them, more advanced techniques don't have the "gut" appeal of the more hit or miss methods for people who Dx or contest. That'll likely limit their application to non-Dxers and non-contesters. I don't think the Dxers and contesters will complain if that leaves more spectrum free for them to use.

>9) There are those who have examined the bit error rate vs S/N ratios of
>the various waveforms and have made up their minds, no arguments
>allowed. Numbers are numbers, right? Wrong! What I am telling you is
>that this is not good engineering or good science unless it also
>considers the realities of the *channel* and the *spectrum* that is
>being used for communication. The *real* experts deal with these
>realities every day of the week. The simplistic answer is to ignore all
>of these bothersome details.

Now *this* requires a touch of heat. It would appear that the *real* experts have unanimously chosen to discard OOK Morse as a way of dealing with these realities. They've looked at *all* the numbers, which *do* consider the channel and the aggregate spectrum utilization as part of the equation. And those numbers don't favor OOK Morse. You're slipping away from that disclaimer you made at the top of the post again.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3482. Re: Listening to Cell phone on a scanner.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: Chuck Harris <cfharris@erols.com>
Message-ID: <343E2A35.8B3@erols.com>
Source record: 90106
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Peter D. Richeson wrote:
>
> First, yes I know it is illegal to do it ( and I don't).
> Second, I know there is probably a better group but I can't find it on
> the list I have.
>
> But, at our ham meeting last night we got to talking about the scanner
> bill that is in congress and to subject came up.
>
> Now here is the question: Is it possable to hear both sides of a cell
> phone conversation on a single freq. I say no. Cell phones are full
> duplex, one freq. goes from the radio to the tower and the other frome
> the tower to the radio. Two of the people there said that in %90 of the
> time they can here both sides of the conversation. What is going on.
>

Simple, the telephone companies (and cell companies) try to treat telephone conversations as 4 wire circuits as much as they can. That is, microphone signals travel on 2 wires, and earpiece signals travel on another 2. At your central office, they combine the microphone and earpiece paths in a device called a hybrid and connect them to a 2 wire circuit that goes over the telephone poles, and eventually to your telephone. Your telephone has another hybrid in it that combines the 4 wire circuit in your handset and connects it to the 2 wire circuit that comes down from the pole. Microphone signals travel down the wire towards the phone company, and earpiece signals travel down the wire towards your phone.

In a perfect world, the hybrids would do a perfect job of splitting the microphone and earpiece signals, and you would never hear both sides of the conversation when listening in on a cell phone signal....However, the world of cheap telephones is anything but perfect, and the hybrids in cheap phones generally reflect alot of the signal intended for the earpiece back towards the phone company. This is called echo.

Now I can hear you thinking: "If the hybrids are so bad, why don't we get feedback in our telephones?" Well this concerned the telephone engineers of yore as well, and what they did to reduce the effect of this echo is make the signals coming from the telephone microphone 20 dB louder than the signals going to the telephone earpiece. This makes any signal, intended for the earpiece, that echoes off of the hybrid way more than 20dB quieter than the microphone signal. Back in the old days of noisy lines, this loss all but assured that the echo couldn't be heard. Now days with "you can hear a pin drop" lines, you can easily

hear the echo.

"What do you mean I can hear the ECHO...Echo...echo...echo.......?"
Well, you would hear the old grand canyon style echo if the lines
between your house and the central office were really really long, but
because they are short, all you can hear is a phase distortion that
makes your sidetone sound a little bit "big", but that's another story.

---
Chuck Harris - WA3UQV
cfharris@erols.com

## 3483. 2.4 GHz radio ethernet bridge&#65533;

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: kazem_edmond@bbns.org
Message-ID: <kazem_edmond-1010971733110001@207.244.85.21>
Source record: 90107

Hi. I'm looking for as much information as possible on a 2.4 GHz radio ethernet bridge w/ a 2-3 Mps bandwidth. The 2.4 GHz is the frequency. I'd REALLY like to build my own, but I need design plans and what-not to do this. Any help would be appreciated. Thanx.

# 3484. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <61lucq$c2o@apple.telalink.net>
Source record: 90108

Cecil Moore <Cecil_A_Moore@ccm.intel.com> wrote:
>Hi Marijan, what you say is true but not very useful. If you must have a machine
>on both ends then it is logical to improve the coding technique to FSK/PSK/MSK
>using a fixed "word" length with framing/redundancy bits and FEC.

Do you actually have to have a machine on both ends?

(actually you do, but the machine on the sending end can be as simple
as a standard keyer -- something that can be implemented with a
dedicated microcontroller or a handful of logic gates, something that
can be built for maybe $30 here in the U.S., as opposed to at the very
least 10x that much money for a minimal system using any other data
mode)

Marijan, it would be very interesting to hear more about your project!

73 Doug

# 3485. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: kd1hz@anomaly.ideamation.com.nospam
Message-ID: <61m2kj$9ne@anomaly.ideamation.com>
Source record: 90109
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

In article <343e59a1.1973495@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:

>And the way Newt got burned is by a couple listening (against the law)
>in their car ... then making a tape (against the law) ... then sending
>that tape to a democrat congressman (against the law) ... who then
>committed a federal crime by playing that tape to the public. But
>because he played the tape on the floor of the House he is protected
>from prosecution.

Why does the congresscritter receive protection from prosecution because
it was played on the floor? If he blows someone away on the floor is
he protected from 1st degree murder charges?

The congresscritter also gave a copy to a newspaper. That certainly
shouldn't be a "protected" action.

>I wonder ... has that couple been prosecuted under the federal statues
>yet? They certainly should be to the maximum extent of the law to set
>an example for others!!!!

I recall recently hearing that they pled guilty to some lessor charge
and paid a $500 fine.

MD
--
-- Ted Kennedy has killed more people with his car than I have
-- with my guns.
--
-- If you don't like my opinions, that's just too damn bad.

# 3486. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: billsohl@planet.net
Message-ID: <61m8nn$96u@jupiter.planet.net>
Source record: 90110
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

kd1hz@anomaly.ideamation.com.nospam (Michael P. Deignan) wrote:

>In article <343e59a1.1973495@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:

>>And the way Newt got burned is by a couple listening (against the law)
>>in their car ... then making a tape (against the law) ... then sending
>>that tape to a democrat congressman (against the law) ... who then
>>committed a federal crime by playing that tape to the public. But
>>because he played the tape on the floor of the House he is protected
>>from prosecution.

>Why does the congresscritter receive protection from prosecution because
>it was played on the floor? If he blows someone away on the floor is
>he protected from 1st degree murder charges?

Anything spoken or read from the floor of congress is protected
speech. Killing someone on the floor of congress isn't
protected...unless
maybe some liberal lawyer tries to equate it with an act
of speech :-)

Bill Sohl K2UNK
ARRL Local Gov't Liaison, Mt. Olive Township, NJ
No Code International, member - 1007
Visit the No-Code WEB site: http://www.nocode.org

# 3487. FS: Used tubes, Test Equipment and Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <61n2sj$gkb$22@ha1.rdc1.occa.home.com>
Source record: 90111

```
Used Tubes, Untested, large quantities of each available,
Pulled from Surplus Equipment, sold "as is"
-------------------------------------------
6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each
8532 $1.00 each

Test Equipment, working, but not recently calibrated, may need minor
repairs & calibration.
-------------------------------------------
Hewlett Packard 8640B/323 ( AN/USM 323 ) Signal Generator, $395.00

Microwave Components, used, untested, sold "as is".
-------------------------------------------
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $40.00 each
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $100.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $40.00 each
HP X752A, 3 dB Directional Coupler, X Band, $12.50 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount ( conversion rate .73 ). No minimum order.
Sale prices valid until 10-20-97 or while supply lasts.
```

# 3488. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <343EBF0B.1AF1@ccm.intel.com>
Source record: 90112

Doug Smith wrote:
> ... something that can be built for maybe $30 here in the U.S., as opposed
> to at the very least 10x that much money for a minimal system using any other
> data mode)

Whoa Doug, that same $30 microcontroller can, with a little help from a single-chip FSK decoder, do the reception. The microcontroller in most modern transceivers could certainly do it. Except for the display, I have no idea why transceiver manufacturers have not implemented FSK reception in addition to FSK transmission.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3489. Re: Listening to Cell phone on a scanner.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEHw9H2.A4E@netcom.com>
Source record: 90113
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <343E16C0.154F@boeing.com>,
Peter D. Richeson <peter.d.richeson@boeing.com> wrote:
>Now here is the question: Is it possable to hear both sides of a cell
>phone conversation on a single freq. I say no. Cell phones are full
>duplex, one freq. goes from the radio to the tower and the other frome
>the tower to the radio. Two of the people there said that in %90 of the
>time they can here both sides of the conversation. What is going on.

The base station (cell) transmitter transmits both sides of the
conversation. Like an ordinary landline phone adds a bit of your
side to the earphone output (Buzzword: sidetone). My guess is that
is also helps by indicating the quality of the link to the cellphone
user.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 3490. Battle Creek Special

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: "Dr. Stephen Andrew Wilson" <drwilson@queretaro.podernet.com.mx>
Message-ID: <01bcd5ca$fdf170a0$650a24c8@podernet.com.mx>
Source record: 90114

Gentlemen and Ladies:

I travelling to many nations of the world in relief work and am interested
in info on an
antenna (Portable) called the Battle Creek Special. Can anyone help me??

Thanks.

Dr. Stephen Andrew Wilson
XE1UFO-KA5SUT

## 3491. WHT Jim Fisk?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-10 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <343EA7C5.1C5C@isrc.net>
Source record: 90115

Leon Heller wrote:
you'll also
> find formulae in the Dec. '77 issue of, the sadly defunct, Ham Radio, in
> an article by Jim Fisk. What became of him, by the way?

He died a while back, which is perhaps the prime reason why _Ham Radio_
isn't around anymore. I still enjoy reading my back issues and Fisk was
a top-notch writer and editor.

Matt J. McCullar, KJ5BA

# 3492. ONE MOD XFMR SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <01bcd5dd$7478e520$e602430c@dell>
Source record: 90116

One Mil spec mod xfmr has sold, WS0E, Joe.7hc@juno.com

# 3493. QSL Buro question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: kmillerX@flash.net
Message-ID: <343ed820.80192673@news.flash.net>
Source record: 90117

I know I'm a little off topic, but I thought I'd ask anyway! I have a
friend who is a WB0, but lives in TX. Does anybody know the address
for the W0 buro?
Thanks,
Kerry Miller
WD5ABC

## 3494. Needed: Tandon TM848-2E 8 Inch Drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: geiger@usit.net
Message-ID: <343ec936.92078965@news.usit.net>
Source record: 90118

I am interested in reading some old CP/M 8 inch floppy diskettes.

I need a couple of Tandon TM848-2E drives for an
old Tandy Model 12 that I have. These are double sided,
double density, half height 8 inch floppy drives.

Any leads would be appreciated.

Ed Geiger - KD4AB - Dayton, TN - geiger@usit.net

## 3495. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <61mkc7$8kq@dfw-ixnews4.ix.netcom.com>
Source record: 90119

In <343e1eff.234602652@news.atl.bellsouth.net> ke4zv@bellsouth.net (Gary Coffman) writes:
>
>Modern codes generally contain redundancy in the form of uniform
>code lengths and forward error correction bits to enable you to detect
>and correct transmission errors. If the channel errors are so great
>that they overwhelm the FEC, you still aren't left with nothing. You
>still get the corrupted message, and you know *where* it is corrupt.
>There may be enough fragments of valid text in the message that you
>can apply contextual clues to make an informed guess about what the
>message was supposed to say. You have no guarantee that your guess
>will be correct, of course.
>

Often, if you're trying to squeeze the maximum amount of info into a channel, the code lengths *aren't* uniform. An excellent example of this is real-time video compression, where the goal is to send the maximum amount of info with as little redundancy as possible (Huffman coding of DCT coefficients, with as few FEC redundancy bits as possible, for instance). Block interleaving can minimize long burst errors - the penalty here being the additional delay introduced when interleaving/de-interleaving the FEC blocks. But if errors overwhelm the FEC, you are left with complete and utter garbage until you resync.

- Jeff, WA6AHL

# 3496. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19971011040901.AAA08924@ladder01.news.aol.com>
Source record: 90120

In article <61lucq$c2o@apple.telalink.net>, desmith@telalink.net (Doug Smith) writes:

>(actually you do, but the machine on the sending end can be as simple >as a standard keyer -- something that can be implemented with a >dedicated microcontroller or a handful of logic gates, something that >can be built for maybe $30 here in the U.S., as opposed to at the very >least 10x that much money for a minimal system using any other data >mode)

I find it amusing that a practice that started up because some people could decode characters by ear is continuing over radio. In case people forget, the line telegraphy was originally supposed to be decoded by eye rather than by ear, but because of poor implementation of the scheme, the individuals who could decode by ear were faster at the time. I personally am more interested in communicating than in emulating a machine decoding something. I don't decode packet bursts, rtty signals (ok, I still have a pretty good idea of what ryryryryryryryryryry set at 45 baud sounds like), pactor, and I don't try to decode voice on an oscilliscope or similar device either.

-art clemons-

# 3497. FS - New listing of NOS tubes and more.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971011052301.BAA19901@ladder02.news.aol.com>
Source record: 90121

FOR SALE: NOS Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco, and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1650 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #1010-T.

# 3498. Re: How active is 2m SSB in UK?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <ZG7CnbAUMzP0EwiI@lfheller.demon.co.uk>
Source record: 90122

In article <61ltcv$8es_001@leeds.ac.uk>, "L. DE BRUIJN"
<CBS5LD@leeds.ac.uk> writes
>Hello everyone, I'm the one still working on the blasted tranverter (10m to
>2m), there seems to be a dearth of 2m signals here in Leeds, UK. Can anyone
>confirm this? What is the best time to try 2m? I have only heard a couple of
>amateurs through my transverter, (thru' loss ca. 0-3dB) and never more than
>one per evening (not even digital or morse!). The antenna is a dipole on the
>ceiling of my basement flat (yes, I know, not optimal). TIA for any info on
>2m
>
> 73 de Laurens M1CCO

It's the same where I am, in Reading. Plenty of FM and packet activity,
but very little SSB and CW.

73, Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

## 3499. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd5da$2bf080e0$0100005a@wa6vse>
Source record: 90123

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<343E61F3.5BE3@crpl.cedar-rapids.lib.ia.us>...
> Gary Coffman wrote:
>
> >
> >
> snip everything.
> >
> > etc.
>
> Never in my life have I ever observed anyone so capable of inventing so
> much impressive sounding and utterly bizarre technical or political
> double talk. A carnival side show hustler couldn't do it any better.
>
> Never have I observed anyone so absolutely *right* about everything
> under the sun. You got questions? Gary's got answers!

Yes, Gary does have answers ... THE TECHNICALLY CORRECT ONES.

That you clearly fail to understand what Gary has been trying to tell you
and recognize and accept that you just don't "get it" is not, IMHO, Gary's
fault ... he has been, I think, EXTREMELY patient with you ... and more
polite that you deserve, IMHO, since you persist in ignoring everyone's
attempts to help you.

> Starting now, I want nothing more to do with any of this. If I want to
> pursue this topic some more I will look for some *real* experts.

Translation: "I'm tired of being told things that I don't want to hear,
no matter how correct they may be, so I think I'll 'take my ball and
go home' ... pout, pout"

> Go ahead, Gary and friends, take your best shot, and then stay away from
> me in the future, just as I intend to stay away from you. OK?

I have no problem with 'staying away from you" (I have little patience for
incompetence) *as long as you are not spouting utter technical nonsense
as "fact" ...

To allow you to misinform folks who know even less about the techniques
you are misunderstanding and misapplying than you do would be unfair
and a disservice to your potential victims ...

I, for one will challenge you on this baloney at every turn ... I'm not
"looking
for a fight" ... but if you don't want to be challenged, don't spout
technically

flawed, inaccurate garbage ... that seems simple enough that even you might
"get it."

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3500. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3442c3dd.4045419@eskinews.eskimo.com>
Source record: 90124

s56a@s55tcp.ampr.ORG (Marijan Miletic) wrote:

>Gary, KE4ZV keeps emphasizing asynchronous nature of Morse code as a great dis-
>advantage in machine decoding. This is absolutely not a case in machine gene-
>rated code which has a master clock and all the elements are generated from it
>in 1:3:5 fashion. Once we estimate basic dot length and detect decent signal
>above the noise, we can start synhronous detection by accurately estimating
>following element. If it happends to be signal again, we KNOW that we hit dash
>and the next element MUST be signal again. If we detect pause (noise) than
>there are 2 choices following it: signal or pause. If signal comes we detected
>intersymbol pause and we go back to signal flowchart. If pause follows pause
>than we KNOW again that we MUST have at least one more pause for character of
>more than that (5 or 7) for word. This simple state machine helps a lot...
>Even with hand sent Morse, slight variations occur only in long pauses which
>do not affect character decoding much. We usually end up with few extra spaces
>
>For a few DX-ers which expressed doubts about the abilities of machines to do
>Morse decoding in pile-ups, let me tell you that PC & DSP achieved 80% score
>on simulated 5 min. tape while I did about 60% after winning EU championship
>twice and being #6 in Dayton 1995 (#1 EU with G3SXW). On the air test in ARRL
>DX contest with about 200 CW QSO exceeded all my expectations once PC worked
>Kansas on 80m which I could barely detect in QRM. One becomes very humble
>after such an expierence just like world chess champ after being beaten by
>computer recently. I have seen the future and I stoped my research...
>
>73 de Mario, S56A, N1YU.

---

The same thing has been done for years with Baudot RTTY, and
especially now with K6STI's program which uses what he calls a
"numerical flywheel". It pulls signals out of the noise like magic.
And of course RTTY runs at 60 words per minute, far faster than most
of us can do CW. Put aside the key for a while and grab the keyboard.
You'll be pleasantly surprised.

73, Bill W7TI

# 3501. Formula for calculating microstrip width ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: steve@nospamthanks.tenchy.demon.co.uk
Message-ID: <34424586.3843405@news.demon.co.uk>
Source record: 90125

Hi,

I need to find the right width for 50R microstrip, depending on the Dk (er) of the board and the thickness. I have come accross tables, but they are really hard to extract an exact value. There must be a formula around, right ?

Also, how can I compute dimension's for on-track inductors, typically one with greater tahn 500R impedance at x frequency, to inject DC into a coax.

Does anyone use Genysys ?? Any good ?

And (I like value for money :-) what is a good material for microwave boards, between FR4 and PTFE at a reasonable cost ?

73

--

Steve. FOR SALE: Suzuki GSX1100EFE, D Reg, 12500 miles, MOT'd.
See http://www.tenchy.demon.co.uk

# 3502. SB-200 Choke Fire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: k3ky@juno.COM
Message-ID: <19971011.065718.7014.1.k3ky@juno.com>
Source record: 90126

There was someone who posted a message about burning up
the 45uH choke in his SB-200 a second time. I hope I am putting
this on the right reflector, as I'm trying to remember what was
going on a week ago. In the meantime, I have had time to think
about the message I posted in response, while I waited 5 days
or so for my computer to get worked on. I had suggested that
the choke fire might have been the result of a parasitic oscilla-
tion 'event'. I didn't have my brain in gear at the time. Parasitics
will destroy or damage tubes, meters, bandswitch wafers,
bias zeners, and plate tuning capacitors (usually just arcs but
doesn't wipe them out.) I don't believe they will ordinarily wipe
out a plate choke. The 45uH choke in the SB-200 refered to here
*is* the plate choke, right? I haven't had my hands on an SB-200
or it's schematic for at least a year, so again, I'm relying on my
memory. Anyway, I believe choke fires are more likely to be
caused by operating too near one of the series-resonant freq-
uencies of the choke. Some chokes have no resonances below
30MHz, and so are pretty safe in any 160-10 meter amp. The B&W
800 choke and the choke used in the SB-220/221 are both exam-
ples of this, I believe. Some chokes, however, were designed
in the old (pre-WARC) days, and happen to have one or more
resonance parked between the higher HF bands, say at or near
18 or 24MHz. If you try to use an amp with such a choke on a
WARC band and it happens to fall near one of the choke reso-
nances, high RF current passes through the choke to ground
and the choke fries. In addition, it is equally possible that some-
one could have such an incident and then rewind the choke so
it even has resonances that fall in one of the traditional higher
bands (20/15/10.) The answer to both problems would be to
get a dip meter and check the new choke for resonances
while it is mounted in place and with a temporary short across
it. I have seen some good descriptions of this simple procedure
in an ARRL publication somewhere. An exact replacement choke
should be carefully checked for any resonances on 17 or 12
meters before operation is attempted there, and a field-rewound
choke should be checked at every HF frequency. The homebrew
choke, even if an exact duplicate of the factory choke, could have
very different electrical characteristics due to a difference in
the insulation film on the wire, winding technique, etc. Of course,
the grid-dipper check of the plate RFC is performed with the amp
off, unplugged, and the HV supply fully discharged! 73, David

David Sinclair K3KY
e-mail: k3ky@juno.com

## 3503. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343f555d.314068711@news.atl.bellsouth.net>
Source record: 90127

On Thu, 09 Oct 1997 10:44:07 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Gary Coffman wrote:
>>
>> As Mathew noted, we can't
>> really match filter or correlate (they are conceptually the same
>> thing) anything but the dot interval with any reliability.
>
>Not true. The dash can also be determined. I keep hearing "dots only".
>It ain't so. I wish we would all break away from that idea. The dash is
>exactly 3 dots long and can easily be separated from a dot, and its
>on/off transitions can easily provide inputs into the clock synch
>process. For a Morse OOK system we cannot throw away *anything* that
>might be useful.

The dash has a spectrum three times narrower than the dot, but it must
share the same receive bandwidth as the dot before demodulation. So
the dash suffers a SNR penalty from not being in a matched bandwidth.
If we treat the dash as being 3 conjoined dots instead, we can approach
a matched bandwidth condition, and achieve a higher effective SNR
before detection. That in turn means our slice demodulation will be
more precise, and we'll recover better edge timing information to be
used in the decoding process.

>> Word space will present a
>> problem for us if it is extended too long, but if we can assume
>> that the operator is keeping the que full, it will suffice.
>
>Word space must be an integral number of dots plus spaces. One other
>thing: the clock synchronization process can be "attenuated" or
>"weighted down" (but not completely turned off) during periods of
>uncertainty about the signal. In other words, only well defined on/off
>transitions are given top billing. As part of this process, the adaptive
>threshold level calculation is crucial.

Yes, we can use a loose DPLL, or numeric flywheel as Beezley calls
it, to maintain rough synchonization during periods of no signal energy.
weighting the timing pulses to it based on recovered signal strength will
reduce wander. This is also a useful technique for dealing with fully
voiced modulations in the presence of fading. We can view OOK as
a system with frequent very deep fades for this purpose.

>> If we reach a dead end, IE an
>> illegal decoding, before reaching the end of the trellis, we can prune
>> the decision tree, backtrack, and try a path with a lower total metric

>> until we reach the end of the trellis with a legal path. That will have
>> the highest probability of being a correct decoding.
>
>Before a dead end or a long pause, automatically send a termination
>sequence, like some other data guys do, if there is a break longer than
>say 10 dot + space lengths. A manual operator will also recognize this.

I'm not sure what you mean. Are you saying to send a special termination character? If so, we have to do a correct decoding of that character to act on it, and we must avoid doing an incorrect decoding of something else as the termination character. Absence of signal for a number of character periods should be a sufficient indication to dump the matrix, and avoids the possibility of incorrectly identifying a special termination character in the middle of a sequence.

Dumping the matrix prematurely reduces the probability of correct decoding, but we have no choice if no further characters are coming in to fill the matrix. The sending operator cannot know if our decoding trellis reaches a dead end, since that signifies a decoding error. So he won't know to send us a special character in that case. In that case, we have to backtrack and try another path through the trellis to find the correct decoding solution. If we can find no correct path, we choose the path with the highest metric because that will have the fewest errors. Our decoding won't be perfect, but perhaps the operator can correct it from context.

>Also, take advantage of one of CW's greatest assets, full QSK break-in.
>Insert a capability for an automatic ACK process. QSK CW operators
>routinely use redundancy in this manner for error correction. The
>machine must, at the very least, duplicate everything that skilled
>operators do. The interrupting code can be a string of dots that the
>receiving machine can recognize, which is what operators often do.

ARQ? Yes we could do that, but we first have to determine if we have an error or not. In some cases, an error will be obvious, IE there is no valid path through the trellis. But in some (probably many) cases, there will be a valid path through the trellis, but it could still be the wrong path, IE there may be several paths through the trellis for a given bit pattern corrupted by noise because Morse is a variable length code. We can't be sure which one is correct. So we need a checksum or CRC transmitted if we want to do ARQ. This isn't so alien to Morse ops since in traffic handling we include a check count with the message for this purpose.

But now we have to problem of reliably detecting the location of the check count. With a variable length code, it won't be at a fixed location. I suppose we could define it to be the last two characters before a termination pause. Since the trellis is carrying a history for us anyway, it won't be hard to do a look back for this purpose.

But because a termination pause gives us the weakest decoding, we'll have a higher probability of decoding the checksum incorrectly.

We have the same problem if we send the check count at the beginning of the message. We need to send it in the middle somewhere so that there are characters before and after it to fill the matrix. But then we're back to trying to locate it. Bummer.

Perhaps we should define a convention that we will follow the check count with a series of BT characters. This will fill out the matrix for us, and also serve to locate the check count. Then when the termination pause occurs, we won't care if the matrix is flushed because we'll already have the information we need.

This is getting clumsy for the manual operator. I still haven't quite figured out if you expect this system to interoperate with manual stations or not. If so, we can't make the protocol too complicated. If not, then we can deal with it since computer memory and processing power are cheap.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3504. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343f64ed.318053967@news.atl.bellsouth.net>
Source record: 90128

On 11 Oct 1997 01:22:15 GMT, jeffa@ix.netcom.com(Jeff Anderson) wrote:

>In <343e1eff.234602652@news.atl.bellsouth.net> ke4zv@bellsouth.net
>(Gary Coffman) writes:
>>
>>Modern codes generally contain redundancy in the form of uniform
>>code lengths and forward error correction bits to enable you to detect
>>and correct transmission errors. If the channel errors are so great
>>that they overwhelm the FEC, you still aren't left with nothing. You
>>still get the corrupted message, and you know *where* it is corrupt.
>>There may be enough fragments of valid text in the message that you
>>can apply contextual clues to make an informed guess about what the
>>message was supposed to say. You have no guarantee that your guess
>>will be correct, of course.
>>
>
>Often, if you're trying to squeeze the maximum amount of info into a
>channel, the code lengths *aren't* uniform. An excellent example of
>this is real-time video compression, where the goal is to send the
>maximum amount of info with as little redundancy as possible (Huffman
>coding of DCT coefficients, with as few FEC redundancy bits as
>possible, for instance). Block interleaving can minimize long burst
>errors - the penalty here being the additional delay introduced when
>interleaving/de-interleaving the FEC blocks. But if errors overwhelm
>the FEC, you are left with complete and utter garbage until you resync.
>
>- Jeff, WA6AHL

Yep, that's the truth. But that isn't the sort of coding we'd choose
for best accuracy in a weak signal environment. There's always a
tradeoff between accuracy and maximum throughput. There's no
free lunch. For realtime video, we tolerate the possibility of catastrophic
errors in order to achieve timely delivery, IE late video is as bad as
corrupt video.

If we aren't so critically concerned about timely delivery, however,
use of a punctured code can almost give us a free lunch. In that
case, we only send enough bits so that the FEC can recover the
message if there are no (or few) channel errors, and send further
bits (allowing the FEC to recover from more errors) only if we
don't get an ACK from the receiver. That way, we send the fewest
bits possible while still ensuring accurate delivery.

Gary
Gary Coffman KE4ZV | You Make It | Email:

Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3505. KW1000 amp help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Stephen Hall <S.A.Hall@btinternet.com>
Message-ID: <01bcd63a$b1a8acc0$LocalHost@default>
Source record: 90129
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Hi and thanks for reading this I have a KW1000 amp which i want use on 6m
has anyone done this..... if so how???
Also i require the set up procedure to neutralize the tubes after the mod
is done...
Any help would be appreciated.
Please respond by e-mail (trouble with news reader HI Hi)

TIA
73's De Stephen G7EUW
s.a.hall@btinternet.com

# 3506. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: grey.hound@bigfoot.com
Message-ID: <3440d395.103748514@news.eurekanet.com>
Source record: 90130

On 7 Oct 1997 00:35:59 GMT, "Carl R. Stevenson" <wa6vse@fast.net> wrote:

>Now before you get upset and accuse me of wanting to "ban Morse" ... I've
>already said that was NOT the case ... just that every reality in the world in
>which we live says that Morse does NOT deserve to be a pass/fail "requirement"
>for entry into HF ham radio ... the hazing ritual should be abandoned ...
>period.
>
>--
>Carl - wa6vse
>wa6vse@fast.net

While I like morse code and the fact that is has some efficiency, I do have to admit that some of the digital modes are quite efficient. I had to pass the 20 WPM code test to gain the "extra" priveleges, but I don't think we need to hold to that standard for licensing forever. Perhaps for some sub-band priveleges (as extra class licensees have in the U.S.), but why insist on it just because we had to pass a code test?

I will always love CW and everyone will admit that you can transmit pretty far with very few watts (or milliwatts) and the equipment, if built from scratch, can be pretty simple. But, not everyone likes this mode. Some of us will always love it, just like many (like myself) like antiques. The idea of a CW-only sub-band doesn't seem so bad. In fact, it could actually be a benefit for us CW advocates.

I don't have enough technical expertise to argue that CW is more efficient or the digital modes. If we consider time as well as bandwidth (space), perhaps the wider bandwidth of some of the digital modes is made up for by the shorter time for a QSO needed?

There will be a declining of interest in CW, whether we like it or not, because it takes discipline to learn it to pass the test. Of course, after learning it, anyone could use a computer to do all of the mental deciphering for them, but it still would take some effort to pass the test.

Perhaps an exclusive sub-band for CW only wouldn't be a bad idea after all? ANd, why require a code test for it? People could learn it if they wanted to, or just avoid the sub-bands for CW. Maybe it could be for the exclusive use of just extra class licensees? I say that, because it is no more fair for that to be than to require code testing of anyone above technician no-code class, in my opinion. Almost everyone uses the other modes. Yes, I like CW, and would like to see it preserved, but why? I'm not really sure, but I don't want to see it forced on others just because it was forced on me to get my first licence. Yes, I learned to love it, but not everyone does. Many people who get the novice license allow it to lapse. Are we gaining anything here?

If amateur radio becomes an exclusive privelege to a minority of us, than we face extinction of our bands from less use as CW dies out. Perhaps CW will never really die, but maybe we have to "move over" to allow other people to share our bands. We don't own them, just use them. Let's do what we can to keep them.

Donald Hellen
KJ3I
Chillicothe, OH, USA

# 3507. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <343f6b0d.319621441@news.atl.bellsouth.net>
Source record: 90131

On 8 Oct 97 08:01:07 GMT, Peter Parker <parkerp@pcug.org.au> wrote:
>People speak of the advantages of the higher data rates per kilohertz
>that are possible, but they miss the main point - What's the higher
>bandwidth going to be used for? A bit like having sufficient bandwidth
>for 500 TV channels, but finding that it's just 500 channels of rubbish.
>
>I don't think I need any more bandwidth than standard CW provides to call
>"CQ contest"!

But you seem to be missing the corrolary to more bits per kilohertz, and that is that if you only have a few bits to send, you only need to use a very small fraction of a kilohertz to do it. BPS/kHz is a ratio that applies at all scales. That means that you could have several stations calling CQ in the bandwidth required for one OOK Morse station to do so. The reduction in required bandwidth also can mean a lower required transmit power to get the message through. That translates to less adjacent channel interference.

Or it can mean that you occupy spectrum for less time, thus giving others access to the frequency, IE TDMA. These things may not benefit you much, but they do benefit others trying to use the spectrum. It is the time-bandwidth product which determines the packing density you can achieve in a given spectrum. Narrower and slower isn't always the best answer. Sometimes wider and faster is the best answer. But in either case, BPS/kHz is the metric which tells you what is going to allow the most people to use a given slice of spectrum.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3508. Re: help: unidirectional antenna needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: grey.hound@bigfoot.com
Message-ID: <3442db37.105703490@news.eurekanet.com>
Source record: 90132
Cross-posted to: sci.electronics.design,sci.electronics.misc,sci.electronics.basics,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>Randie Ohtsji [4555] <rohtsji@glenayre.com> wrote:
>>Does anybody out there know a good unidirection antenna design for
>>transmission purposes (as opposed to receive). I basically
>>need to transmit in front of me, none to the rear and very litte
>>to the sides. Is there also some way to vary the angle of how
>>much is transmitted to the sides? I need to transmit a 433MHz
>>signal into a 50 ohm unidirectional antenna.

How about a yagi or quad beam antenna? Front to back rejection can be varied somewhat at the expense of forward gain. They are simple to construct and can be purchased commercially also. If you need a wider reception angle, another antenna with less gain, a diplole, or even a 1/4 wave antenna could be used just for reception. The ARRL handbook, as well as the equivalent from RSGB (England) and some otheres, like Bill Orr's VHF/UHF antenna book are good guides for building all of the commonly used types of antennas for VHF/UHF. If you can find "VHF for the Radio Amateur" by Frank C. Jones, W6AJF, published in 1961 by CQ Magazine, there are antennas for frequencies from 50 Mhz to 1296 Mhz. (VHF/UHF distinctions were blurred back then.) I made a 4 bay yagi array with a rather unique fed system I've not seen anywhere else that really put fire in my portable 2M tranceiver. You might not find this in print anymore, but there are plenty of books that can help you decide and design your own solution to your problem.

Donald Hellen
KJ3I

# 3509. Re: Formula for calculating microstrip width ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <343f8e91.452252@news.azstarnet.com>
Source record: 90133

On Sat, 11 Oct 1997 09:42:45 GMT,
steve@nospamthanks.tenchy.demon.co.uk (Steve) wrote:

>I need to find the right width for 50R microstrip, depending on the Dk
>(er) of the board and the thickness. I have come accross tables, but
>they are really hard to extract an exact value. There must be a
>formula around, right ?

Go to http://www.appwave.com/
and download their free transmission line software

>Also, how can I compute dimension's for on-track inductors, typically
>one with greater tahn 500R impedance at x frequency, to inject DC into
>a coax.

Don't quite understand the question.

>Does anyone use Genysys ?? Any good ?

Don't use it, don't know.

>And (I like value for money :-) what is a good material for microwave
>boards, between FR4 and PTFE at a reasonable cost ?

You might look at Rogers, but I'm not sure what quantities you need
and whether they would work with you.

N7WS

# 3510. (No Subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Pete deVolpi <amsoft@epix.net>
Message-ID: <Forum.876581414.23913.amsoft@m>
Source record: 90134
Cross-posted to:
rec.radio.cb,rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.homebrew

```
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-------------------------------------------------------
Send E-mail to: amsoft@epix.net ,(Pete deVolpi, KC3TL)
Publisher of "The World of Ham Radio", Callsign CD-ROM
AmSoft,PO Box 666, New Cumberland, PA, 17070-0666, USA
This document was sent 10/11/97 AD, 10:49:39 EST,
FTP SITE: ftp://hamster.ivey.uwo.ca/pub/amsoft/
WWW SITE: http://hamster.ivey.uwo.ca/~amsoft/
-------------------------------------------------------
```

# 3511. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: sco@sco-inc.com
Message-ID: <344094f2.3720064@news.mindspring.com>
Source record: 90135
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

kd1hz@anomaly.ideamation.com.nospam (Michael P. Deignan) wrote:

>In article <343e59a1.1973495@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
>
>>And the way Newt got burned is by a couple listening (against the law)
>>in their car ... then making a tape (against the law) ... then sending
>>that tape to a democrat congressman (against the law) ... who then
>>committed a federal crime by playing that tape to the public. But
>>because he played the tape on the floor of the House he is protected
>>from prosecution.
>
>Why does the congresscritter receive protection from prosecution because
>it was played on the floor? If he blows someone away on the floor is
>he protected from 1st degree murder charges?

It is so written in the CONSTITUTION. No member may be prosecuted for
their offical acts (on the floor ... I think it is).

# 3512. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd658$9ca29ca0$0100005a@wa6vse>
Source record: 90136

Cecil Moore <Cecil_A_Moore@ccm.intel.com> wrote in article
<343EBF0B.1AF1@ccm.intel.com>...
> Doug Smith wrote:
> > ... something that can be built for maybe $30 here in the U.S., as opposed
> > to at the very least 10x that much money for a minimal system using any
other
> > data mode)
>
> Whoa Doug, that same $30 microcontroller can, with a little help from a
> single-chip FSK decoder, do the reception. The microcontroller in most
> modern transceivers could certainly do it. Except for the display, I
> have no idea why transceiver manufacturers have not implemented FSK
> reception in addition to FSK transmission.
> --
> 73, Cecil, W6RCA, OOTC (not speaking for my employer)

Cecil, I would submit that paying $30 for a microcontroller is getting hosed
..
the cost and complexity involved with systems that can do much better than
Morse is CONSISTENTLY pointed out as a "barrier to acceptance" and is
grossly exaggerated by the same folks who spout the "Morse will get through
where nothing else will." and "Morse is the best mode for narrowband
operation."
falsehoods ...

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3513. Best Base

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: JEEPMON <jeepmon@interaccess.com>
Message-ID: <61o73h$ngi$1@nntp3.interaccess.com>
Source record: 90137

I am interested in purchasing a used HF xrcvr rig. I m looking
for at least a triple conversion receiver one. All bander of course. I am
willing to spend upwards of $1000. I am currently looking at a Kenwood
940SAT and an Yeasu 757. Are both of these bases and have their own power
supply?? Do these have 6M also. I don't care about digital. Can u recommend
a GREAT H.F. rig base (with internal power supply)? How do the 940 and 757
compare? Any other suggestions? I know that ICOM makes a model 706 (I and
II) that are H.F. xrcvrs with both 6M and 2M, but it is a mobile. Is there
any Base H.F. rigs that cover 160-10M with 6M also (2M is not that
important now as I would like to get a separate 2M base after an H.F.
base). I hear that Kenwood , Icom, Yeasu all make top of the line equipment
but the tech and general support from Kenwood is severely lacking... I am
perfectly willing to purchase an older unit such as an FT101 or something
similar but I don't know what all those older radios do nor any of their
specs. Is their a book that has pictures of all those old radios and newer
ones to with general specs? I would pay lots for a book like this. It may
sound silly to say but aesthetic do mean something to me, to the respect
that I want a one piece base unit not separate speakers, power supplies,
tuners, and separate VFO's, etc.
Please help me if u can thanx!

--
I take the road less traveled, and that has made all the difference!
JEEPMON@JUNO.COM

# 3514. Homebrew Stuff FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <61oerq$9o5@news.teleplex.net>
Source record: 90138

I have the following for sale

O-5000 volt at 1 ampere DC power supply. Peter Dahl transformer
Cleaning out my shack and heavily downsizing the hobbly.

1-5000 volt meter, 230 Vac Front Panel Variac, Very High quality
Bleader resistor and series output resistor to protect finals.
Dual circuit breakers, In heavy metal cabinet with roller. Professional
Built at a cost of over $1200. Has internal relay to remote start and
10,000 Volt relay to contact bleeders when de-energised. Heavy duty
Square D panel lanps and on-off switch. $450
HP 430C with with bolometer in very good condition $145
These are very hard to find with a working bolometer

Simpson 260 with mirrored scale, Very good condition $70

Bencher Paddle, Very good condition Black and Chrome $40

William Nye Straight Key $20

Amp Supply Co AT1200 Antenna Tuner, 1200 Watt Very Good condition $80

Shure Brothers 444 Mike Good Condition $20
Jenning 3-30pF , 15KV Vacuum Variable Capacitor
Extremely nice cap $50

The following New in the box Panel Meters:

2 - Modutek #725DMA001 0-1 Ma $15 each

1 - 200-0-200 uA Modutek #15DUA-200 1 1/2" $15

1 - Modutek 0-50 uA, 1 1/2 " same as above $15

1 - General Electric #2513 300-0-300 DC Volts $12

1 - Simpson 1 1/2 " 0-50 uA Beautiful meter $18

2 - New Ceramic Variable inductors by Lapoint Ceramic 10uH
Very nice $22 each

1 - SK620A Eimac Socket and Eimac SK606 Ceramic Chimney
New in the box (both) $35

1 - Eimac SK800B socket for 4CX1500 or 4CX1000A Modified and ready
for the 432 Mhz amp in the Handbook. (I never finished the
project) $75

1 - Millen #12551 Variable Capacitor , New 50pF, approx 1500 Volt
$15

1 - EF Johnson #154-505-4 like new dual gang 50pF, (100 total)
HV Transmit capacitor $18

1 - Miller Transmitting choke 1.5uH #4535 pi-wound Beautiful
$12

1 - Eimac 4-1000 air system socket used in good condition.
Removed from equipment $20

3 Slightly used and tested 6LQ6 sweep tube $15 each
RCA These have had little or no use, they look nearly new.

1 - Jackson Brothers Dual- Speed Dial drive , new
4 scales 0-1.0 and 3 blank this is a really nice
drive for a receiver $25

1 - Jackson Brothers ball drive and dial, New , Round , Type C
Approx 4" in tattered box $15

1 - Collins used modulation transformer Model 677N201
20 watt 6000 ohm primary, 6000 ohm secondary
3000 VDC Max WV Good condition $25

1 - Hamtronics R451 Receiver , Very good condition
crystal controlled , with one crystal, Have no equipment to test
but looks very nice, designed for use as a repeater Receiver
Never used after assembly $50

Pat Bunn
N4LTA

# 3515. Re: How active is 2m SSB in UK?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <343fc01c.1848775@news.online.no>
Source record: 90139

On Sat, 11 Oct 1997 09:04:36 +0100, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <61ltcv$8es_001@leeds.ac.uk>, "L. DE BRUIJN"
><CBS5LD@leeds.ac.uk> writes
>>Hello everyone, I'm the one still working on the blasted tranverter (10m to
>>2m), there seems to be a dearth of 2m signals here in Leeds, UK. Can anyone
>>confirm this? What is the best time to try 2m? I have only heard a couple of
>>amateurs through my transverter, (thru' loss ca. 0-3dB) and never more than
>>one per evening (not even digital or morse!). The antenna is a dipole on the
>>ceiling of my basement flat (yes, I know, not optimal). TIA for any info on
>>2m
>>
>> 73 de Laurens M1CCO
>
>It's the same where I am, in Reading. Plenty of FM and packet activity,
>but very little SSB and CW.
>
>73, Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
Hi
the practice is here:
TUNE the RX to 144.300 or 144.050 (Standbye frequencies) when no
activity, and monitor the frequency, you will soon know when condx
starts, 144.050 is perhaps the best calling frequency for aurora condx
Lot of calling is every day on 144300.

---
Email: LA8AK at online dot no

## 3516. Where can I find this relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: kmillerX@flash.net
Message-ID: <343fde38.147299442@news.flash.net>
Source record: 90140

I need 2 Omron relays, the number on them says G5D22423T-US. They have 120VAC coils. Does anybody know a good source for them?
Thanks,
Kerry Miller, WD5ABC
kmiller@flash.net

# 3517. Re: Foxhole Receiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Edward A Slimak <afn01212@afn.org>
Message-ID: <343F85FD.4291@afn.org>
Source record: 90141

msimon@tefbbs.com wrote:
>
> A detector can be made by using an graphite pencil lead in contact
> with the sharp edge of a razor blade.
>
> Simon
> ----------
> jsender104@aol.com (Jsender104) wrote:
>
> >The foxhole rx was in no way standradized. It was built wih what you had and
> > what your ingenuity would allow. The only common component was the detector.
> > As the selenium coated razor glades were fairly common they could be fashioned
> > into a detector.
>
> Opinions expressed herein are solely my own and may or may not reflect my opinion at this particular time or any other.
The pencil lead was "NOT" on the sharp edge of the razor! The point was
placed on the blue-blade side. The anodized surface acted as a
"simi-conductor".... Sparks W4EAS

# 3518. Re: ttl to rs232 or rs232 to ttl cable schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <QToQSDAZD2P0EwSL@lfheller.demon.co.uk>
Source record: 90142

In article <01bcced2$11ac74a0$b37a2599@jeremy.EGAN>, Public Safety
<publicsafety@earthlink.net> writes
>If anyone has or knows of a source for a schematic of a rs232 to ttl cable
>please contact me at publicsafety@earthlink.net
>

I use the Maxim MAX202 for RS-232 to TTL conversion. 5 V supply only,
and 4 100n capacitors.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3519. Re: HELP IC751A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: nospam@no.spam.com
Message-ID: <343fdfca.58906293@news.eburg.com>
Source record: 90143
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

On Sat, 11 Oct 1997 11:19:49 -0500, Dave <w9vi@mail.com> wrote:

>I have an ICOM 751A that does not work below 8 mhz. The receive
>is quiet with a bit of white noise, probably from the audio amp.
>
>Could someone tell me the major components that govern frequencies
>below 8 mhz? Any ideas what I could check? How can it be fixed?
>
>A direct response to w9vi@mail.com would be appreciated.
>
>Thanks in advance...
>
>Dave W9VI
Well, assuming that the IC751 is the same. Sounds like the PLL is out
of lock. Check for 6.5 V on R46 @ 7.9999Mhz mode LSB General. Adjust
C78 to get the correct voltage measurement. Says in the service manual
to use an oscilloscope but a digital volt meter -should- ( haven't
tried it so might be wrong) work if you don't have one. Or if you
don't have a meter, try tweaking it so that your receive comes
back-checking to make sure that it works in the whole band from 100Khz
to 7.9999Mhz.
C78 adjust for 6.5V @7.9999Mhz
In case you also need to adjust for the next 3 bands.
C88 adjust for 6.5V @14.9999Mhz mode USB General
C97 adjust for 6.5V @21.9999Mhz
C107 adjust for 6.5V @ 29.9999Mhz
Confirm measurements by checking for 3V at 8,15 and 22Mhz.
Look for the PLL board, the large square metal can toward the back of
the radio has the adjustment points in it. There will be 4 holes in
the top to access the adjustment points. The hole closest to the front
of the radio is C78, the next one behind it is C88, next is C97, next
is C107. R46 is on the left side of the metal can containing the
adjustment points and a little less half way to the middle of it.
Marked on the board so should be easy to find. The PLL board that you
are looking for is found by taking the bottom cover off of the radio
and it will be the board to the right hand side as the radio is upside
down with the front facing you. That is my opinion of what needs to
be adjusted- hopefully it will help. I had the same problem once and
that did the trick. Actually I did a full alignment but that was the
adjustment procedure that was out of whack.
-Dave
If you need to email me, xcorry@eburg.com , remove the x from corry.

# 3520. Re: HELP IC751A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <344009BE.7E22@onramp.net>
Source record: 90144
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Dave wrote:
>
> I have an ICOM 751A that does not work below 8 mhz. The receive
> is quiet with a bit of white noise, probably from the audio amp.
>
> Could someone tell me the major components that govern frequencies
> below 8 mhz? Any ideas what I could check? How can it be fixed?
>
> A direct response to w9vi@mail.com would be appreciated.
>
> Thanks in advance...
>
> Dave W9VI

Go to Icom's FAQ site and look under 751A. If it isn't covered it should
give you some clues..
--
Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://www.onramp.net/~avvid

# 3521. 2.1 khz filters info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcd726$69ce7b40$12ddd8cc@km3g.cts.com>
Source record: 90145
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Does anyone know the input and output impedance of the Fox Tango/IRCI/INRAD 2.1 khz crystal filters for the 830/930/940/950/850 series rigs?? It's the same filter for each rig. Need the i/p and o/p Z for the 8.83mhz and 455khz 2.1 khz filters.

Lane
Kilo Mexico Three Germany
San Diego

# 3522. HELP IC751A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Dave <w9vi@mail.com>
Message-ID: <343FA725.3667@mail.com>
Source record: 90146
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have an ICOM 751A that does not work below 8 mhz. The receive
is quiet with a bit of white noise, probably from the audio amp.

Could someone tell me the major components that govern frequencies
below 8 mhz? Any ideas what I could check? How can it be fixed?

A direct response to w9vi@mail.com would be appreciated.

Thanks in advance...

Dave W9VI

# 3523. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34403682.3643@trader.com>
Source record: 90147

> > single-chip FSK decoder

Is there a single-chip BPSK decoder?
---
Dennis
n9vem

# 3524. Re: Formula for calculating microstrip width ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <61p3j1$6rg$2@news1.teleport.com>
Source record: 90148

In article <34424586.3843405@news.demon.co.uk>,
steve@nospamthanks.tenchy.demon.co.uk (Steve) wrote:
>Hi,
>
>I need to find the right width for 50R microstrip, depending on the Dk
>(er) of the board and the thickness. I have come accross tables, but
>they are really hard to extract an exact value. There must be a
>formula around, right ?

There are several, with varying accuracy. One which works well for FR-4
and PTFE at roughly 50 ohms is:

Z0 = (87/sqrt(er + 1.41)) * ln(5.98h/(0.8w + t))

where

er = dielectric constant of the board material
h = board dielectric thickness
w = trace width
t = trace thickness

h, w, t can be in any units, but must all be in the same units.

This is from the Motorola MECL System Design Handbook.

More complex formulas that are more accurate for much narrower or wider
lines, and for higher dielectric constants (like the 10 of Alumina and
GaAs) can be found in "Transmission-Line Properties of Strip on Dielectric
Sheet", Wheeler, MTT-25 #8, Aug. 1977, p. 631, or _Computer-Aided Design of
Microwave Circuits_ by Gupta, Garg, and Chadha.

Roy Lewallen, W7EL

# 3525. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <343F8378.D77@delphi.com>
Source record: 90149

William E. Sabin wrote:
> 3) In amateur bands where spectrum space is not a critical issue, the
> more efficient data modes are certainly preferable. No one is arguing
> about that.

Well Bill, I will argue about that. I am capable of running most of the more efficient data modes but I simply prefer CW for ragchewing. Quite often, I run 5 watts when I could be running 700 watts. I don't need to transfer a lot of data and, for me, CW is simply more fun than PACTOR. CW is not a problem. It should be one of the modes that hams are free to choose. There's very little difference between PACTOR and internet with its email and chat modes and internet is usually a lot more reliable. Why can't we all just admit that each mode has its own characteristics which are morally neither good nor bad. Each mode has its place. There's nothing wrong with CW. There's nothing wrong with old modes (except spark). There's nothing wrong with new modes. The only "wrongness" is the incessant bickering. Modes, like activities, can be chosen for no other reason than for fun and that's perfectly OK. Some hams own only one HF rig, a QRP CW transceiver. Let's be careful in our fervor for efficiency that we avoid using the force of the federal government to enforce greater efficiency. The preferred modes will win out and I'm not sure the winner will be the most efficient mode unless we are forced into it (which is a wrongness).

73, Cecil, W6RCA

# 3526. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <343F85DB.3381@delphi.com>
Source record: 90150

William E. Sabin wrote:
> 3) In amateur bands where spectrum space is not a critical issue, the
> more efficient data modes are certainly preferable. No one is arguing
> about that.

Well Bill, I will argue about that. I am capable of running most of the more efficient data modes but I simply prefer CW for ragchewing. Quite often, I run 5 watts when I could be running 700 watts. I don't need to transfer a lot of data and, for me, CW is simply more fun than PACTOR. CW is not a problem. It should be one of the modes that hams are free to choose. There's very little difference between PACTOR and internet with its email and chat modes and internet is usually a lot more reliable. Why can't we all just admit that each mode has its own characteristics which are morally neither good nor bad. Each mode has its place. There's nothing wrong with CW. There's nothing wrong with old modes (except spark). There's nothing wrong with new modes. The only "wrongness" is the incessant bickering. Modes, like activities, can be chosen for no other reason than for fun and that's perfectly OK. Some hams own only one HF rig, a QRP CW transceiver. Let's be careful in our fervor for efficiency that we avoid using the force of the federal government to enforce greater efficiency. The preferred modes will win out and I'm not sure the winner will be the most efficient mode unless we are forced into it (which is a wrongness).

73, Cecil, W6RCA

# 3527. Re: How active is 2m SSB in UK?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Sid Boyce <szb50@amdahl.com>
Message-ID: <343FBCF2.19FB95C5@amdahl.com>
Source record: 90151

L. DE BRUIJN wrote:
>
> Hello everyone, I'm the one still working on the blasted tranverter (10m to
> 2m), there seems to be a dearth of 2m signals here in Leeds, UK. Can anyone
> confirm this? What is the best time to try 2m? I have only heard a couple of
> amateurs through my transverter, (thru' loss ca. 0-3dB) and never more than
> one per evening (not even digital or morse!). The antenna is a dipole on the
> ceiling of my basement flat (yes, I know, not optimal). TIA for any info on
> 2m
>
> 73 de Laurens M1CCO
There isn't much 2m SSB equipment available, so most operation is on FM
where even a simple 2W handheld can yield good results, there are also
many repeaters around that allow contacts quite far afield.
2m Packet (digital) is very active throughout the UK. Here in the West
Midlands I use a handheld driving a 30 Watt Amp for packet radio. Best
suggestion is to get in touch with your local radio club, the Leeds and
District Amateur Radio Club for which I don't have details to hand, but
there is also Halifax and District Amateur Radio Society, Tel. 01422
202306.
------73--------G3VBV------
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375
---
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

# 3528. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: pshintani@demo.webtv.net
Message-ID: <61pc2v$rbq$1@demo-102.iap.bryant.webtv.net>
Source record: 90152

Here's my two bits:
1) consumer microwave oven transformers have poor regulation. However, they may be good for low power at a high duty cycle, ie my microwave oven used used for up to 30 minutes at a time !
2) I have an article for a 500 W linear using a microwave oven transformer, from a '96 CQ magazine written in Japanese.

3) If you need a big transformer, check out ultrasonic welding equipment. I understand that they typically use big(2kW) or so HV transformers. I have another article that uses one such transformer to build a 2kw linear with a 8877

Peter

my real address is
pshintani@demo.webtv.net

# 3529. Re: Formula for calculating microstrip width ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <uzDfqFA382P0Ew2y@lfheller.demon.co.uk>
Source record: 90153

In article <34424586.3843405@news.demon.co.uk>, Steve <steve@nospamthank
s.tenchy.demon.co.uk> writes
>Hi,
>
>I need to find the right width for 50R microstrip, depending on the Dk
>(er) of the board and the thickness. I have come accross tables, but
>they are really hard to extract an exact value. There must be a
>formula around, right ?

You'll find a formula on page 24-25 of the book: Reference Data for
Radio Engineers. I don't have the actual formula, I just have a
photocopy of the next page with an experimentally determined graph. The
top of the page I've got refers to h=dielectric thickness. w=width of
strip, eta=dielectric constant and mu=permeability.

According to the ARRL UHF/Microwave Experimenter's Manual, you'll also
find formulae in the Dec. '77 issue of, the sadly defunct, Ham Radio, in
an article by Jim Fisk. What became of him, by the way?

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3530. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-11 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <34403B61.3F50@delphi.com>
Source record: 90154

Garth Ball wrote:
> I do not think morse code will die for me but I have no
> scientific confidence for this belief, just a contented prejudice.

Hi Garth, I dream about Morse code and hear it just barely
under the road noise level of my pickup on a long trip even
with the IC-706 off.

73, Cecil, W6RCA

# 3531. www.potg.com = Free comedy radio, Unique and Award-Winning

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19971012141300.KAA07332@ladder02.news.aol.com>
Source record: 90015

www.potg.com = Free comedy radio, Unique and Award-Winning

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 3532. Re: Formula for calculating microstrip width ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <61qnjp$qrn@nntp02.primenet.com>
Source record: 90016

Steve <steve@tenchy.demon.co.uk> wrote:
: Hi,

: I need to find the right width for 50R microstrip, depending on the Dk
: (er) of the board and the thickness. I have come accross tables, but
: they are really hard to extract an exact value. There must be a
: formula around, right ?

: Also, how can I compute dimension's for on-track inductors, typically
: one with greater tahn 500R impedance at x frequency, to inject DC into
: a coax.

Steve,
If you look at my web page at:

http://www.primenet.com/~ctrask

you will find an extensive bibliography on microstrip, and shortly one
for the spiral inductors that you've asked about.

```
,----------------------. Circuit Design for the
/ What's all this \ RF Impaired
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ ATG Design Services
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ Technical Editor,
. ( ) \ QRP Quarterly
'-| )__| :. \ QRP ARCI 9464
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com
http://www.primenet.com/~ctrask
```

Graphics by Loek Frederiks

## 3533. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: George Edwards <gedwards@onramp.net>
Message-ID: <01bcd71d$d8874b60$27e532ce@708714231>
Source record: 90017

And of course....we could also watch paint dry as a pastime.

# 3534. Re: looking for advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3440f9f9.421761192@news.atl.bellsouth.net>
Source record: 90018

On Fri, 10 Oct 1997 08:39:22 GMT, keinanen@sci.fi (Paul Kein&#65533;nen) wrote:
>ke4zv@bellsouth.net (Gary Coffman) wrote:
>>And splitting the signal power into two paths is going
>>to cost you 3 db. I'd think that would be the *last* thing you'd want in
>>a weak signal system.
>
>While splitting the antenna terminal signal power into two paths in
>equipment limited environments will degrade the SNR by 3 dB, I do not
>see how this is relevant in this case, when we typically have several
>stages of amplification (that determine the noise figure) ahead of the
>splitter.

Ok, I see that.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3535. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3440fba8.422192103@news.atl.bellsouth.net>
Source record: 90019

On 8 Oct 97 14:46:11 GMT, s56a@s55tcp.ampr.ORG (Marijan Miletic) wrote:
>Gary, KE4ZV keeps emphasizing asynchronous nature of Morse code as a great dis-
>advantage in machine decoding. This is absolutely not a case in machine gene-
>rated code which has a master clock and all the elements are generated from it
>in 1:3:5 fashion. Once we estimate basic dot length and detect decent signal
>above the noise, we can start synhronous detection by accurately estimating
>following element. If it happends to be signal again, we KNOW that we hit dash
>and the next element MUST be signal again. If we detect pause (noise) than
>there are 2 choices following it: signal or pause. If signal comes we detected
>intersymbol pause and we go back to signal flowchart. If pause follows pause
>than we KNOW again that we MUST have at least one more pause for character of
>more than that (5 or 7) for word. This simple state machine helps a lot...
>Even with hand sent Morse, slight variations occur only in long pauses which
>do not affect character decoding much. We usually end up with few extra spaces

Mario, the async nature of hand sent Morse can be a problem, but the bigger problems are the non-uniform nature of the Morse symbols, the fact that with OOK 60% of the symbols are unvoiced, and the variable length of the encoding. When you add all of those together, you have a mess.

I notice that Cecil gave you a good answer to the machine to machine scenario. If you're going to do that, then you should go ahead and use a better modulation and coding. The only reason it makes any real sense to me to attempt to do machine Morse is to interoperate with *manual* operators. So you must design the system to accomodate the variability that they insert into the process.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 3536. PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Jonathan <mcgirr@softdisk.com>
Message-ID: <01bcd737$7f3e6560$4d6d1cce@softdisk.softdisk.com>
Source record: 90020

I have been working on (i.e., builing) a shortwave receiver using the coil and variable capacitor method. I am interested in enhancing my little playtoy with a PLL tuning circuit, but I have had trouble locating reference materials. Does anyone have information on making a PLL tuner?

Thanks!

Jonathan

# 3537. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: NORMANMO@miavx1.muohio.edu
Message-ID: <3440D973.7D42@miavx1.muohio.edu>
Source record: 90021

>Carl - wa6vse
>wa6vse@fast.net
>NCI #1052
>Join No Code International!
>Support the modernization of ham radio and
>help to assure its survival into the 21st century!

No Code no God
Know Code Know God

# 3538. Re: How active is 2m SSB in UK?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: " Derek. C. Brown" <delboy1@qatar.net.qa>
Message-ID: <61rt0h$n10@ns1.qatar.net.qa>
Source record: 90022

OK chaps, I know that the activity level is at an all time low, but wait, turn ur aerials towards lincolnshire, from November 13 thru to Nov 18 and every 28 days after G8ECI, The DX station of JO03 square will be QRV again.....I normally call and listen in the 3 main points of the compass in the UK ie South, West & North throughout the day and most of the night, if the XYL lets me Hi Hi.....So take heart I'll give a call when I'm back in the UK.....PS also get a beam up, if at all possible, I believe most of Europe to the Ukraine borders was worked on 2m SSB only a few weeks ago......73 es DX and CU on 144.300 USB..de G8ECI PSE K K K K
Leon Heller wrote in message ...
>In article <61ltcv$8es_001@leeds.ac.uk>, "L. DE BRUIJN"
><CBS5LD@leeds.ac.uk> writes
>>Hello everyone, I'm the one still working on the blasted tranverter (10m
to
>>2m), there seems to be a dearth of 2m signals here in Leeds, UK. Can
anyone
>>confirm this? What is the best time to try 2m? I have only heard a couple
of
>>amateurs through my transverter, (thru' loss ca. 0-3dB) and never more
than
>>one per evening (not even digital or morse!). The antenna is a dipole on
the
>>ceiling of my basement flat (yes, I know, not optimal). TIA for any info
on
>>2m
>>
>> 73 de Laurens M1CCO
>
>It's the same where I am, in Reading. Plenty of FM and packet activity,
>but very little SSB and CW.
>
>73, Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>

# 3539. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3441504B.18A3@antispam.trader.com>
Source record: 90023

NORMANMO@miavx1.muohio.edu wrote:
> No Code no God

I'm theologically bound to respond:
No Code know No Code God
Know Code know Code God

I want code to be there, but I have no current need of it.
The spectrum efficency stuff has been interesting, but the
rest of this thread has been silly.
----
Dennis n9vem

# 3540. Re: Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <34414CC5.12F5@antispam.trader.com>
Source record: 90024

Bill Meara wrote:
> >My buddy and I are new to amateur radio...built their own radios
> >...this interests us greatly...point us in the right direction
> >Larry Wood (ke6ehr)
>
> you might want to start by building a simple...CW transmitter.
> Next step...a simple Direct Conversionn receiver...listen to
> HF CW and SSB QSOs and you could pair it up with the transmitter
> mentioned earlier. Later, you might want to build a simple Superhet

Bill,
It's nice that you answered these guys, but odds are they're
no-code techs. Most new hams are. They probably
want a 2m FM transciever. A direct conversion unit ought to
be as simple as a variable source, a VFO, a mixer/detector, and an
op-amp. Problem is...all the "build it cheap and quick" articles
_are_ for the 40m CW crowd! Show me/them _one_ schematic for the
above unit, with cheap, exact, current, part numbers.
----
Dennis n9vem

# 3541. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: nobody@nowhere.com
Message-ID: <344131d3.18583033@news.penn.com>
Source record: 90025
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

On Sat, 11 Oct 1997 15:03:17 GMT, sco@sco-inc.com (SCO) wrote:

>kd1hz@anomaly.ideamation.com.nospam (Michael P. Deignan) wrote:
>
>>In article <343e59a1.1973495@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
>>
>>>And the way Newt got burned is by a couple listening (against the law)
>>>in their car ... then making a tape (against the law) ... then sending
>>>that tape to a democrat congressman (against the law) ... who then
>>>committed a federal crime by playing that tape to the public. But
>>>because he played the tape on the floor of the House he is protected
>>>from prosecution.
>>
>>Why does the congresscritter receive protection from prosecution because
>>it was played on the floor? If he blows someone away on the floor is
>>he protected from 1st degree murder charges?
>
>It is so written in the CONSTITUTION. No member may be prosecuted for
>their offical acts (on the floor ... I think it is).
>

Wasn't there ten amendments to the original Constitution?
If so, then if a member of Congress breaks the Constitution, what
recourse do we Americans have?
I'm not sure , but I'd assume the CONSTITUTION wouldn't protect
members for their official
violations of our God ordained rights.

BTW, The Constitution isn't worth the paper it's written on.

# 3542. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: nobody@nowhere.com
Message-ID: <34413a96.20826126@news.penn.com>
Source record: 90026
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

On Sat, 11 Oct 1997 15:03:17 GMT, sco@sco-inc.com (SCO) wrote:

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>>In article <343e59a1.1973495@news.mindspring.com>, SCO <sco@sco-inc.com> wrote:
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>>>And the way Newt got burned is by a couple listening (against the law)
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>>>that tape to a democrat congressman (against the law) ... who then
>>>committed a federal crime by playing that tape to the public. But
>>>because he played the tape on the floor of the House he is protected
>>>from prosecution.
>>
>>Why does the congresscritter receive protection from prosecution because
>>it was played on the floor? If he blows someone away on the floor is
>>he protected from 1st degree murder charges?
>
>It is so written in the CONSTITUTION. No member may be prosecuted for
>their offical acts (on the floor ... I think it is).
>

As long as Americans elect Republicans or Democrats for office, we'll
always be screwed.
They're 2 divisions of a one party system.
The Govt. forbids or restricts everything in this country that is neat
or cool.

I know that a lot of people here are mad at the FCC.
But I'm sure that the FCC is having it's strings pulled.
So place your anger somewhere higher than the FCC.

We deserve all this punishment that we are receiving.
If a country can elect Bill Clinton , not once but twice, deserves no
freedom at all.
At least Adolph loved his country and was a nationalist.
Billy boy is open to the highest bidder.

Sad but true

# 3543. TS-530 Power Out

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: William Saulnier <WJSAULNIER@postoffice.worldnet.att.net>
Message-ID: <344141DC.5A03@postoffice.worldnet.att.net>
Source record: 90027

Can anyone tell me what the CW output of this radio should be? Mine used to put out 100W+ (I'm sure) but Kenwood seems to think 80W (which I get now) is within spec. I've replaced the tubes, reneutralized and even sent to Kenwood who said its OK. It does about 220 ma at 800V according to the meter in the rig. I get about 120W Peak on SSB. I'm using two different and good power meters that more or less agree.

If it should do better, any guess as to what the problem might be?

Thanks
Bill

# 3544. Re: Colma Ca frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Suzeee <sjosvai@leland.Stanford.EDU>
Message-ID: <Pine.GSO.3.96.971012151539.14272C-100000@elaine21.Stanford.EDU>
Source record: 90028
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Assistance Please Looking for Colma police frequencies
Thanks
Suzi

# 3545. Re: Colma Ca frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Suzeee <sjosvai@leland.Stanford.EDU>
Message-ID: <Pine.GSO.3.96.971012151736.14272D-100000@elaine21.Stanford.EDU>
Source record: 90029
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Need if anyone has them, colma ca frequencies for the police
Thanks Suzi

# 3546. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34412BDB.1831@pop.removethistomailme.net>
Source record: 90030

Jonathan wrote:
>
> I have been working on (i.e., builing) a shortwave receiver using the coil
> and variable capacitor method. I am interested in enhancing my little
> playtoy with a PLL tuning circuit, but I have had trouble locating
> reference materials. Does anyone have information on making a PLL tuner?
>
> Thanks!
>
> Jonathan

PLL design is really not a great thing to tackle if this is your first receiver project. You can get some bssic information on their theory and operation from the ARRL handbook. If that doesn't convince you to run screaming in the other direction, the next reference to look at would be the PLL synthesis books by Ulrich Rohde and Roland Best.

Sams used to publish a good introductory book by Howard Berlin called "Design of Phase-Locked Loop Circuits with Experiments," but I haven't seen it in stores for a long time. www.amazon.com may carry it, or be able to get it. This book doesn't go into RF synthesizer techniques, but is an excellent introduction to the basic principles.

For casual shortwave experimentation, I'd take a look at the line of direct digital synthesis (DDS) chips from Analog Devices (www.analog.com). The AD9850 in particular would make a great VFO for a general-coverage HF receiver project. You could easily run it with your PC, or build a dedicated controller based on a Basic Stamp or something similar.

73 de KE5FX

---
Note: My E-mail address has been altered to avoid spam
---

# 3547. Re: Paralleled power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19971012222800.SAA15653@ladder02.news.aol.com>
Source record: 90031

Hi Ian
I once paralleled two switching supplies for a system I was building until I could get a large enough supply. The two supplies were connected to either side of the back plane to get as much isolation as possible. It worked ok for digital, but looking at the voltage, every now and again there was a strange fluctuation in the voltage that I interpreted to be some sort of lock-in beating between the switching frequencies of the two supplies. When the correct supply arrived, I put it in and looked no further.
So its possible, but be aware.
73
Jim Cooper NE6O
CooperJim@aol.com

# 3548. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <3441464c.986453@news.zippo.com>
Source record: 90032

On Sun, 12 Oct 1997 14:58:19 -0500, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>Jonathan wrote:
>>
>> I have been working on (i.e., builing) a shortwave receiver using the coil
>> and variable capacitor method. I am interested in enhancing my little
>> playtoy with a PLL tuning circuit, but I have had trouble locating
>> reference materials. Does anyone have information on making a PLL tuner?
>>
>> Thanks!
>>
>> Jonathan
>
>PLL design is really not a great thing to tackle if this is your first
>receiver project. You can get some bssic information on their theory
>and operation from the ARRL handbook. If that doesn't convince you to
>run screaming in the other direction, the next reference to look at
>would be the PLL synthesis books by Ulrich Rohde and Roland Best.
>
>Sams used to publish a good introductory book by Howard Berlin called
>"Design of Phase-Locked Loop Circuits with Experiments," but I haven't
>seen it in stores for a long time. www.amazon.com may carry it, or be
>able to get it. This book doesn't go into RF synthesizer techniques,
>but is an excellent introduction to the basic principles.
>
>For casual shortwave experimentation, I'd take a look at the line of
>direct digital synthesis (DDS) chips from Analog Devices
>(www.analog.com). The AD9850 in particular would make a great VFO for a
>general-coverage HF receiver project. You could easily run it with your
>PC, or build a dedicated controller based on a Basic Stamp or something
>similar.
>
>73 de KE5FX
>
>----------------------------------------------------
>Note: My E-mail address has been altered to avoid spam
>----------------------------------------------------

In the last couple of years there has been write up's on
phase locked loops, in Electronics Now magazine. If
you could get copies of these, it may help you.

Steve Carlisle

## 3549. Looking for VHF amp engineering advice...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: kr4wm!@sccoast!.net!
Message-ID: <MPG.eab2d7cacd4f64198968c@news.infoave.net>
Source record: 90033

OK, so I'm cheating by starting with a Motorola repeater
power amp! I recently picked up this amp which uses two
8560AS tubes. I've looked all over for a model number,
but none has presented itself. Anyhow, most of the info
I need is probably generic in nature.

This amp has a single 1P2T coaxial relay, a Magnecraft
#128 X-62. Is this common enough and cheap enough that I
could obtain another? I'm supposing I need two of these,
with interconnecting cables. Alternately, is there such
a thing as a 2P2T coaxial relay? How much should I expect
to pay for a relay for this application?

There's no plate/grid current meter, so I how will I be able
to tell when the plate(s) are properly dipped? Should I simply
load for highest power? Should I try and design a plate
current metering circuit? Do I need to monitor grid current?

There's no volt meter. Other than showing a potential problem,
is it necessary to monitor plate voltage? I could do this easily,
as the plate supply has a separate lead.

I plan on using this amp mostly for SSB, so would like to
set it up for class AB1. It's my guess that it's class C now,
because it was in FM repeater service. There's a screen voltage
adjustment on the front of the amp. Is all I need to do simply
to set this control properly, or is there something else I need
to do?

I don't anticipate large frequency excursions, maybe from 144.150
to 144.250. I _may_ use it for repeaters only in an emergency.
Is anyone familiar enough with the Motorola repeater amp designs
so that you could tell me if I'd risk exploding something by not
retuning the amp when moving from 144.2 to 147.72? The controls
for tuning this amp are: grid tuning, plate tuning, antenna
coupling, and antenna matching. I'm assuming that proper procedure
is to touch them up in that order- correct?

I probably should think of something else, but right now I can't.
If you can think of anything I haven't considered, I'd appreciate
a heads-up. This thing is too nice for me to mess up. It's clean
as a pin- no dust/rust/mouse droppings. Looks brand new. I was told
to expect about 400 watts out, but I'm guessing it'll do much more
than that on SSB. The plate transformer is HUGE!!! From the insulation
on it, I don't think it's more than 1000 volts, though.

Anybody ever mess with one of these and been where I'm headed?

Thanks for any advice- 73 all, Web Williams in Myrtle Beach, SC

Please remove all ! in e-mail address to reply!!!

# 3550. Re: How active is 2m SSB in UK?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <IQpmCnAjSVQ0Ew5i@lfheller.demon.co.uk>
Source record: 90034

In article <61rt0h$n10@ns1.qatar.net.qa>, "Derek. C. Brown"
<delboy1@qatar.net.qa> writes
> 73 de Laurens M1CCO
>>
>>It's the same where I am, in Reading. Plenty of FM and packet activity,
>>but very little SSB and CW.
>>
>>73, Leon

I've just checked the small Yagi I use for 2 m SSB, and the VSWR is over
3:1, which is one reason why I'm not hearing very much. It was 1:1 when
I put it up.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3551. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: aczepczy@d.umn.edu
Message-ID: <3441A669.6032@d.umn.edu>
Source record: 90035
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

I don't know about all of you, but I don't want anybody to listen to my conversations via my cellular phone.

Besides what is the pleasure of listening to other people's conversatiosn. IT's NONE OF YOUR BUSINESS ANYWAY!!!

# 3552. Re: Paralleled power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <344172C0.103E@delphi.com>
Source record: 90036

CooperJim wrote:
> So its possible, but be aware.

Hi Jim, a good rule of thumb is, if the supply is not designed for paralleled operation (a lot are and a lot aren't), don't do it.

73, Cecil, W6RCA

# 3553. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <34417224.7102@delphi.com>
Source record: 90037

John Miles wrote:
> For casual shortwave experimentation, I'd take a look at the line of
> direct digital synthesis (DDS) chips from Analog Devices

Hi John, actually PLLs are easier to us as a local oscillator than DDS chips because PLLs tend to be a lot more linear. It is much harder to get rid of spurious responses with a DDS chip than with a PLL. Motorola had some pretty good application notes on PLLs last time I checked.

73, Cecil, W6RCA

## 3554. Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: kclwood@bak2.lightspeed.net
Message-ID: <34403685.82603849@news.lightspeed.net>
Source record: 90155

My buddy and I are new to amateur radio and have read several stories about people who have built their own radios. As we are semi-technologically inclined, this interests us greatly. Can anyone point us in the right direction of where to start? Any help would be GREATLY appreciated!!

Thanks,

Larry Wood (ke6ehr)

# 3555. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <343fe877.1059448@news.online.no>
Source record: 90156

On Sat, 11 Oct 1997 00:13:55 GMT, wrt@eskimo.com (Bill Turner) wrote:

>The same thing has been done for years with Baudot RTTY, and
>especially now with K6STI's program which uses what he calls a
>"numerical flywheel". It pulls signals out of the noise like magic.
>And of course RTTY runs at 60 words per minute, far faster than most
>of us can do CW. Put aside the key for a while and grab the keyboard.
>You'll be pleasantly surprised.
>
>73, Bill W7TI
>
100LPM cw is 16.6baud - about 1/3 of RTTY speed
an optimal cw rx system may have some signal/noise advantage over
RTTY, or you may use some lower power. CW signals occupy less
spectrum, more amateurs may be QRV within a bandsegment using cw than
RTTY

because of the low power needed the use of CW may have an
environmental advantage, too

By the way, is still the mainline TT/L tube type TU (QST 1964?)
expected to be the best?

---
Email: LA8AK at online dot no

## 3556. Re: Antenna for Attic????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: DAVID ROWE <elim@ime.net>
Message-ID: <61q2v6$9q1$1@news.ime.net>
Source record: 90157
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec,radio.shortwave,rec,radio.scanner

hi John,

Radio Shack also sells a nice neat swl antenna made up from rotor 0r flat ribbion cable. it is actually paralell dipoles.. and It may be able to fit in you attic.

73 Dave

# 3557. Re: Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <$jEfUhAcwJQ0Ew9T@pacsat.demon.co.uk>
Source record: 90158

In article <34403685.82603849@news.lightspeed.net>, Larry Wood
<kclwood@bak2.lightspeed.net> writes
>My buddy and I are new to amateur radio and have read several stories
>about people who have built their own radios. As we are
>semi-technologically inclined, this interests us greatly. Can anyone
>point us in the right direction of where to start? Any help would be
>GREATLY appreciated!!
>
>Thanks,
>
>Larry Wood (ke6ehr)
>
>

Check out Hands Electronics on web pages below.

73 Simon

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 3558. WTB:EIMAC 3CPX5000 PULLOUTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: w6kkt@frazmtn.com
Message-ID: <3441bd06.885960@news.frazmtn.com>
Source record: 90159

```
WTB: Eimac 3cpx5000 tube "pullouts" from MRI machines. Please
contact Jesse, 805-242-7650 or email: w6kkt@frazmtn.com
```

# 3559. Re: Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3440b47c.79732205@news.erols.com>
Source record: 90160

On Sun, 12 Oct 1997 02:33:21 GMT, kclwood@bak2.lightspeed.net (Larry Wood) wrote:

>My buddy and I are new to amateur radio and have read several stories
>about people who have built their own radios. As we are
>semi-technologically inclined, this interests us greatly. Can anyone
>point us in the right direction of where to start? Any help would be
>GREATLY appreciated!!
>
>Thanks,
>
>Larry Wood (ke6ehr)
>
>
Larry: Go for it! You can definitely do it. Be careful in selecting your circuit. Look for something simple - nothing exotic or experimental. Take it one step at a time. If you have never built anything before, you might want to start by building a simple crystal controlled CW transmitter. Next step up might be a simple Direct Conversionn receiver. With one of these you could listen to HF CW and SSB QSOs and you could pair it up with the transmitter mentioned earlier. Later, you might want to build a simple Superhet Receiver.

But a lot of books. The ARRL has an excellent selection (Solid State Design, QRP classics etc.)

Be persistent. Don't give up if you don't succeed in your early efforts. Consult with more experienced hams (here or in person) if you run into trouble.

Good luck! 73 Bill N2CQR

## 3560. Re: Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: jeff@jehosophat.com
Message-ID: <slrn641iee.8d6.jeff@photuris.jehosophat.com>
Source record: 90161

<kclwood@bak2.lightspeed.net> said this:
>My buddy and I are new to amateur radio and have read several stories
>about people who have built their own radios. As we are
>semi-technologically inclined, this interests us greatly. Can anyone
>point us in the right direction of where to start? Any help would be
>GREATLY appreciated!!

take a look at this cool project:

http://brink.com/brink/QRP/

73 de n9avg,
--
jeffrey davis <jeff@jehosophat.com>
http://jehosophat.com/

# 3561. Re: Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Chuck Reichert <kd9jq@imaxx.net>
Message-ID: <34408b1b.0@news.imaxx.net>
Source record: 90162

Although not inteneded to provide kit info I do have freeware
tools,circuits,references for homebrewing.

Try: http://www.imaxx.com/~kd9jq

73 Chuck KD9JQ

Larry Wood wrote in message <34403685.82603849@news.lightspeed.net>...
>My buddy and I are new to amateur radio and have read several stories
>about people who have built their own radios. As we are
>semi-technologically inclined, this interests us greatly. Can anyone
>point us in the right direction of where to start? Any help would be
>GREATLY appreciated!!
>
>Thanks,
>
>Larry Wood (ke6ehr)
>
>
>

# 3562. Re: Formula for calculating microstrip width ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-12 00:00:00 UTC
From: Chuck Reichert <kd9jq@imaxx.net>
Message-ID: <34408bad.0@news.imaxx.net>
Source record: 90163

Also try http://users.aol.com/maxfro/private/mstrip.html

He has an online microstrip calculator.

Chuck KD9JQ

Leon Heller wrote in message ...
>In article <34424586.3843405@news.demon.co.uk>, Steve <steve@nospamthank
>s.tenchy.demon.co.uk> writes
>>Hi,
>>
>>I need to find the right width for 50R microstrip, depending on the Dk
>>(er) of the board and the thickness. I have come accross tables, but
>>they are really hard to extract an exact value. There must be a
>>formula around, right ?
>
>You'll find a formula on page 24-25 of the book: Reference Data for
>Radio Engineers. I don't have the actual formula, I just have a
>photocopy of the next page with an experimentally determined graph. The
>top of the page I've got refers to h=dielectric thickness. w=width of
>strip, eta=dielectric constant and mu=permeability.
>
>According to the ARRL UHF/Microwave Experimenter's Manual, you'll also
>find formulae in the Dec. '77 issue of, the sadly defunct, Ham Radio, in
>an article by Jim Fisk. What became of him, by the way?
>
>Leon
>--
>Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
>Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
>See http://www.lfheller.demon.co.uk/rcm.htm for details of a
>low-cost reconfigurable computing module using the XC6216 FPGA
>
>

# 3563. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <61tvlq$sdq@apple.telalink.net>
Source record: 89965

Jim <jstrohm@taxes.net> wrote:
>JS wrote:
>>
>> Perhaps one way to deal with these jokers tying up the net is to have ISP's
>> start charging them for the gross amount of junk e-mail they send...
>BZZZT!
>Wrong answer, but thanks for playing our game, "What's my SPAM!"
>Actually, this is EXACTLY what the SPAM-meisters like
>Sanford Wallace do. They make the originators of SPAM pay
>to send messages out from their gateway. They collect a fairly
>reasonable fee, based on the cost to provide this service. However,
>it nowhere approaches the cost to the rest of the world -- and since
>the SPAMmers pay a service provider to unleash their torrent of
>swill on the rest of us, it legitimizes their actions.

Some people have, however, suggested exactly what "JS" did.
Difference being, that under their plan *all* ISPs would charge per
byte*addressee received. So if I sent a 1000 byte message to
jstrohm@taxes.net, taxes.net would charge telalink.net 1000*1*0.01, or
10 cents; presumably, telalink.net would in turn charge me that 10
cents. If I sent the same message to 10000 addressees, taxes.net
would charge telalink.net 1000*10000*0.01, or $1000. If telalink.net
didn't pay up, taxes.net would reject future email from telalink.net
users. Again, presumably telalink.net would pass that $1000 charge
along to me.

I do see two other problems in this scheme though. First, handling
mailing lists, where one message is sent to several hundred (or
thousand) recipients *who want it*. Unfortunately, this is
technically identical to spam -- only by analyzing the contents can
one tell it isn't. Second problem is when someone sends a single very
large message (for example, with an executable binary attached) to one
addressee. Unfortunately, fighting this crap just isn't easy...

73 DOug

# 3564. Re: Krylon spray?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <61uiq3$jnu@mtinsc03.worldnet.att.net>
Source record: 89966

Ian,
I have a can in front of me. It says (only) Krylon "Crystal Clear
Acrylic Coating" Made by Sherwin-Williams Co. Solon, Ohio 44139
I hope this is helpful... BTW, Have a son named Ian... White
73, _Woody_

Ian White, G3SEK wrote:
>
> I'm looking for a European equivalent for Krylon lacquer spray - does
> the label say anything about the chemical formulation? (For example, is
> it cellulose, vinyl or polyurethane?)
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.demon.co.uk/g3sek

--
de Woody, WB4QXE, woody/white@worldnet/att/net (Non-spamers, change /
to . )
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

# 3565. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: jwkelley@e4e.oac.uci.edu
Message-ID: <61th5j$n3d@news.service.uci.edu>
Source record: 89967
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

In article <343A2822.212E@crpl.cedar-rapids.lib.ia.us>,
William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

"I really think that many of us are not aware of the *real* agenda in
this discussion of Morse CW vs other modes."

"The name of the game is "control", where a certain small but strident
and militant group is not satisfied to do what they want to do, they
want to tell everyone else what to do. And anyone who doesn't want to
fall into line is subjected to ridicule and name calling, such as
["lazy", "worthless", "no-coder"] and so forth, and is subjected
to other curmudgeonly behavior. The buzz word for them is "educate".
They are going to educate the ignorant mob."

"Sociologists are well aware of the dynamics of the "clique" group, and
its relationships with "outsiders" and "non-believers". This is a
classic example, right out of the textbooks. The rationale is one thing,
but the real game is something else."

>Bill W0IYH

The shoe fits on the other foot as well Bill.

Jim AC6XG

# 3566. Re: Building a radio - Correction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "Charles H. Reichert" <qa2696@email.mot.com>
Message-ID: <34422AA5.288D@email.mot.com>
Source record: 89968

Chuck Reichert wrote:

> Although not inteneded to provide kit info I do have freeware
> tools,circuits,references for homebrewing.
>
> Try: http://www.imaxx.com/~kd9jq

Correction, that should be http://www.imaxx.net/~kd9jq

73 Chuck KD9JQ
>
> Larry Wood wrote in message <34403685.82603849@news.lightspeed.net>...
> >My buddy and I are new to amateur radio and have read several stories
> >about people who have built their own radios. As we are
> >semi-technologically inclined, this interests us greatly. Can anyone
> >point us in the right direction of where to start? Any help would be
> >GREATLY appreciated!!
> >
> >Thanks,
> >
> >Larry Wood (ke6ehr)
> >
> >
> >

--

| Motorola CIG phone:847-632-6669 Work |
| Charles H. Reichert fax:848-632-6999 Work |
| IL-27 Post 2D7 |
| 1501 W. Shure Drive mailto:qa2696@email.mot.com |
| Arlington Hgts, IL. 60004 |
| |
| http://www.cig.mot.com/Organization/wwtools/cstar.html |

# 3567. Need Motorola Micor repeater amp info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: kr4wm!@sccoast!.net!
Message-ID: <MPG.eac996cda0d74c998968d@news.infoave.net>
Source record: 89969

I'm trying to convert a Motorola Micor repeater amp from
class C to class AB1 or AB2. Does anything need to be done?
It appears there's adjustable screen voltage- is all I need
to do adjust this? There's two 8560AS tubes in it. In SSB
service, with 10 watts RF in, how much should I expect out?
Thanks, -Web

Please remove all ! from e-mail address to reply!!! Thanks!

# 3568. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34424D59.6548@pop.removethistomailme.net>
Source record: 89970

Charles H. Reichert wrote:
>
> "Stuff Deleted"
>
> I have a pair of freeware PLL programs & user guides at:
>
> http://www.imaxx.net/~kd9jq
>
> See PLL2, PLL3. These should be helpful in getting you going.
>
> 73 Chuck KD9JQ

Not sure if it's just me or not, but the various links (software,
circuits) don't appear to do anything?

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 3569. Re: QSL Buro question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <3441F622.6A63@taxes.net>
Source record: 89971

I thougnt the ARRL QSL buro was primarily a DX buro, and
domestic use was discouraged. The Operating Manual has
up-to-date BURO info. You could also call the ARRL and
ask -- they're pretty good at providing accurate, up-to-date
info over the phone.

If your friend wants to see cards any time this year, he should
QSL direct -- and provide a SASE for domestic exchanges. If
you have never used the BURO, you haven't come to realize that
it should be spelled "burro" because there's this one lone little
donkey that carries all the cards all over the world. Like
Santa Claus and about as frequent, but not as fast because he
can't fly.

N6OTQ

## 3570. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Skeptic <village1@lightspeed.net>
Message-ID: <34426A9A.3F29@lightspeed.net>
Source record: 89972
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Anyone that uses a cell phone should realize that they may be being monitored. As far as Im concerned anything transmitted via rf is free game to "tune in" on.

# 3571. DB1NV Spectrum Analyser - VHF Communications Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Chris Price <c.price@virgin.net>
Message-ID: <61u3f0$ae6$1@nclient3-gui.server.virgin.net>
Source record: 89973

Anybody wish to swap experiences in constructing the 500MHz Spectrum Analyzer published in the VHF Communications magazine.

Chris G4AGJ

# 3572. Re: Krylon spray?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <3RvyRWACboQ0EwOU@ifwtech.demon.co.uk>
Source record: 89974

Roy Lewallen wrote:

> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>>
>>I'm looking for a European equivalent for Krylon lacquer spray

>
>Women's fingernail polish is the same basic formulation, so if you can find
>the same stuff in a can, you've got it. Lacquer is a common type of
>fast-drying paint, so I'm sure you have it there -- once you figure out
>what it's called.

No problem with lacquer = lacquer, but in modern usage that doesn't specify what it's made of, or fingernail polish either. The consensus (including several e-mails) seems to be that Krylon is acrylic, which at least fits the name.

>I have fond memories of trying to buy denatured alcohol in Australia some
>years ago. Fortunately the chemist (which we would call a druggist) was a
>man of science so we were able to communicate. I never would have guessed
>"methylated spirit", but once I heard the term it was obvious that was what
>I was after.

Thank you, Roy, from my wife who is a US teacher of English and has lived here for twenty years, but has just learned something new about alcoho... no. let me rephrase that... ["You'd better!" she says.]

>
>Was it Churchill who declared the U.S. and England to be "countries divided
>by a common language"?

"England and America are two countries separated by the same language," is attributed to George Bernard Shaw (but of course that's pronounced BERNard, not bernARD).

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 3573. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Mike - WB0IKT <crucis@sky.net>
Message-ID: <34427DE1.8F89B696@sky.net>
Source record: 89975
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Doran Platt wrote:
>
> SCO wrote:
>
> > NHCPL@COUPLE.COM (nhcpl) wrote:
> >
> > >If you would just sit back and think for 2 minutes - you will see
> > that
> > >Americans are loosing thier rights "ONE-BY-ONE"....This is just one
> > >more piece.
> > >
> > >Just think about it.
> > >
> > >(and the only reason this came about is that ole' NEWT got burnt)
> > >
> > And the way Newt got burned is by a couple listening (against the
> law)
> >
> > in their car ... then making a tape (against the law) ... then
> sending
> >
> > that tape to a democrat congressman (against the law) ... who then
> > committed a federal crime by playing that tape to the public. But
> > because he played the tape on the floor of the House he is protected
> > from prosecution.
> >
> > I wonder ... has that couple been prosecuted under the federal
> statues
> >
> > yet? They certainly should be to the maximum extent of the law to
> set
> >
> > an example for others!!!!
>
> If I read the news correctly, they got a $500 fine and had to
> promise
> not to do it again.

I was curious and called Newt's DC office.

The couple has NOT been charged, nor fined. Janet Reno is sitting on
this one too!

--
==========
Mike Watson, WB0IKT QCWA Mbr# 28651, Mid-Continent Chapter
#35
Raymore, Missouri, USA Grid: EM28st
http://www.sky.net/~crucis E-mail: crucis@sky.net or WB0IKT@juno.com
==========

# 3574. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@antispam.trader.com>
Message-ID: <3442C212.775D@antispam.trader.com>
Source record: 89976

John Miles wrote:
> > http://www.imaxx.net/~kd9jq
> Not sure if it's just me or not, but the various links (software,
> circuits) don't appear to do anything?

Me too.
---
Dennis n9vem

# 3575. FS: Low prices on NOS Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <61utra$lq$22@ha1.rdc1.occa.home.com>
Source record: 89977

```
NOS Tubes, large quantities of each available.
-----------------------------------------
5U4G Russian, $7.50 each
6AZ8 Philips, $3.00 each
JAN 12AT7 GE, $4.50 each
811A Chinese, $11.00 each
JAN 5751 GE, $4.00 each
5886 Raytheon, $25.00 each
6186W (6AG5WA) philips, $.25 each
JAN 6922 Philips, $3.00 each
7062/E188CC Amperex,$4.00
JAN 8106 GE, $5.00 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
For shipping cost outside of USA & Canada, e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount ( conversion rate .73 ). No minimum order.
Prices valid until 10-24-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"
Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA
```

# 3576. Re: QSL Buro question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: kmillerX@flash.net
Message-ID: <34429cbb.39363914@news.flash.net>
Source record: 89978

Tnx for the info guys, I found the address on the ARRL's web site.
Kerry Miller
kmiller@flash.net

# 3577. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: *****rfeng@mailexcite.com*****
Message-ID: <61roua$2u9@bgtnsc01.worldnet.att.net>
Source record: 90038

Perhaps one way to deal with these jokers tying up the net is to have ISP's start charging them for the gross amount of junk e-mail they send... not the best solution but a start maybe

In article <60en8h$mo0@apple.telalink.net>, desmith@telalink.net (Doug Smith) wrote:
>w1_k_sorter@qsl.net (K sorter) wrote:
>>Please realize-when I say 'attack' the spammers computer, I don't mean
>>to send it signals which will do physical harm to the spammers
>>computer!!!!
>
>There's no known way to cause physical damage to a computer by sending
>it a message/signal/packet/virus. (I suppose a lot of less-technical
>readers don't realize that -- there have been quite a few virus hoaxes
>over the years suggesting that a given virus could cause physical
>damage..)
>
>>'Attack' means to use hacking techniques, UDP specialized commands
>>sent via the network, polling-any low thruput command sent via the
>>network that causes the target computer to take time to process it,
>>and that DOESN'T genearate a reply meets this criteria.
>
>Just be aware this could be technically illegal in some jurisdictions.
>In some ways, it should be -- what happens if one of the spammers
>decides something *you're* doing is wrong & decides to attack qsl.net?
>On the other hand, if someone does attack a spammer, I'm sure not
>going to have any sympathy for the victim!
>
>73 Doug
>
>

# 3578. 40W 2Mtr Amp FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <61rqka$m4g@news.teleplex.net>
Source record: 90039

I have a Communications Concepts (I Believe) PC Board and RF Relay
a Motorola MRF240 RF Transistor, and most of the parts except heatsink
to build a simple 3.5 watts in , 35 Watts out, 13.8 volt 2 meter
amplifier. Included is a Die Cast Aluminum case. I bought the stuff at
Dayton a few years ago and never built the amp.

The amp is based on the Motorola Application Note AN-791 in the RF
Handbook which I can supply a copy. It is a Linear design with RF
Sensing to switch the RF Relay.

$75 including shipping

Pat Bunn
N4LTA

# 3579. Re: Tuning with large cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <3441D6AA.6FF1@flash.net>
Source record: 90040

Tom Bruhns wrote:
You can then plot frequency versus % rotation and see
> how (non)linear it is. Spreadsheets are quite handy for this sort
> of thing.
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com

Thanks Tom, Im putting data into Excel as we speak.

Tim

# 3580. Video Cameral help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Dale Chatham <dale@chatham.org>
Message-ID: <3441B7FF.BA4B2142@chatham.org>
Source record: 90041

I have a video camera which has a 10 pin "cannon" type connector to the outside world. This appears to be a standard type video connector.

Anyone have any info on the pin out? FYI, camera is a JVC GX-S9U.

TIA,

Dale

## 3581. MAiling list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: claudio.DEltin@rs1.telital.IT
Message-ID: <01BCD7B3.0A7E52E0@pc-claudiod>
Source record: 90042

I want receive, if possible, the Digests of Ham-Homebrew.
Thank's Very much.
73 Claudio

_____
Claudio Deltin RF - Engineering
TELITAL S.p.A.
via Stazione di Prosecco 5/B
SGONICO (TS) - Italy
Tel 39-40-4192244 / Fax 39-40-251257
E-mail: claudio.deltin@rs1.telital.it

## 3582. Krylon spray?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <xWHDQAAhYfQ0Ewf7@ifwtech.demon.co.uk>
Source record: 90043

I'm looking for a European equivalent for Krylon lacquer spray - does the label say anything about the chemical formulation? (For example, is it cellulose, vinyl or polyurethane?)

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 3583. Re: Where can I find this relay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <3441D627.412A@flash.net>
Source record: 90044

Kerry Miller wrote:
>
> I need 2 Omron relays, the number on them says G5D22423T-US. They
> have 120VAC coils. Does anybody know a good source for them?
> Thanks,
> Kerry Miller, WD5ABC
> kmiller@flash.net

Omron, my competitor, does business via industrial distributors. I'd call Omron direct and ask them for a sample they'll more than likely send you one if you don't tell them that you'll NEVER buy more than 100 pc : ) If not ask who locally sells Omron, you should be able to find Omron at Granger, Newark and many others.

Tim

# 3584. heath SA-2040 2kW tuner $225.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcd863$048de020$bc9ed8cc@km3g.cts.com>
Source record: 90045
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Very rugged full legal limit tuner. Roller inductor. 4.5kV air variables.
Built like a battleship. $225.00 shipped CONUS

Lane
Kilo Mexico Three Germany
San Diego

## 3585. Drake MN-75 200 watt tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcd863$2bf88340$bc9ed8cc@km3g.cts.com>
Source record: 90046
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

matches the 7-line. 200 watts. $150.00 shipped CONUS.

Lane
Kilo Mexico Three Germany
San Diego

## 3586. PIC Programming and Iambic Keying

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: David McKain <mckain@cemr.wvu.edu>
Message-ID: <61t9nc$5g8$1@cathedral.cerc.wvu.edu>
Source record: 90047

I am really interested in learning about PIC programming just as a point of interest and would like to build an iambic keyer, both the mechanical and electronic ends) as a project. Could anyone point me in the right direction (on the internet) for some additional info.

Thanks

Dave McKain
KC8GGV

# 3587. Morse code reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <344236C6.1885@crpl.cedar-rapids.lib.ia.us>
Source record: 90048

The purpose of this article is to encourage the homebrew experimentation with methods for improving the reception of weak-signal Morse code on the Amateur Radio bands. The motivations for this are the following:

1) Morse code, also known as on-off-keying (OOK), irrespective of other interests in speech modes such as SSB and relatively complex data modes of numerous types, is still, and is expected to remain, a mode of great worldwide interest in Amateur Radio.

2) Manual CW operation, using very simple eqipment, both transmit and receive, especially low power (QRP) equipment, and without computer (PC) assistance, is easily accessible to individuals of limited technical and financial means. CW has always been the "common denominator" mode in Amateur Radio.

3) CW operation is conducted within very narrow bandwidths, which means that a large number of stations can operate simultaneously within narrow Amateur sub-bands such as the HF CW bands.

4) There are many operators who enjoy the CW mode, and want to preserve it, in addition to the more tehnically advanced modes that are now available.

5) Morse code is a signalling method that can easily be "mapped" from dot-dash symbols to a local language such as English, German, etc. In other words it can be translated mentally by the operator without machine assistance.

From a purely technical standpoint, Morse code has limitations, relative to other "waveforms" such as FSK and a large number of phase-coherent methods. FSK requires two separate frequencies, Mark and Space, usually separated by 170 Hz. This means that conventional FSK usage doubles the band occupancy and requires *two* clear receive frequencies for perfect copy. As an alternate to this, CW mode can be received at slow speed on a *single* frequency in a very narrow bandwidth. And very simple equipment is adequate for this purpose.

In a noise background, FSK is more effective partly because there is always a signal present. CW mode, on the other hand, has to deal with "key up" (no signal) states, in which the absence of signal may imply a fairly high noise level. To the human operator these key-up states are significant information because they "separate" dots and dashes, characters and words. In other words, key-up is at least one bit of information. For example a dot followed by a space (key-up) is a two bit message and a dash is a 4 bit message (A.S. Chester, MIEE, G3CCB, Wireless World, August, 1983). Also, sometimes offsetting some of the

advantage of FSK is the fact that *some* CW transmitter designs are capable of 3 dB more long-term peak power at the 50% duty cycle of CW. It is also true that FSK must also distinguish between the signal on one frequency and the noise on another frequency. This is identical to the CW problem that I just mentioned. Still, at a very low signal-to-noise density ratio (S/N0) FSK offers an additional advantage in error rate (Carlson "Communications Systems", 1975).

Phase coherent methods such as PSK, MSK etc. offer much more improvement. The problems with these methods involve A) the complexity of the equipment and B) the very difficult problem of maintaining phase coherence, especially at HF. This is the realm of truly advanced technology that is not readily accessible to most amateur operators.

In view of these considerations a very desirable goal, from a specifically *Amateur Radio* standpoint, would be an experimental homebrew effort to develop a Morse code CW system that would A) greatly improve CW reception under weak signal and interference conditions and B) permit "interoperability" (buzz word) with CW operators who are *not* equipped with the advanced system, so that *anyone* can copy the CW signal under conditions of adequate signal levels and interference and with moderate code speeds.

How can this be accomplished? There are many approaches that could be considered. One European CW expert reports a German design that works quite well. I do not know how that system works. One basic approach could be to store a number, perhaps 10, of consecutive bits, both key down and key up, and use software decoding of these bits into dots, dashes and the three different space intervals, into alphanumeric on-screen text.

The main exercises are to A) distinguish signal from noise, just as in FSK, and B) to determine dot vs dash and the lengths of the spaces. Part B is more difficult than FSK and requires some special ingenuity, but I am sure it is definitely feasible (do-able).

The approach that I would prefer is as follows (and this is just a first cut):

1) The audio output of a conventional CW receiver is further filtered by a DSP filter with narrow bandwidth and phase linearity (zero group delay). This filter is at 500 Hz and has an adjustable bandwidth down to, say as little as 20 Hz or so.

2) The output of this filter is clocked into a CCD (charge coupled device) or "bucket brigade" with 100 taps (10 taps per bit). The clock rate can be initially set and synchronized manually by the operator, but the subsequent clock synchronization can be maintained by using the kind of "early/late" synch methods that are used in spread spectrum. The clock should have an "inertia" property that prevents rapid fluctuations. These methods are used in many applications. A follow-on project could be the fully automatic lock-up and synch process (not

necessary for starters).

3) A threshold detector distinguishes between ON and OFF. This can be set manually or it can be determined "on-the-fly" by the software, possibly using a preamble of 10 dots. An initial up-front manual adjustment would get things started.

4) Each set of ten taps corresponds to a dot length. Each set is converted to positive-going voltages, and then put through an integrate and dump filter.

5) The collection of ten outputs from the ten integrate and dump filters is then compared with the threshold and 1/0 levels are sent out for processing into text.

6) One important aspect is that 3 contiguous ON states at the outputs of the integrate and dump filters are combined to form a dash or 3 space symbol. This combining is equivalent to an additional filtering process. A method somewhat similar to this is the "Welch method", used in DSP work (Oppenheim and Schafer, 1975).

7) An alternate (possibly better) method would use *parallel* bucket brigades that are set up for A) dot plus space, B) dash plus space, C) 3 spaces and D) 5 space intervals. The exercise is then to process these with some kind of "decision making" software algorithm.

8) The processing could be done with a stand-alone gadget that uses an LCD readout plus a printout capability, or a PC interconnect. For starters, the PC approach would be better.

The final result would be a greatly enhanced capability for Morse code CW that would allow a solid interface with both computerized communication and the human operator who knows how to operate CW. This end result would be a *compromise* between the relatively inefficient Morse ON/OFF system and the other more efficient but more specialized data methods that demand data processing for the human operator.

One powerful tool that CW operators use is the fast QSK break-in mode. This should most definitely be part of the approach, for it allows error correction. This can be manually operated at first, but later on automated. We don't have to do the whole ball of wax at one time, it can be spread out.

I believe this would be a uniquely valuable enhancement of the Amateur Radio Service for this one special reason: the number one thing about CW is that the Morse code can be read mentally or written without any machine intervention, and for Amateur Radio in particular this is powerful. The enhancement in noise and interference adds additional power.

Bill W0IYH

# 3588. Cliperton-L parts unit $150.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcd8b8$af042dc0$be9fd8cc@km3g.cts.com>
Source record: 90049
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I have a 100% disassembled Dentron Cliperton-L amp minus the tubes. It is about 95% complete (parts wise) including the original filter cap board which needs work. Includes the main power xmfr, plate and filament chokes, plate tuning and loading caps, tank circuit L network, the tank door knobs, band switch, front panel meter, the entire chassis, tube sockets, etc. Does not have the output T/R relay and the ALC circuitry.

This was going to be a rebuild/upgrade project but I have since changed my mind.

Price is $150.00 for everything minus UPS charges from San Diego. A replacement pwr xmfr form Peter Dahl Co. is going for $185.00 minus shipping. My zip is 92139. Buyer pays shipping.

Lane
Kilo Mike Three Gulf
San Diego

# 3589. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "Charles H. Reichert" <qa2696@email.mot.com>
Message-ID: <34422B64.790A@email.mot.com>
Source record: 90050

"Stuff Deleted"

I have a pair of freeware PLL programs & user guides at:

http://www.imaxx.net/~kd9jq

See PLL2, PLL3. These should be helpful in getting you going.

73 Chuck KD9JQ

# 3590. antenna klm 2m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: pe1khp <pe1khp@pi.net>
Message-ID: <3442BF6C.BA9@pi.net>
Source record: 90051

```
This is a multi-part message in MIME format.

--------------450C6D9A4072
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

////
(o o)
----------------------------------------ooOO--(_)--OOoo-------
VHF DX AmateurRadio Station PE1KHP JO22XE
-----------------------------------------------------------------
Ham site Apeldoorn http://home.pi.net/~adpe1khp/home.htm
Veron Afdeling Apeldoorn http://home.pi.net/~adpe1khp/v05.htm
VERON VHF-UHF commissie http://home.pi.net/~adpe1khp/vhf.htm
-----------------------------------------------------------------
Het licht aan het einde van de tunnel, dat is de sneltrein.
-----------------------------------------------------------------

--------------450C6D9A4072
Content-Type: text/plain; charset=us-ascii; name="ANTENNA.TXT"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="ANTENNA.TXT"

Hi,

I am looking for details of a 16 LBX KLM antenna for 2 meter.
I wanted to made it my self.

I am looking too for a yagi optimizer programme. I have version 1.02
of Brain Beezley K6STI. If you can help me with that programme, please
give me then a email.

Thanks for reading this msg.

Adriaan PE1KHP.

--------------450C6D9A4072--
```

# 3591. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Spam Hater <spamh8@kktv.com>
Message-ID: <34424408.1B67@kktv.com>
Source record: 90052
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

aczepczy@d.umn.edu wrote:
>
> I don't know about all of you, but I don't want anybody to listen to my
> conversations via my cellular phone.
>
> Besides what is the pleasure of listening to other people's
> conversatiosn. IT's NONE OF YOUR BUSINESS ANYWAY!!!

Then use encryption or use landline (regular phone for
those in Rio Line California).

# 3592. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: erk <erk_nospam_@inde.mct.anl.gov>
Message-ID: <344243E4.EFA@inde.mct.anl.gov>
Source record: 90053
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

This whole business of "private conversations" on "public" airwaves is
no different than holding a "private conversation" in a crowded room
with both parties shouting at each other from opposites sides of that
room. Silly, in the extreme. How dare the other OCCUPANTS listen!
And then, add the "lawmakers" and "money makers" to the brew.. Thou
shalt not listen to private conversations on public airwaves. It is
insane!!!
The solution is a technical one. The manufacturers can make secure
systems, but IMHO fear a public backlash at the cost. Sheesh. Is there
no end?

Dick

***** My employer most likely does NOT share my opinions. *****

## 3593. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <3441F446.474A@taxes.net>
Source record: 90054

JS wrote:
>
> Perhaps one way to deal with these jokers tying up the net is to have ISP's
> start charging them for the gross amount of junk e-mail they send...

BZZZT!
Wrong answer, but thanks for playing our game, "What's my SPAM!"

Actually, this is EXACTLY what the SPAM-meisters like
Sanford Wallace do. They make the originators of SPAM pay
to send messages out from their gateway. They collect a fairly
reasonable fee, based on the cost to provide this service. However,
it nowhere approaches the cost to the rest of the world -- and since
the SPAMmers pay a service provider to unleash their torrent of
swill on the rest of us, it legitimizes their actions.

Compare it to the Nuclear Regulatory Commission deciding to
get rid of nuclear waste by mailing everybody 100 grams of
plutonium -- then requiring us to pay to dispose of it properly.
The NRC declares it legal and proper, pays for the outbound mail,
and we get burned.

The real answer is to handle UCE as equal to junk faxes, and to
handle forged headers as equal to wire fraud. Give the consumer
a significant monetary recourse in court, and give the various
levels of government a significant incentive in terms of fines
and forfeiture. Only that will end SPAM. And it will end soon
when "Send SPAM, go to jail" is a reality.

Sorry for the off-topic noise, but SPAM is the "rotten QRM" of
the 1990s.

Jim N6OTQ

## 3594. 6m amp help??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19971013175700.NAA25178@ladder02.news.aol.com>
Source record: 90055

I recently came by a tube soket assembly for a pair of 4cx250's. Thought they may make a nice building block for an amp. They have a built in screen bypass cap which measures 120nf total for both tubes. Apparently this assembly was designed for UHF/VHF use. My question is what is the minimum freq that tthe sreen bypass would be effective. I was thinking about building a 6/10 meter amp. I have figured out a way to augment the existing capacitors but had rather not. I may even cosinder using them in a 2 meter amp instead.
Any help would be gratly appreciated.

Jim

# 3595. Re: Video Cameral help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Jim Tury <tury@erols.com>
Message-ID: <34427D76.7173F4E4@erols.com>
Source record: 90056

Dale Chatham wrote:

> I have a video camera which has a 10 pin "cannon" type connector to
> the
> outside world. This appears to be a standard type video connector.
>
> Anyone have any info on the pin out? FYI, camera is a JVC GX-S9U.
>

pin1 is camera video out
pin 7 is camera audio out
pin 9 is gnd
pin 10 is battery +

other pins are camera/recorder dependent

KA4CKI

## 3596. Rotary Inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: bbenton@wave-net.net
Message-ID: <344213e0.2433387@wave3.wave-net.net>
Source record: 90057

I am building an antenna tuner and need a good heavy duty rotary
inductor. If you have one, drop me a note.
Thanks...Ben KC4F

# 3597. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34425966.511739600@news.atl.bellsouth.net>
Source record: 90058
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

On Tue, 07 Oct 1997 07:16:34 -0500, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>I really think that many of us are not aware of the *real* agenda in
>this discussion of Morse CW vs other modes. These other modes are
>presently available to anyone who wants to experiment with and use them.
>Or, STAs from FCC are available.
>
>The name of the game is "control", where a certain small but strident
>and militant group is not satisfied to do what they want to do, they
>want to tell everyone else what to do. And anyone who doesn't want to
>fall into line is subjected to ridicule and name calling,

[and imposition of government force.]

Yes that's exactly what the code test forever crowd is trying to do.
It is "my way or the highway". We''ve all heard it often enough.
And we've heard the ridicule heaped on those who disagree with
the lodge initiation that this group wants to maintain embedded in
public law as a condition of access to amateur HF frequencies.

What we've heard from the other side is a call for freedom of choice
rather than public subsidy. The merits of various communications
techniques should be judged in free and open competition, and in
free and open debate and discussion. Let the systems which best
suit the needs of particular individuals be chosen by those individuals
as a matter of informed choice, and let the choices of others be similarly
made based on their own objectives and needs without imposition
of government force into the matter.

That's the real crux of the matter. One side wants to win their point
through the use of government force to maintain a subsidy for their
particular methodology. The other side is content to let individuals
make a free and open personal choice based on the merits of the
techniques in question, confident that Adam Smith's invisible hand
will bring them success in the marketplace of ideas.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3598. Re: Krylon spray?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <61tmho$8s4$1@news1.teleport.com>
Source record: 90059

In article <xWHDQAAhYfQ0Ewf7@ifwtech.demon.co.uk>,
"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>
>I'm looking for a European equivalent for Krylon lacquer spray - does
>the label say anything about the chemical formulation? (For example, is
>it cellulose, vinyl or polyurethane?)
>
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.demon.co.uk/g3sek

Women's fingernail polish is the same basic formulation, so if you can find the same stuff in a can, you've got it. Lacquer is a common type of fast-drying paint, so I'm sure you have it there -- once you figure out what it's called. The dictionary says lacquer paint is "any of various clear or colored synthetic organic coatings that typically dry to form a film by evaporation of the solvent; esp: a solution of a cellulose derivative (as nitrocellulose)".

I have fond memories of trying to buy denatured alcohol in Australia some years ago. Fortunately the chemist (which we would call a druggist) was a man of science so we were able to communicate. I never would have guessed "methylated spirit", but once I heard the term it was obvious that was what I was after.

Was it Churchill who declared the U.S. and England to be "countries divided by a common language"?

Roy Lewallen, W7EL

## 3599. Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Mike Doyle <a3telecom@answerme.com>
Message-ID: <61tuvj$ae12877@beta.airnet.net>
Source record: 90060

What is this NewsGroup for?

http://www.freeyellow.com/members/a1telecom

## 3600. Galaxy V P/S and cable wanted!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: "g.c. mcaskill" <mcaskill@eastland.net>
Message-ID: <01bcd818$66c60740$484a65cf@mcaskill>
Source record: 90061

Looking for a p/s and cable for a Galaxy V transceiver...
Been looking for this one a long time... Please help!!!
I've been told a Heathkit HW-23 P/S will work... Any ideas?
E-mail or phone 254-442-2770... Thanks in advance!
--
Glen C. McAskill - N5HUP
ZZZmcaskill@eastland.netZZZ
(Remove the ZZZ's from the address to get the real
e-mail address---- SPAMMERS SUCK!)

# 3601. Re: Krylon spray?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <34427224.6D3C@boeing.com>
Source record: 90062

Roy Lewallen wrote:
>
> In article <xWHDQAAhYfQ0Ewf7@ifwtech.demon.co.uk>,
> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
> >
> >I'm looking for a European equivalent for Krylon lacquer spray - does
> >the label say anything about the chemical formulation?
Try searching Krylon for their Material Safety Data Sheet (MSDS) on
this.
> Was it Churchill who declared the U.S. and England to be "countries divided
> by a common language"?
Actually, I think it was an earlier PM (Tallyrand?) but is usually
attributed to Churchill.
>
> Roy Lewallen, W7EL
Roy is correct, fingernail polish is lacquer. Unfortunately, I think
the UK name for it is different.

The Krylon refered to has no pigment.

A common pigmented lacquer is Japan Black (probably called something
else these days) which in spite of its name was imported from England by
Ford for the Model Ts which is why he only painted them black.
(Eventually, he found a direct source from DuPont which after a few
years found other pigments.) I believe the source was Imperial Chemical
or one of its ancestors.
Ralph

# 3602. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-13 00:00:00 UTC
From: Brian Grier <reirgjb@ac.rnb>
Message-ID: <61tre1$fdo@brtph500.bnr.ca>
Source record: 90063
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

aczepczy@d.umn.edu wrote:
>
> I don't know about all of you, but I don't want anybody to listen to my
> conversations via my cellular phone.
>
> Besides what is the pleasure of listening to other people's
> conversatiosn. IT's NONE OF YOUR BUSINESS ANYWAY!!!

If you want to ensure privacy get a digital celluar phone and
stay in the cells that support that service. Otherwise you
are simply broadcasting an unencrypted signal over the airways.

Listening to the Police, File, Ambulance, baby monitors,
McDonalds employees, CORDLESS PHONES, and cellular phones is
something that people do. The law has always made revealing
private information illegal. Currently it is only illegal to
listen to an analog cellular phone, not a cordless phone.
Restricting access to scanners and monitors will not greatly
increase your privacy.

Brian

# 3603. Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: Derk & Linda Haag <haag@nwlink.com>
Message-ID: <3443277F.E733D2D2@nwlink.com>
Source record: 89979
Body handling: HTML body converted to readable text

Does any one know of any amp circuits for the 27.Mhz range
Approximately 35 - 50 - 100 watt

Please E-Mail me....
CB

Thanks

Does any one know of any amp circuits for the 27.Mhz range

Approximately 35 - 50 - 100 watt

Please E-Mail me....

CB <haag@nwlink.com>

Thanks

## 3604. Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: rick@area.com
Message-ID: <61upd0$ip5$1@nixon.area.com>
Source record: 89980

I would like to hear from anyone with experience homebrewing
a solid state HF power amplifier, especially at the legal limit
level. I see a lot of postings about tube amplifiers, but
no solid state. Outside of ham radio, I believe that no
new designs are using tubes at the 1500 watt level. Am I
unaware of some reason why tubes are great for ham amplifiers?
Also, is anyone aware of a commercially available ham linear
that runs 1500W PEP output using solid state devices? All
the solid state ham linears I've seen are not legal limit.

Rick Karlquist N6RK
rick@area.com

# 3605. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: Daniel Mikos <dmi853@swbell.net>
Message-ID: <34433CFC.DE6FC8F@swbell.net>
Source record: 89981
Body handling: HTML body converted to readable text

You do know that operating a linear amplifer in the 11 meter band is
against the rules and regulations.
You need to read Part 95 of the FCC rules and regulations.

Derk & Linda Haag wrote:

> Does any one know of any amp circuits for the 27.Mhz range
> Approximately 35 - 50 - 100 watt
>
> Please E-Mail me....
> CB
>
> Thanks

You do know that operating a linear amplifer in the 11 meter band is against
the rules and regulations.

You need to read Part 95 of the FCC rules and regulations.

Derk & Linda Haag wrote:

Does any one know of any amp circuits for the
27.Mhz range

Approximately 35 - 50 - 100 watt

Please E-Mail me....

CB <haag@nwlink.com>

Thanks

# 3606. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: 1RealHope <davidc@bit-net.com>
Message-ID: <01bcd841$e32d4540$118a92d0@bit-net.bit-net.com>
Source record: 89982

Gary:

Why would you do that to the Extras who value their own "sanctuary"?
Seems they earned it by completing the toughest possible testing.

I'm sure a sub-segment of the existing segment already used by folks for
morse code could be set up as a "sanctuary" for code, free of competing
mode types.

DavidC AA1FA (Ayuh, an Extra who would like some peace and quiet for a
qso now and then!)

> I'd even suggest using the existing Extra segments
> at the lower ends of the HF bands for this purpose.
> Gary Coffman

# 3607. Re: Morse code reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcd834$720a2de0$0100005a@wa6vse>
Source record: 89983

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<344236C6.1885@crpl.cedar-rapids.lib.ia.us>...
> The purpose of this article is to encourage the homebrew experimentation
> with methods for improving the reception of weak-signal Morse code on
> the Amateur Radio bands. The motivations for this are the following:
>
> 1) Morse code, also known as on-off-keying (OOK), irrespective of other
> interests in speech modes such as SSB and relatively complex data modes
> of numerous types, is still, and is expected to remain, a mode of great
> worldwide interest in Amateur Radio.

You hope ... I believe it will survive, even if forced learning and
mandatory tests are eliminated, but "remaining a mode of great world-
wide interest" is, IMHO a stretch ...

> 2) Manual CW operation, using very simple eqipment, both transmit and
> receive, especially low power (QRP) equipment, and without computer (PC)
> assistance, is easily accessible to individuals of limited technical and
> financial means. CW has always been the "common denominator" mode in
> Amateur Radio.

Some truth, some "feel-good" rhetoric, some mythology ...

> 3) CW operation is conducted within very narrow bandwidths, which means
> that a large number of stations can operate simultaneously within narrow
> Amateur sub-bands such as the HF CW bands.

But MORE stations could operate simultaneously within those same narrow
segments by using more modern techniques that are only marginally more
"complicated."

> 4) There are many operators who enjoy the CW mode, and want to preserve
> it, in addition to the more tehnically advanced modes that are now
> available.

Partially true ... there are also rabid "Morse forever and nothing else
will make you a 'Real Ham'" folks who seem intent on keeping anything
more modern from gaining a foothold in "their" bands.

> 5) Morse code is a signalling method that can easily be "mapped" from
> dot-dash symbols to a local language such as English, German, etc. In
> other words it can be translated mentally by the operator without
> machine assistance.

So? Yes, ALL it does is provide a representation of the (usually
"Arabic") alphabet, nothing more. As far as "mental translation"
the same "attribute" can be attached to Baudot of ASCII at comparable

speeds (if the Baudot or ASCII operators would slowwww wayyyy dowwwn.)
The fact that those other codes are *usually* decoded by some sort
of electronic decoder is mostly because it is trivial to construct
such apparatus and they are capable of operating MUCH faster than
humans can copy by ear.

> From a purely technical standpoint, Morse code has limitations, relative
> to other "waveforms" such as FSK and a large number of phase-coherent
> methods. FSK requires two separate frequencies, Mark and Space, usually
> separated by 170 Hz.

The 170 Hz shift is a "convention" not a requirement ... and that shift
is capable of supporting FAR higher transfer rates than Morse operators
can handle ...

> This means that conventional FSK usage doubles the
> band occupancy and requires *two* clear receive frequencies for perfect
> copy. As an alternate to this, CW mode can be received at slow speed on
> a *single* frequency in a very narrow bandwidth.

FSK can retain "orthogonality" down to tone spacings of 1/2(T) (where
"T" is the symbol rate for coherent demodulation and 1/T for non-
coherent demodulation ... other techniques can result in higher "bits/Hz"
numbers than simple BFSK, but BFSK is probably the simplest to implement
of all of the digital modes.

> And very simple
> equipment is adequate for this purpose.

The transmitter and receiver for BFSK are only marginally more
complicated than an OOK rig and either technique could be used
to transmit/receive Morse ... though far better codes are available
and could just as easily be copied by ear at the slow rates normally
associated with OOK Morse ... there is even a body of evidence, it
seems, that the human ear is more sensitive to subtle changes in
pitch in a noisy environment than subtle changes in amplitude ...
thus it seems that FSK would also have a decoding advantage in
"wetware" not just in hardware.

> In a noise background, FSK is more effective partly because there is
> always a signal present. CW mode, on the other hand, has to deal with
> "key up" (no signal) states, in which the absence of signal may imply a
> fairly high noise level. To the human operator these key-up states are
> significant information because they "separate" dots and dashes,
> characters and words. In other words, key-up is at least one bit of
> information.

Only if the S/N is high enough that you can reliably discriminate
a "space" from a FADE ... holes is holes ...

> For example a dot followed by a space (key-up) is a two bit
> message and a dash is a 4 bit message (A.S. Chester, MIEE, G3CCB,
> Wireless World, August, 1983). Also, sometimes offsetting some of the

> advantage of FSK is the fact that *some* CW transmitter designs are
> capable of 3 dB more long-term peak power at the 50% duty cycle of CW.

Yet that 3 dB due to duty-cycle limitations at best only partly
compensates for the clear 6-9 dB advantage of FSK ... and that
ignores the fact that it's easy to add FEC to the digital signal
with its uniform code ...

> It is also true that FSK must also distinguish between the signal on one
> frequency and the noise on another frequency.

True, but that's trivial for a correlator and an integrate and dump.

> This is identical to the CW problem that I just mentioned.

It is NOT "identical" ... the "unvoiced data" in the CW signal results
in a more sparse decoding matrix, as Gary pointed out the other day.

> Still, at a very low signal-to-noise
> density ratio (S/N0) FSK offers an additional advantage in error rate
> (Carlson "Communications Systems", 1975).

And at higher S/No ratios, the errors in machine-decoded FSK will be
orders of magnitude lower than typical "human error" ... or do you
contend that most human operators can copy hundreds of thousands of
characters of high speed Morse without a single error?

> Phase coherent methods such as PSK, MSK etc. offer much more
> improvement. The problems with these methods involve A) the complexity
> of the equipment and B) the very difficult problem of maintaining phase
> coherence, especially at HF. This is the realm of truly advanced
> technology that is not readily accessible to most amateur operators.

Baloney ... (the "truly advanced technology that is not readily
accessible to most amateur operators" part, that is ...) This stuff
has been well-known for quite a few years ... yes, improvements are
still being made in equipment and methods, but the basics are readily
available in a wide variety of references for all to see and learn.
The problem is that too many people spend all of their time re-enacting
things from the 1920s-->1940s and virtually no time improving their
technical knowledge and skills.

> In view of these considerations a very desirable goal, from a
> specifically *Amateur Radio* standpoint, would be an experimental
> homebrew effort to develop a Morse code CW system that would A) greatly
> improve CW reception under weak signal and interference conditions and
> B) permit "interoperability" (buzz word) with CW operators who are *not*
> equipped with the advanced system, so that *anyone* can copy the CW
> signal under conditions of adequate signal levels and interference and
> with moderate code speeds.

Sounds like a waste of time to me ... but if it blows air up your
skirt, knock yourself out ... just don't try to use it as some sort
of "justification" for maintaining Morse as the penultimate of

radio communications ... 'cause it's FAR from it ...

[snipped long, drawn-out, proposal of questionable technical
merit ... seems like Bill still doesn't understand where the
demodulator stops and the decoder begins ... oh, well ...]

> I believe this would be a uniquely valuable enhancement of the Amateur
> Radio Service for this one special reason: the number one thing about CW
> is that the Morse code can be read mentally or written without any
> machine intervention,

Again, the EXACT same thing can be said for FSK using Baudot or
ASCII as long as you're willing to SLOWWW WAYYY DOWWWN to rates
that are comparable to OOK Morse transmission rates.

The entire argument of that Morse is "superior because it can
be copied in one's head" is a Potimkin (sp?) Village/Emperor's
Clothes construct ... a scam which attempts to conceal the facts
for the purpose of deterministically arriving at the
desired/predetermined/(pro-Morse) "conclusion."

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3608. Re: antenna klm 2m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <61vkka$8ds_001@leeds.ac.uk>
Source record: 89984

In article <3442BF6C.BA9@pi.net>, pe1khp <pe1khp@pi.net> wrote:
>This is a multi-part message in MIME format.
>
>
>////
> (o o)
>-----------------------------------------ooOO--(_)--OOoo-------
>VHF DX AmateurRadio Station PE1KHP JO22XE
>-------------------------------------------------------------
>Ham site Apeldoorn http://home.pi.net/~adpe1khp/home.htm
>Veron Afdeling Apeldoorn http://home.pi.net/~adpe1khp/v05.htm
>VERON VHF-UHF commissie http://home.pi.net/~adpe1khp/vhf.htm
>-------------------------------------------------------------
>Het licht aan het einde van de tunnel, dat is de sneltrein.
>-------------------------------------------------------------
>
>
>Hi,
>
>I am looking for details of a 16 LBX KLM antenna for 2 meter.
>I wanted to made it my self.
>
>I am looking too for a yagi optimizer programme. I have version 1.02
>of Brain Beezley K6STI. If you can help me with that programme, please
>give me then a email.
>
>Thanks for reading this msg.
>
>Adriaan PE1KHP.
>
>

Although I don't have a Yagi optimiser program there was an interesting
article on yagi design using genetic algorithms in VHF Communications/UKW
Berichte in issue 1 or 2 of 1997 which gave dimentions for a yagi with 54dB
FB ratio.

73 de Laurens M1CCO

# 3609. FREE MOTOROLA PAGERS! GET YOURS TODAY!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: info@pgrds.com
Message-ID: <3442cf58.0@Crypt.NetGoth.COM>
Source record: 89985

**********

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**********CALL 1-800-784-6452 CERTIFICATE #4248000**********

# 3610. FREE LIST: McMurdo Silver Material (c1930's)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: ghg3@aol.com
Message-ID: <19971014114701.HAA02674@ladder01.news.aol.com>
Source record: 89986

FREE LIST: McMurdo Silver Material (c1930's)

*
If you are interested in McMurdo Silver, let me know!

I just picked up some nice old McMurdo Silver mail order ephemera, and I'll be sending out periodic announcements to those interested, when I put each lot up for sale.

Each lot comes complete in its original envelope, as sent to the prospective buyer (order form, price list, cover letter, etc.) back in the mid 30's.

I have six lots. They will not be auctioned. They will be sold on a first-come-first-serve basis.

By requesting to be on this McMurdo Silver list, you will receive only six email announcements regarding the McMurdo Silver material (one per lot), then you will receive no more, I will dump the list, and I won't bother you anymore (unless you request to be bothered).

Request to be on this list! If you're a McMurdo Silver buff, you won't want to miss it!

George Gifford
ANCESTRY CONNECTION
36 Alton Avenue
Cumberland, RI 02864
ghg3@aol.com

# 3611. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: "Charles H. Reichert" <qa2696@email.mot.com>
Message-ID: <34437D28.26B1@email.mot.com>
Source record: 89987

John Miles wrote:
>
> Charles H. Reichert wrote:
> >
> > "Stuff Deleted"
> >
> > I have a pair of freeware PLL programs & user guides at:
> >
> > http://www.imaxx.net/~kd9jq
> >
> > See PLL2, PLL3. These should be helpful in getting you going.
> >
> > 73 Chuck KD9JQ
>
> Not sure if it's just me or not, but the various links (software,
> circuits) don't appear to do anything?

Everything seems OK here from work today (10-14-97). These links just scroll down the page to the subject matter, which you can then click on to bring up a page on the particular item.

73 Chuck KD9JQ

# 3612. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34438bd2.590195589@news.atl.bellsouth.net>
Source record: 89988
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

On Mon, 13 Oct 1997 15:00:33 -0500, Mike - WB0IKT <crucis@sky.net> wrote:
>Doran Platt wrote:
>> If I read the news correctly, they got a $500 fine and had to
>> promise
>> not to do it again.
>
>I was curious and called Newt's DC office.
>
>The couple has NOT been charged, nor fined. Janet Reno is sitting on
>this one too!

If that's what Newt's office told you, they're wrong. Doran is correct
that they plea bargained and settled with a $500 fine and no jail time.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3613. Re: Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3443750f.584368040@news.atl.bellsouth.net>
Source record: 89989

On Sun, 12 Oct 1997 15:18:45 -0700, Dennis Erwin Thurlow
<geosynq@antispam.trader.com> wrote:
>Bill Meara wrote:
>> >My buddy and I are new to amateur radio...built their own radios
>> >...this interests us greatly...point us in the right direction
>> >Larry Wood (ke6ehr)
>>
>> you might want to start by building a simple...CW transmitter.
>> Next step...a simple Direct Conversionn receiver...listen to
>> HF CW and SSB QSOs and you could pair it up with the transmitter
>> mentioned earlier. Later, you might want to build a simple Superhet
>
>Bill,
>It's nice that you answered these guys, but odds are they're
>no-code techs. Most new hams are. They probably
>want a 2m FM transciever. A direct conversion unit ought to
>be as simple as a variable source, a VFO, a mixer/detector, and an
>op-amp. Problem is...all the "build it cheap and quick" articles
>_are_ for the 40m CW crowd! Show me/them _one_ schematic for the
>above unit, with cheap, exact, current, part numbers.
>----
>Dennis n9vem

For a single chip 2m FM transmitter, see the Motorola appnote for the MC2833 (follow it with a single transistor tripler to get to 2m, or two triplers to get to 70cm). For a single chip receiver, see the Motorola appnote for the MC13135 (2m). At one time, Motorola was giving away evaluation kits for these two chips, IE, you got chips, the appnote, and a circuit board. The passive parts needed are listed in the appnote complete with part numbers and sources. I don't know if they still have any of these evaluation kits, I got mine a couple of years ago, but the appnote is still available.

The single chip receiver can stand the addition of a preamp (there are many circuits for preamps in the Handbook, or in the Proceedings of the Central States VHF Conference, which would be suitable). And the transmitter chip only puts out 10 mW, so an amplifier following it will be helpful. One of the hybrids sold by RF Parts will do nicely. You also need an audio output amp for the receiver, the classic LM386 circuit will do, or Motorola has a chip specifically for this purpose which features a compatible squelch gate.

This can make a nice simple basic rig that isn't challenging to build. The availability of subsystem ICs and hybrid power modules has made building VHF+ rigs easy. (Build it in modular sections.) It won't compete with commercial equipment in bells and whistles,

but it will serve to get you on the air. Crystal it for your favorite repeater or simplex frequency. It shouldn't cost over $50, and the bulk of that is in the crystal(s) and the hybrid amp.

(But note that you can get a commercial surplus Motorola or GE FM rig for $50 and convert it to the amateur bands for the cost of a pair of crystals. This gets you tight helical filters in the front end for superior pager crud rejection, and an excellent power amplifier to a really decent power level, IE 80 to 110 watts. This is the best way to go if you just want a good rig for the least expense.)

For a bit more challenge and flexibility, the Rick Campbell R2 and T2 designs (in the Handbook, kits available from Kanga) allow you to work SSB/CW on any band from 160m to 70cm depending on the LO you choose (You might want to use one of the DDS circuits recently published in 73 and QST, or a simple crystal oscillator will do). Again for more power, the T2 needs a power amp, and again RF Parts has suitable hybrid bricks to handle that for 2m or 70 cm. For HF, you'll likely want to build a discrete amplifier using either bipolar or FET power transistors. Chris Boswick's book, _RF Circuit Design_, can help you there. Or you might consider one of the amplifiers featured in Motorola appnotes for output power up to the 140 watt level.

Building respectable HF equipment is more difficult than building VHF+ equipment because you generally need much better selectivity and the ability to handle strong adjacent channel signals, and you generally need more output power to be effective, but it isn't all that hard. Again, build in modular sections so that you can easily isolate and troubleshoot any construction or design problems. This one may cost you a bit over $200 to build unless you shop very carefully.

If you want really hot performance, modify the R2 to use a DSP back end. I use the Analog Devices evaluation board for this. This simplifies the R2 because you can dump the opamps used for gain and audio phasing, and do that in software. It also allows you to demodulate arbitrary modulations, including FM, FSK, or PSK as well as SSB and CW. You can also modify the T2 the same way so you can generate arbitrary modulations too. This begins to approach the performance of top of the line equipment like the new Kachina computer driven radio (not quite, but it is getting close). The DSP board is about $100 (though you can add DSP to your board for about $15 in parts cost, but you'll have to program and debug it with a separate fixture).

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3614. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <34439358.7F4@ccm.intel.com>
Source record: 89990

Derk & Linda Haag wrote:
> Does any one know of any amp circuits for the 27.Mhz range
> Approximately 35 - 50 - 100 watt

Hope you realize that using a 35 watt linear driven by a 5 watt AM
CB signal will result in about 8 watts output, about 1/3 of an S-unit
improvement. Linears are *very* inefficient for AM. The truckers using
their high-powered linears are primarily heating their trucks with it.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

## 3615. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: "R.Morris K2RK" <robrk@pgh.net>
Message-ID: <34439F78.1A9E@pgh.net>
Source record: 89991

Amplifier---If you can pick it up...it ain't big enough....

Carefull what you ask for. Heard of someone asking Peter Dahl for a 4000
volt transformer
and got it, forgetting to do 1.4x and ended up with a 5600 volt
supply.....

# 3616. US Tech Manual TM 11-666?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <sGJ0M5AmY2Q0EwNC@two-way.demon.co.uk>
Source record: 89992

I'm hoping that one of you fellas could tell me a little about an item
in this manual that covers the installation of a 'cylinder' above or
around an antenna loading coil to add capacitance.
This seems incorrect to me but it's been given to me as a reference and
as a substitute to a capacity hat so I've got to look into whether it
works or not.
Anyone heard about this?

Tnx and (((73)))

Phil G4ZOW / UK

# 3617. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: 1RealHope <davidc@bit-net.com>
Message-ID: <01bcd8ba$777c9020$1f8a92d0@bit-net.bit-net.com>
Source record: 89993

Isn't a linear on 11 meters illegal?

# 3618. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <34439AF8.7451B0CF@direct.ca>
Source record: 89994

Jonathan wrote:
>
> I have been working on (i.e., builing) a shortwave receiver
> using the coil and variable capacitor method. I am interested
> in enhancing my little playtoy with a PLL tuning circuit, but
> I have had trouble locating reference materials. Does anyone
> have information on making a PLL tuner?

As others have pointed out, this can be a major can of worms.
Have you considered DDS instead? Stability, frequency agility
and a lot less hassle to make it go.

Another cute idea is PA0KSB's Huff and Puff circuit, which
stabilizes a VFO against a crystal reference...
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

# 3619. Re: DB1NV Spectrum Analyser - VHF Communications Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <3443A48C.C76@lakeweb.com>
Source record: 89995

Chris Price wrote:
>
> Anybody wish to swap experiences in constructing the 500MHz Spectrum
> Analyzer published in the VHF Communications magazine.
>
> Chris G4AGJ

I hadn't seen the artical.
Is it anything like this?:
http://www.lakeweb.com/dbLabs/spectrumAnalyzer/intro.shtml

Best, Dan.

# 3620. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: Daniel Mikos <dmi853@swbell.net>
Message-ID: <34433CE1.BC5FD0AA@swbell.net>
Source record: 89996
Body handling: HTML body converted to readable text

You do know that operating a linear amplifer in the 11 meter is against
the rules and regulations.
You need to read Part 95 of the FCC rules and regulations.

Derk & Linda Haag wrote:

> Does any one know of any amp circuits for the 27.Mhz range
> Approximately 35 - 50 - 100 watt
>
> Please E-Mail me....
> CB
>
> Thanks

You do know that operating a linear amplifer in the 11 meter is against
the rules and regulations.

You need to read Part 95 of the FCC rules and regulations.

Derk & Linda Haag wrote:

Does any one know of any amp circuits for the
27.Mhz range

Approximately 35 - 50 - 100 watt

Please E-Mail me....

CB <haag@nwlink.com>

Thanks

## 3621. Tube info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: shockle1@ix.netcom.com
Message-ID: <6205e4$4se@sjx-ixn5.ix.netcom.com>
Source record: 89997

I am looking for spec sheets or other data for a couple of power tetrodes.
The first is an AEG RS686H/Q450-4, and the second type number is RR 680.
That they come from AEG Elektronische Rohren Gmbh is about all the info
that comes with them.

Any help would be appreciated.

# 3622. Info on SB-200

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: jaggi@cvrc.med.upenn.edu
Message-ID: <620g6f$3bb$1@netnews.upenn.edu>
Source record: 89998

Hi,

I am homebrewing a HF linear with a pair of 572's. Basically, I am following the details as given in the 1977 ARRL handbook for a 160m amplifier (which uses the same tubes). However I haven't found any good reference on the output impedance of the tubes and tank circuits for the 10-80m bands yet. I wonder if someone who owns a SB-200 (with schematics) could give me some details on tank coils and caps. Any info would be greatly appreciated.

Thanks,

Jurg, KG2LD

# 3623. FREE MOTOROAL PAGERS! GET YOURS TODAY!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: info@paeger.com
Message-ID: <3442e460.0@Crypt.NetGoth.COM>
Source record: 89999

**********

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## 3624. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: jsender104@aol.com
Message-ID: <19971014210300.RAA07463@ladder02.news.aol.com>
Source record: 90000

>
>Carefull what you ask for. Heard of someone asking Peter Dahl for a 4000
>volt transformer
>and got it, forgetting to do 1.4x and ended up with a 5600 volt
>supply.....
>
Not bad, I wouldn't think of building a power supply this big without including a VARIAC for adjustments. 5600 maxed out wouldn't be bad for 4000 volts nominal. Of course he would have saved some greenbacks by getting a smaller transformer.

# 3625. Re: Krylon spray?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: geotek@flex.net
Message-ID: <34436c6f.166199714@news.zippo.com>
Source record: 90001

On Mon, 13 Oct 1997 11:21:21 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>
>I'm looking for a European equivalent for Krylon lacquer spray - does
>the label say anything about the chemical formulation? (For example, is
>it cellulose, vinyl or polyurethane?)
>
Krylon is an acrylic lacquer. Actually I prefer the clear coat
automotive touch-up lacquer, I think it is a little tougher. Check
with your local automotive supply store.

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

## 3626. Re: (No Subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: Trevor Mole <trevor@moledad.demon.co.uk>
Message-ID: <yg3ZsDAjt8Q0EwNn@moledad.demon.co.uk>
Source record: 90002
Cross-posted to:
rec.radio.cb,rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <Forum.876581414.23913.amsoft@m>, Pete deVolpi
<amsoft@epix.net> writes
> http://hamster.ivey.uwo.ca/~amsoft/

--
Trevor Mole - Trevor@moledad.demon.co.uk

# 3627. Hustler Vertical Parts Available?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: grey.hound@bigfoot.com
Message-ID: <3456d740.247555136@news.eurekanet.com>
Source record: 90003

I am looking for an insulator for a Hustler trap vertical. It's made of lucite or something similar, and the coil is wound over it. The material broke and I need to replace it. Is Hustler still in business? Are there parts available for these trap verticals still?

Please direct any answers by email, please.

Donald Hellen
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or transfer the email address of the sender for any
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# 3628. A/D Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: "Kenneth W. Schildt" <kschildt@bellsouth.net>
Message-ID: <kschildt-1410972054370001@d00369.mem.bellsouth.net>
Source record: 90004

Hello all,

Can anyone recommend an inexpensive A/D interface for the PC?

Thanks,

Ken N4VSD

# 3629. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: Jim Strohm <jstrohm@texas.net>
Message-ID: <3444492F.2139@texas.net>
Source record: 90005

Before the British Post was established in 1840, the recipients of mail had to pay the postman for the mail they received. Imagine if you had to pay to receive your Publisher's Clearing House Sweepstakes entry envelope. Duh, you pay NOW to receive unsolicited commercial email (UCE), also known as SPAM.

In 1840, the paradigm changed. The sender of mail bore the full cost of delivery, and the recipient got it free of charge.

It's 1997, and it's time to adjust the paradigm. If I am paying $20 a month for the privilege of receiving mail, I expect that the unsolicited mail senders will bear the full cost of my receiving mail. So that means -- I get lots of SPAM -- they need to pay me 10 cents per SPAM to cover MY cost to receive it.

Either that, or the SPAMmers will pay all costs associated with my email account, while I receive unlimited dial-up internet access through that account from anywhere in the U.S.

And why not? Advertisers pay for air time on TV and radio. Why should we PAY for advertisers to abuse us? Oh wait, I forgot, that's cable TV and DSS. Fortunately I don't pay for that.

ObHomeBrew content:
None. I spent it all on dealing with SPAM.

N6OTQ

# 3630. Manual for Tek 190B Sig. Gen.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: astone@erols.com
Message-ID: <3444555F.132C@erols.com>
Source record: 90006

Hi -- Picked up one of these instruments for free at a hamfest and it seems to work very well. Would be nice to have the manual though or at least the schematic and some key specs. from the manual. Wonder if anyone happens to have the manual and wouldn't mind copying a few pages for me (will reimburse). Alternatively, perhaps someone can suggest a source for obtaining the manual. Thanks.

73,

Ron (KA3J)

# 3631. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: NORMANMO@miavx1.muohio.edu
Message-ID: <3443F0E2.57EF@miavx1.muohio.edu>
Source record: 90007

A little known secret most hams would be unwilling to share with cbers is simply to stick a pin in your coax and tie one side of a 220 volt ac line to it. Tie the other side to the outer shield. This should be good for more than 50 watts. (Don't try this when your clothes dryer is running or else you'll trip the breaker breaker).

# 3632. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EI22w1.1qA@world.std.com>
Source record: 90008

AA1FA davidc@bit-net.com replied to Gary KE4ZV,
> Why would you do that to the Extras who value their own "sanctuary"?
> Seems they earned it by completing the toughest possible testing.

Did Gary suggest taking it away from the Extra's? I don't think
you can read that into his suggestion without malice or assumption
of malice. It would suffice to amend Part 97 to prohibit non-OOK CW
from the Extra class data-sub-bands. He does suggest prohibiting
you from contacting Europeans via RTTY or Clover in your sanctuary,
but I doubt Europeans expect to find technosavvy Americans in the
Extra subband ... as if round green keys were technosavvy by
any standard except within amateur radio *sigh*

Until the number of license grades is decreased from the absurd to
rational, having the portion of each data sub-band which is reserved for Extra
Only operators, be marked for CW-only would make sense.
(And if we ever acheive the two-class structure of most of the rest of
the IARU member countries, the low ends would still be a fine place for
it; starting it as Extra country makes it the HiSpeed end by default.)

Forcing Extra class RTTY/Pactor/Clover ops to use the AA data
segment to talk to each other doesn't seem a horrible price to pay
for their die-hard straight brethren to have sanctuary from the
rabble.

Requiring the 20wpm hazing of folks who want to operate in the CW
Sanctuary seems reasonable.
(I fully expect the reactionary ARRL to shoot the hobby in the foot
again by instead proposing the Novice subbands have RTTY/data barred
from them for all classes, including 10m where even Novices get
RTTY/Data today. This would be justified only if the non-QRO
requirement for all classes were re-instated, at a lower QRP level,
making the Novice Bands the QRP Sanctuary. Although I still think if
Novice/Tech+ is to do any good at drawing people into modern HF
operating, they need some RTTy/*tor privileges besides 10m & VHF+.)

(Far more reasonable than the only actually part-97 mandated CW-only
subbands -- 50.0-50.1 and 144.0-144.1 are CW ONLY, including
beacons, no sensible codings or modulations permitted, with the initial
intent of barring no-coders from them, but the FCC sensibly dropped
that -- being available to scummy no-coders like me with no obvious
qualifications aside from memorizing a few measly answers and a desire
to keep this technical hobby alive.)

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs

http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 3633. PLL Analysis Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: pat@orrell.prestel.co.uk
Message-ID: <3443733b.4735523@news.prestel.co.uk>
Source record: 90009

Hello

Just an open question on PLL analysis software. Most PLL analysis programs I have seen so far depend on the phase detector having a voltage output that is related to the phase change. So the loop filter takes the form of a transfer function of Vo/Vi.

But some ICs that can be bought that are PLLs( Phase Detector+divider etc) have current output from phase detector and hence use different loop filter structure which has the form of Vo/Ii so the PLL analysis cannot help.

Any ideas (I have one or two myself, but await interest)

Pat@Orrell.prestel.co.uk

# 3634. Need MC34119 audio amp 8pin dip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <620j8f$3jh$1@rosenews.rose.hp.com>
Source record: 90010

Hello.

I need some MC34119 audio amp 8pin dip chips
if anyone has any for sale.

finishing up the receiver section and
moving onto the af amp of a shortwave
project.

thanks.

tony

## 3635. Re: 6m amp help??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-14 00:00:00 UTC
From: Len <ln@hagagymnasiet.norrkoping.se>
Message-ID: <3443AFA5.32A2@hagagymnasiet.norrkoping.se>
Source record: 90011

Hamm4fun wrote:
>
> I recently came by a tube soket assembly for a pair of 4cx250's. They have a built in screen bypass cap which measures 120nf total for both tubes.

The built-in cap for UHF use is usually 1000 pF, while 2700 pF is common for VHF use. The latter is enough for frequencies down to 30 MHz. Either your measurement is wrong or there is some other cap connected to the sockets.
73 de Len SM5DFF

# 3636. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3444819B.AE9@crpl.cedar-rapids.lib.ia.us>
Source record: 89915
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

Greg Dean wrote:
>
> I think that we need a discussion what place Morse Code will
> play in the next century.

I have presented my views in my article and do not want to argue any more about that. I am interested in the technology involved and *nothing* else.

Bill W0IYH

# 3637. Re: Building a radio (transmitter side)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Tovar <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4msou3ctd1.fsf_-_@spinner.ecofe.com>
Source record: 89916

For a single chip 2m FM transmitter, see the Motorola appnote for the MC2833 (follow it with a single transistor tripler to get to 2m, or two triplers to get to 70cm).

A similar chip, the MC2831A, was written up by W1FB in _QST_, March 1990 (pp. 31-33). Alas, it was designed for 10 meter (not even 6 meters). And yeah, and it already had to double the 14.5 MHz VXO to get 29 MHz (with 28 KHz adjustment). It suggests using an 18 MHz crystal and doubling the results of their design twice to go from the 36 MHz to 144 MHz. But that would only have 120 KHz of adjustment, e.g. not enough to even cover the whole satellite sub-band. And then there's spectral purity issues...

You're right Gary, a tripler to get to 48 MHZ and another tripler to get to 144 MHz, and you're in business. Maybe put in a Toko helical filter and not even think about emissions (or pagers on the receive side). But for FM, you're stlll rock-bound to a tiny segment of the 2 meter band.

For UHF, how about the MC13176 (FM, AM, and presumably CW)? Its reference crystal would be about 13-14 MHz (internal pre-scaler), and i bet you could use an older DDS (AD7008) as a reference (talk about fast frequency switching!). If you could make a MHW703 ($37) run at 440 MHz (spec'ed for 450-460 MHz), i bet you could run the MC13176 thru a Toko helical, through the module, and get 2W out with decent spectral quality. (And Motorola probably makes something better spec'ed for 430-450 MHz).

I'm *still* looking for a decent homebrew project for 6 meters or above that has useful results for under three figures. (Ramsey doesn't count, i want reasonable sensitivity or good spectral purity. R2/T2 still need sophisticated VFO at VHF or above, and either pre-amp or PA.) And let's not compare apple with oranges, people are working HF QRP under three figures, and that's a fairer comparison. That is, can one at least work someone across town under poor conditions?

The theoritical projects are fine for experienced people with decent test equipment; i'm interested in something more along the lines of reproducible project. And heck, i'd even settle for CW-only if it were something a Technician could use. Even if they can't decode it by ear, with a decent amount of hacking, their computer probably could. If one can hand-send and only responds to CQs from stations that one's software is currently able to decode, rather than issuing CQs, the other end may not even know it's not being received by ear... And the technician has gotten out of the FM rut.

How about something real to build that isn't HF?

-- KD6PAG (Networking Old-Timer, RF newbie)

# 3638. Re: Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34448fce.0@newshost.pcug.org.au>
Source record: 89917

Dennis Erwin Thurlow <geosynq@antispam.trader.com> wrote:

>Bill,
>It's nice that you answered these guys, but odds are they're
>no-code techs. Most new hams are. They probably
>want a 2m FM transciever. A direct conversion unit ought to
>be as simple as a variable source, a VFO, a mixer/detector, and an
>op-amp. Problem is...all the "build it cheap and quick" articles
>_are_ for the 40m CW crowd!

However they don't have to be. A number of projects come to mind:-

1. Crystal-controlled 6m or 2m FM transmitter (can be as low as 20mW if in a good spot relative to the repeater)

2. 6m or 2m receiver using an AM car radio as a tunable IF and a simple homebrew converter. Note that by using a 600 kHz IF, only one crystal is required for the transceiver if it is teamed up with (1) above.

3. DSB gear for 6m or 2m (see Solid State Design)

4. AM gear for 6m (see some JA hams' web pages for info - links below)

Clubs/groups wanting to encourage this type of activity could assist by providing a 6m AM input to their two metre repeater. Then one need only build a simple 6m AM transmitter and use a cheap scanner (covering 2m) to get on air.

73,
--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (02) 6285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____________________________________________________

# 3639. Re: Manual for Tek 190B Sig. Gen.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3444B652.3DDE@ix.netcom.com>
Source record: 89918

astone@erols.com wrote:
>
> Hi -- Picked up one of these instruments for free at a hamfest and it
> seems to work very well. Would be nice to have the manual though or at
> least the schematic and some key specs. from the manual. Wonder if
> anyone happens to have the manual and wouldn't mind copying a few pages
> for me (will reimburse). Alternatively, perhaps someone can
> suggest a source for obtaining the manual. Thanks.
>
> 73,
>
> Ron (KA3J)
---
Hi Ron --- On-Line manual vendors at URL:
http://pw2.netcom.com/~ac6v/pageaae.html

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 3640. Re: Telemetry Node???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3444bede.63857906@news.atl.bellsouth.net>
Source record: 89919

On 2 Oct 1997 06:32:43 GMT, Ted Maczulat <tmacz@arrowsmith.net> wrote:

>Hi and thanks for reading this.
>
>I am looking for a telemetry node. Kantronics used to make one.
>
>It is a normal TNC running network firmware. It also has 8 analog
>inputs to measure stuff at the site.
>
>I also have hears that someone was working on a kit for a standard
>TAPR2 tnc that would add telemetry measuring capability.

That would be TAPR's Metcom accessory. Check www.tapr.org
for info.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3641. Re: Ham-Homebrew Digest V97 #599

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <3444B9F4.3D5F@lafn.org>
Source record: 89920

> Subject: Building a radio
>
> The single chip receiver can stand the addition of a preamp (there are many
> circuits for preamps in the Handbook, or in the Proceedings of the Central
> States VHF Conference, which would be suitable). And the transmitter chip
> only puts out 10 mW, so an amplifier following it will be helpful. One of the
> hybrids sold by RF Parts will do nicely. You also need an audio output amp
> for the receiver, the classic LM386 circuit will do, or Motorola has a chip
> specifically for this purpose which features a compatible squelch gate.

Hi Gary,
What is the part number of the Motorola amp IC with
the squelch gate?

Nice write up,
Thanks and 73, W6MIK

--

_____
Dave Shalita,
af389@lafn.org
Van Nuys, CA

# 3642. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <3444F2F3.463E@flash.net>
Source record: 89921

NORMANMO@miavx1.muohio.edu wrote:
>
> A little known secret most hams would be unwilling to share with cbers
> is simply to stick a pin in your coax and tie one side of a 220 volt
> ac line to it. Tie the other side to the outer shield. This should
> be good for more than 50 watts. (Don't try this when your clothes
> dryer is running or else you'll trip the breaker breaker).

50 watts? Im sorry this simply isnt true, and it's sad that someone
would mislead you
like this. There is simply NO WAY you'll get more than 40 watts using
this meathod.

Tim

# 3643. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Tovar <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mu3ejcwox.fsf@spinner.ecofe.com>
Source record: 89922

PLL design is really not a great thing to tackle if this is your first receiver project. You can get some bssic information on their theory and operation from the ARRL handbook. If that doesn't convince you to run screaming in the other direction, the next reference to look at would be the PLL synthesis books by Ulrich Rohde and Roland Best.

From reading the 1993 Edition of the ARRL Handbook, it seems that one of the things that make this really hard to do is to get a reasonable settling time on the synthesizer. Most radios use the same PLL for both transmit and receive, and trying to make that shift happen fast enough requires a really good PLL design.

Now, suppose we're using a PLL for an R2/T2 pair (or a different PLL for transmit and receive) at 6 meters and above. And suppose we don't try to scan on a per-channel basis, like an FM rig does, or shift for repeater usage. Could we then slow down the loop substantially and make smaller corrections, thus making it much less critical to design and at the same time, have much less phase noise?

-- KD6PAG (Networking Old-Timer, RF newbie)

# 3644. Re: A/D Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: tait@primeline.net
Message-ID: <622jpd$pbv$4@nr1.toronto.istar.net>
Source record: 89923

In article <kschildt-1410972054370001@d00369.mem.bellsouth.net>,
"Kenneth W. Schildt" <kschildt@bellsouth.net> wrote:
#Hello all,
#
#
#Can anyone recommend an inexpensive A/D interface for the PC?
#
#Thanks,
#
#Ken N4VSD
How accurate? In a pinch , I use the game port.

Gary Tait,VE3VBF

# 3645. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3448613f.17510225@eskinews.eskimo.com>
Source record: 89924

la8ak@online.nospam.thanks (J M Noeding) wrote:
<snip>
>CW signals occupy less
>spectrum, more amateurs may be QRV within a bandsegment using cw than
>RTTY
>

---
Yes, but not many more. 170-Hz RTTY can be done with only a 250 Hz
bandwidth, about the same as most of us use for CW. It's true that CW
can be done with even narrower filters than that, but it's difficult
to tune and hard to listen to for any length of time.

73, Bill W7TI

# 3646. FREE LIST: McMurdo Silver Material, c1930's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: ghg3@aol.com
Message-ID: <19971015112100.HAA02899@ladder01.news.aol.com>
Source record: 89925

FREE LIST: McMurdo Silver Material (c1930's)

*
If you are interested in McMurdo Silver, let me know!

I just picked up some nice old McMurdo Silver mail order ephemera, and I'll be sending out periodic announcements to those interested, when I put each lot up for sale.

Each lot comes complete in its original envelope, as sent to the prospective buyer (order form, price list, cover letter, etc.) back in the mid 30's.

I have six lots. They will not be auctioned. They will be sold on a first-come-first-serve basis.

By requesting to be on this McMurdo Silver list, you will receive only six email announcements regarding the McMurdo Silver material (one per lot), then you will receive no more, I will dump the list, and I won't bother you anymore (unless you request to be bothered).

Generally, these lots cover the Masterpiece II, Masterpiece IV, Masterpiece V, and the World Wide Nine. Some lots include copies of "The Silver Times."

Request to be on this list! If you're a McMurdo Silver buff, you won't want to miss it!

George Gifford
ANCESTRY CONNECTION
36 Alton Avenue
Cumberland, RI 02864
ghg3@aol.com

# 3647. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: "Charles H. Reichert" <qa2696@email.mot.com>
Message-ID: <3444CF5E.4F41@email.mot.com>
Source record: 89926

> kodiak@mail.europa.com%INTERNET wrote:
>
> Chuck,
>
> I, too, had trouble reading the circuits and software links in your
> page. The links put me at the very top of your home page, not at the
> requested area in your page. Also, the page only loaded down to your
> interests, nothing more. However, clicking on a link to the for sale
> section and then "back" arrow to home allowed me to then access the
> circuits/software links. Finally, "back" arrow from one of your
> circuits only brought up your background, no other text. A second
> "back" arrow followed by a "forward" arrow brought up the circuits
> section again. I was able to do this repeatedly. Nice page by the way.
>
> I am using Netscape 3.01 on an IBM clone.
>
> Regards and I hope this debugs for you.
>
> Larry KC7ULI

OK. That sounds familiar. I would occasionally have the same
problem with my and other sites, but thought it was a NetScape quirk.
Trying out the new Explorer 4.0 but haven't noticed the problem yet.
If I do then I'll suspect my ISP as the culprit. Usually reloading
will correct the problem.

73 Chuck KD9JQ

# 3648. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <3444E6CF.5FEC@ccm.intel.com>
Source record: 89927

Jim Strohm wrote:
> FWIW, an 811A in GG with 1500V on the plate will give 200 watts
> all day long with 10 watts drive.

Hi Jim, will it give 200 watts *output* in GG driven by an *AM*
input?
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

## 3649. Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199710151710.NAA10558@pop.uky.edu>
Source record: 89928

Larry,

First try a simple kit. Edlie electronics has a kit made by
Elenco Electronics AM/FM for $23.95 (AM only for $19.95). This is a
AM/FM radio kit on a large circuit board with the schematic
digram silk-screened on the board. It is easy to assemble and
is great for your first project because it is spread out over
such a large area. Also it comes with a 51 page instruction
and assembly manual that guides you thru a number of experiments
and even has questions to be answered after each chapter.

This type of kit will help you understand most of the
major elements of a radio:

AF Amplifiers
IF Amplifiers
IF Limiters
Detectors AM and FM
Mixers and oscillators

This kit and a little help from the ARRL handbook will
improve both your knowledge of radio and assembly skills.

Then you can move on to other projects. You could even
use elements of this one to build something else.
This is the first kit of its kind I have seen in years.
It looks good to me even though it is not on a ham band.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

# 3650. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EI3vy6.Jp2@world.std.com>
Source record: 89929

Cecil who is usually pretty sensible asked:
> Hi Jim, will it give 200 watts *output* in GG driven by an *AM*
> input?

Why is everyone (well at least two on this thread) assuming the CB'er looking for an illicit amp is going to use it with AM?
CB'ers have had SSB for years.
(Reference: AES's and Radio Shack catalogs).

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 3651. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <344522F2.6C82@ccm.intel.com>
Source record: 89930

wdr@world.std.com wrote:
> Why is everyone (well at least two on this thread) assuming the CB'er
> looking for an illicit amp is going to use it with AM?

What percentage of CBers use SSB? Just going by the odds.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3652. Re: A/D Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <6235pc$si1@hpcvsnz.cv.hp.com>
Source record: 89931

Kenneth W. Schildt (kschildt@bellsouth.net) wrote:

: Can anyone recommend an inexpensive A/D interface for the PC?

Ken...please tell us some other things like number of bits, input voltage range desired, speed, whether you want any software with it... I recently got a $100 kit with two channels of ADC, max speed 240 conversions/second, which just plugs into the RS-232 port, nothing else needed, and includes data logging software. But ... a Soundblaster is also an inexpensive A/D interface, with different purposes. And you can get plugin cards that do a respectable job of being a scope for a few hundred dollars.

--
Cheers,
Tom
tomb@lsid.hp.com

# 3653. Re: Ham-Homebrew Digest V97 #600

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Andromedo@aol.COM
Message-ID: <971015165815_1666596044@emout11.mail.aol.com>
Source record: 89932

STOP SENDING ME SHIT

# 3654. Re: Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: kr4wm!@sccoast!.net!
Message-ID: <MPG.eaf03e8381a30b798968e@news.infoave.net>
Source record: 89933

In article <61upd0$ip5$1@nixon.area.com>, rick@area.com says...
> I would like to hear from anyone with experience homebrewing
> a solid state HF power amplifier, especially at the legal limit
> level. I see a lot of postings about tube amplifiers, but
> no solid state. Outside of ham radio, I believe that no
> new designs are using tubes at the 1500 watt level. Am I
> unaware of some reason why tubes are great for ham amplifiers?
> Also, is anyone aware of a commercially available ham linear
> that runs 1500W PEP output using solid state devices? All
> the solid state ham linears I've seen are not legal limit.
>
> Rick Karlquist N6RK
> rick@area.com
>
>

Hi Rick,

There's a fellow that lives a few blocks from me who produces
the "Skywalker" brand of solid state HF amps. He produces them
in either kit form, or already built. They're made in power
levels of 300-600-1200-1500 watts. If you need his phone number,
write me back and I'll look it up for you. It's in practically
every 73, CQ, QST magazine. Look for the classified advertisement
with an address in Myrtle Beach, SC on Chickasaw Lane.

Remove all the ! from my e-mail address to reply!!!

73, Web

# 3655. Re: Maxar 80 UHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: jrv <jvaldes@whoi.edu>
Message-ID: <34451361.9CAA2FF8@whoi.edu>
Source record: 89934

CORRECTION ... it is a Maxar 50 !!!!!!!!!!!!

Jim Valdes wrote:

> I have a two channel Motorola Maxar 80 UHF transceiver. I need to
> locate
> a schematic as I would like to move it down into the 440 range. I
> don't
> want to purchase a service manual as that would be more than the
> radio's
> worth. I would be happy to reimburse any reproduction costs.
>
> Thanks,
> Jim, WA1GPO

## 3656. Pictures

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: thack@flash.net
Message-ID: <151097195557@flash.net>
Source record: 89935

I'm gay and proud. Email me with pictures and bio. I will return all email.
binderz@rocketmail.com

# 3657. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: tosca@warwick.net
Message-ID: <344f44f4.8484511@news.warwick.net>
Source record: 89936

On Wed, 15 Oct 1997 09:44:35 -0700, Tim <Hynde@flash.net> was lurking
in rec.radio.amateur.homebrew, and composed the following about "Re:
Looking For Good Schematic For a CB linear":

>NORMANMO@miavx1.muohio.edu wrote:
>>
>> A little known secret most hams would be unwilling to share with cbers
>> is simply to stick a pin in your coax and tie one side of a 220 volt
>> ac line to it. Tie the other side to the outer shield. This should
>> be good for more than 50 watts. (Don't try this when your clothes
>> dryer is running or else you'll trip the breaker breaker).
>
>50 watts? Im sorry this simply isnt true, and it's sad that someone
>would mislead you
>like this. There is simply NO WAY you'll get more than 40 watts using
>this meathod.

I beg to differ. The reason you are only getting 40 watts is because
you overlooked the fact that you are working with a 220 volt line,
and not 110.

You have to ground the chassis of the CB to the neutral of the 220
volt line, otherwise it will be unbalanced and you won't get the full
power boost. I get almost 56 watts. Maybe m-m-m-m-more.

Don't you know anything about electricity??
--

�ase ELECTRONICA! �1976 TE Inc.
mailto:tosca@warwick.net


==PLEASE E-MAIL AS WELL AS POST;
ISP HAS BEEN PURGING QUICKLY! ==

# 3658. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: kh6hz@anomaly.ideamation.com.nospam
Message-ID: <623bkl$ard@anomaly.ideamation.com>
Source record: 89937
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

In article <3444F276.B1E920C2@voyager.net>, Erv <kb8tnq@voyager.net> wrote:

>What's amazing to me, is how one guy targets the cell phone end of the
>debate and that is what has fueled this round for some time. If you get
>an overview of the proposal, it is NOT just cell phones, but Police,
>Fire, Businesses, etc. which will become illegal to monitor.

Of course. The cell phone is probably the most common element people can identify with. By claiming that this bill helps protect people from listening to your cell phone, you get a lot of otherwise ignorant-of-the-facts public on your side because, OBVIOUSLY, nobody buy a "peeping tom" would want to listen to someone's phone calls -- and (their rationale) "I KNOW *I* wouldn't want anyone listening to MY phone calls."

This is a tactic well known and used by many groups, especially groups like gun control advocates, who routinely parade "assault weapons" in front of the public as "cop killers" even though those classifications of guns are only responsible for 2.5% of the crime in the US during any given year. Same result from the public: "Well, I know *I* certainly wouldn't need one of those guns, so why does *HE* need one?"

MD
--
-- Ted Kennedy has killed more people with his car than I have
-- with my guns.
--
-- If you don't like my opinions, that's just too damn bad.

# 3659. FS: 455kc Pan Adp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: blf <boyd@humboldt1.com>
Message-ID: <344591A0.1E69@humboldt1.com>
Source record: 89938

For Sale: Signal Corps Panoramic Adaptor
Model BC-1031-A

It works very well and is very clean,
have book and power cord. It has a
455kc input, and 100kc bandwith.

$200.00 Includes shipping lower 48

Reply: boyd@humboldt1.com

Thanks,
Boyd N6DMF

# 3660. Re: PLL Tuning Circuit (HELP!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3445676F.3CD9@pop.removethistomailme.net>
Source record: 89939

Cecil A. Moore wrote:
>
> John Miles wrote:
> > For casual shortwave experimentation, I'd take a look at the line of
> > direct digital synthesis (DDS) chips from Analog Devices
>
> Hi John, actually PLLs are easier to us as a local oscillator than
> DDS chips because PLLs tend to be a lot more linear.

Hmm, I don't think I've seen 'linear' used in that particular context before. :-)

DDS's only real drawback for HF use is its relative lack of signal purity due to quantization and phase-accumulator truncation. Even so, the output of an AD9850 is probably cleaner than a lot of homebrew VFOs and synthesizers constructed without adequate knowledge and/or test equipment.

At any rate, you'll have a VERY hard time convincing me, or anyone else, that PLL's are "easier" to deal with from a homebrewer's perspective. DDS is about as idiot-proof as you can get.

> It is much
> harder to get rid of spurious responses with a DDS chip than with
> a PLL.

It's best not to look at DDS and PLL as competing synthesis technologies, but as complementary ones. One very effective solution is to use the DDS as a reference and "clean it up" with a simple, narrow-bandwidth PLL. This allows a fixed division modulus and a very elementary single-loop design, far simpler than the usual multi-loop, variable-modulus monstrosities used in most commercial gear.

For someone who's just playing around, though, and wants a simple, flexible solution for SSB/CW reception across multiple bands, I don't see anything wrong with using a DDS directly into the first mixer. Sure, strong signals may tend to cause spurious responses due to phase-truncation spurs, but it'll still be a much nicer overall compromise than a lot of multi-band homebrew designs. (Plus, a lot of the nasty out-of-band stuff can be eliminated with a preselector in front of the mixer.)

The original poster isn't trying to put Rohde & Schwarz out of business -- he's just trying to build a basic synthesizer and play around with it as a receiver LO. Once he gets the basics down, he'll be in a good position to experiment with hybrid techniques to clean up the spurs.

> Motorola had some pretty good application notes on PLLs
> last time I checked.
>

Yeah, but last I checked they weren't up on www.motorola.com yet. :-(

> 73, Cecil, W6RCA

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 3661. Re: Listening to Cell phone on a scanner.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: John <johnr@flinet.com>
Message-ID: <3444E89C.60F4@flinet.com>
Source record: 89940
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Peter D. Richeson wrote:
>
> First, yes I know it is illegal to do it ( and I don't).
> Second, I know there is probably a better group but I can't find it on
> the list I have.
>
> But, at our ham meeting last night we got to talking about the scanner
> bill that is in congress and to subject came up.
>
> Now here is the question: Is it possable to hear both sides of a cell
> phone conversation on a single freq. I say no. Cell phones are full
> duplex, one freq. goes from the radio to the tower and the other frome
> the tower to the radio. Two of the people there said that in %90 of the
> time they can here both sides of the conversation. What is going on.
>
> Thanks
> Peter/KA5COI

Peter, I hava a AOR900 Handheld scanner and I can hear BOTH sides of the conversation most of the time. It seems the closer the cell unit is to either the tower or my house it is possible. Don't quite understamd it. I find more and more channels with digital signals are becoming more common. It probably won't be long before they are all digital. My personal phone is in the digital mode and quite often it acts up and the conversation becomes unreadable. Hope this answers your question. Also listening to cell conversations is mostly innocent. How do I know who I am listening too??? Before the conversation gets too involved the link is passed to another tower and another frequency and I no longer can hear it. By the time I could possibly find it again it is over.

John

# 3662. Maxar 80 UHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Jim Valdes <jvaldes@whoi.edu>
Message-ID: <3444FB5C.36D31A7E@whoi.edu>
Source record: 89941

I have a two channel Motorola Maxar 80 UHF transceiver. I need to locate a schematic as I would like to move it down into the 440 range. I don't want to purchase a service manual as that would be more than the radio's worth. I would be happy to reimburse any reproduction costs.

Thanks,
Jim, WA1GPO

# 3663. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Erv <kb8tnq@voyager.net>
Message-ID: <3444F276.B1E920C2@voyager.net>
Source record: 89942
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

What's amazing to me, is how one guy targets the cell phone end of the debate and that is what has fueled this round for some time. If you get an overview of the proposal, it is NOT just cell phones, but Police, Fire, Businesses, etc. which will become illegal to monitor.

If you own a mobile, HT or scanner that is capable of receiving these things, it will be illegal....and there is NO grandfathering on this one, if passed as written. The fact is, this could greatly harm the hobby, as many of us work with Police and Fire. Some groups work hand in hand with them.....take the group in Flint, MI for example. So your attacks on those "listening in" or "being nosey" are little more than a cheap shot at some hard working hams.

Wise up gang, we can lose a helluva lot here and I, for one, will not stand by while the parade passes. Write your representatives in Washington and tell them to forget this idea and protect Amateur Radio.

7-3,
Erv KB8TNQ

--
Please visit our Web Site at:
http://www.kb8uyz.com/kb8tnq
---
"Dare to Dream, It Sets Your
Spirit Free!"
---

# 3664. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: cliffw@tsixroads.com
Message-ID: <6232of$sdv@sparky.tsixroads.com>
Source record: 89943
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Brad Cuppy <bpc003@kktv.com> wrote:

>SCO wrote:

>> As far as I know HAM radio is exempted.
>> I am in favor of any bill that blocks the monitoring of "private
>> conversations". HAM radio is not "private communications" ...
>> HAM radio is on the public airwaves and can be heard by anyone with a
>> radio that can tune the ham bands. Hams at my ham clubs are in favor
>> of this bill's idea (I have not seen the actual bill ... just heard it
>> talked about at our club meetings).
>>
>The airwaves should be free ! Anything on there is and should be
>open game ! If you want privacy wsuing the airwaves, then
>scramble. It is just that simple ! In addistion, do not
>divulge what you heard. That is what was law and should be law
>again.
Are you joking?..radio waves(airwaves) are the same thing as sound
waves and light waves...when you operate your vocal chords and
produce words or when you saunter fourth in the light and present
your image to the world, you have placed that information in the
public domain, so to speak...and what possible logic could de-
termine that you have a "right" to walk unseen or speak unheard
or even broadcast undetected....gosh!!!

# 3665. Looking for CW beacon EPROM program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: kr4wm!@sccoast!.net!
Message-ID: <MPG.eaf21615c2879fa98968f@news.infoave.net>
Source record: 89944

I'm looking for the code needed to send to an EPROM that
would allow it to be a beacon keyer. Anybody ever do this?

# 3666. Re: Dealing with spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <6234n5$38m@apple.telalink.net>
Source record: 89945

Jim Strohm <jstrohm@texas.net> wrote:
>It's 1997, and it's time to adjust the paradigm. If I am paying
>$20 a month for the privilege of receiving mail, I expect that
>the unsolicited mail senders will bear the full cost of my receiving
>mail. So that means -- I get lots of SPAM -- they need to pay me 10
>cents per SPAM to cover MY cost to receive it.

Even worse, there are still people paying hourly charges (or who don't have toll-free local access numbers) for their 'Net access. For these folks, there's a direct & defined cost of spam, just as if the recipient was paying the postage for USPS spam.

Actually, you *do* still pay something for the spam you receive in the US mail. Either you throw it out, or you recycle it -- either way, someone has to be paid to dispose of it, and chances are your tax money pays that person.

73 Doug

# 3667. Re: Looking for CW beacon EPROM program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <34455FDD.246E3BAE@direct.ca>
Source record: 89946

Webster D. Williams wrote:

> I'm looking for the code needed to send to an EPROM that
> would allow it to be a beacon keyer. Anybody ever do this?

The EPROM doesn't actually do the sending; it just holds the
message you want to send.

There are several ways of doing this. One is to burn a bit
pattern into the EPROM that corresponds to what you want to
send, like this for VE7LDH:

10101011100010001110111010101000101110101000111010100010101 01

(i.e. dididididah dit dahdahdididit didahdidit dahdidit dididididit)

You then cycle through the EPROM locations with a counter and
apply the output (0 or 1) to a keying circuit. Since the EPROM
output is often 8 bits wide, one cute setup stores 8 different
messages, one per bit, which you select with a switch.

Another way is to use a computer. Save the message in whatever form
is suitable (e.g. 1 = dit, 2 = dah, 3 = intercharacter space, etc.)
and then have a microcontroller read the codes in succession,
decide what they mean, and apply the results to a keying circuit.
This is much more flexible, since it allows you to easily tweak
things like weighting and spacing, which are fixed in the first
approach.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

# 3668. Re: PLL Analysis Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Mike <NoSpam@Today.Thanks>
Message-ID: <34459F90.7564@Today.Thanks>
Source record: 89947

pat@orrell.prestel.co.uk wrote:

> Hello

> Just an open question on PLL analysis software. Most PLL analysis
> programs I have seen so far depend on the phase detector having a
> voltage output that is related to the phase change. So the loop
> filter takes the form of a transfer function of Vo/Vi.

> But some ICs that can be bought that are PLLs( Phase Detector+divider
> etc) have current output from phase detector and hence use different
> loop filter structure which has the form of Vo/Ii so the PLL analysis
> cannot help.

> Any ideas (I have one or two myself, but await interest)

> Pat@Orrell.prestel.co.uk

It really doesn't matter what the phase detector puts out - you end up
converting it to a current anyway.

For example, the "Charge-Pump" outputs on some devices are actual logic
levels - TTL for ttl parts, ECL for ecl parts.

The signals go through a series resistor before they get to the filter.

Apply good old Ohm's Law, and you get the resulting current.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 3669. KB8UYZ Amateur Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: "KB8UYZ.COM" <dan@kb8uyz.com>
Message-ID: <344584BF.206B@kb8uyz.com>
Source record: 89948
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.amateur.policy

October 15, 1997

Check out the revised KB8UYZ.COM. Now with regular amateur radio news and information updates, links, and more. We are also finishing our amateur radio mods archive, and will have it available very soon!

Visit http://kb8uyz.com.

73's
Dan KB8UYZ
dan@kb8uyz.com

# 3670. Parts Info-Stancor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: "R.Morris K2RK" <robrk@pgh.net>
Message-ID: <34458B9D.3651@pgh.net>
Source record: 89949

Anyone have a 50's/60's Stancor catalog and find the current/voltage rating for a choke marked C 230T ???

How about an Elma Engineering #290 Rectifier Transformer or Elma #289 Filament Transformer ??

# 3671. FS: NOS and Used Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Kevin Harlan <bob@net.com>
Message-ID: <623r58$nl9$1@ha1.rdc1.occa.home.com>
Source record: 89950

NOS Tubes, large quantities of each available.
---
5U4G Russian, $7.50 each
6AZ8 Philips, $3.00 each
JAN 12AT7 GE, $4.50 each
811A Chinese, $11.00 each
JAN 5751 GE, $4.00 each
5886 Raytheon, $25.00 each
6186W (6AG5WA) philips, $.25 each
JAN 6922 Philips, $3.00 each
7062/E188CC Amperex,$4.00
JAN 8106 GE, $5.00 each
Used Tubes, Untested, large quantities of each available,
Pulled from Surplus Equipment, sold "as is"
---
5U4G, $2.50 each
6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each
8532 $1.00 each
Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
For shipping cost outside of USA & Canada, e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount ( conversion rate .73 ). No minimum order.
Prices valid until 10-24-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"
Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

# 3672. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Norman Hockler <norsan@bright.net>
Message-ID: <621b16$7u8$1@cletus.bright.net>
Source record: 90012

"R.Morris K2RK" <robrk@pgh.net> writes:
> Amplifier---If you can pick it up...it ain't big enough....
>
> Carefull what you ask for. Heard of someone asking Peter Dahl for a 4000
> volt transformer
> and got it, forgetting to do 1.4x and ended up with a 5600 volt
> supply.....

So use a half wave rectifier........

# 3673. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Jim Strohm <jstrohm@texas.net>
Message-ID: <34444E59.49CA@texas.net>
Source record: 90013

Derk & Linda Haag wrote:
>
> Does any one know of any amp circuts for the 27.Mhz range
> Aprox 35 - 50 - 100 watt

The old Motorola RF Data Manual (1978 version) has a reprint of an application note that describes what you are looking for.
It is AN-762, Linear Amplifiers for Mobile Operation. An adaptation of this application note was published in QST under the title, "Build this Solid State Titan" and was published in the ARRL Handbook in (I believe) 1981 or 1982. Communication Concepts sells a circuit board and some parts kits for a version of this amplifier.

As you are probably aware, use of amplifiers is not legal for CB.
You are responsible for the legal operation of your station.
You are also responsible for NOT asking commercial ventures such as Communication Concepts to assist you in illegal operation of your station.

I have seen a number of vendors on the Internet who claim to sell amplifiers that will work on the CB band with 5-watt CB radios, but I have not verified their claims. In spite of any possible usefulness of these amplifiers, the fact still remains that their use on CB is illegal, and their sale for use on CB is illegal as well.

FWIW, an 811A in GG with 1500V on the plate will give 200 watts all day long with 10 watts drive. One jug and one junk microwave oven will get you there if you know where to connect the five wires.

Jim N6OTQ
giving free information because information wants to be free, and we are ultimately responsible for the responsible use of information

# 3674. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-15 00:00:00 UTC
From: Greg Dean <n9nwo@gte.net>
Message-ID: <621qqs$qgu$1@gte2.gte.net>
Source record: 90014
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

I think that we need a discussion what place Morse Code will
play in the next century. While some will remark that the
military, including the Coast Guard, have deserted Morse,
others will comment that the Navy Academy is still teaching
it. There is a move to bring it back into MARS but that is
due to some of the older members wish to continue using it.

We need to have people like Jeff Herman, who was there when
the Coast Guard stopped the use of code, to give their insights
of what the military and merchant marine communities are heading
towards. We need the insights of others.

I am Army, still serving. We do not use the code, even morse
intercept is gone. Digital is king. Even the Navy is highly
dependant on digital with the Tactical Digital networks at the
fleet level (I completed four years of Navy ROTC at Purdue just
for fun and relief from my engineering courses). Most of business
is going digital. But someone should keep the skills alive, if
for no other reason than just fun and the romance of the old days.

I believe that we see the Morse requirement be lowered to 10-12
wpm. The 21 wpm will most likely disappear. But some familiarity
is needed, just not a high skill level. This is in line with the
rest of the western world. (Along with tougher but few testing
elements.)

Gary Coffman wrote:
>
> On Tue, 07 Oct 1997 07:16:34 -0500, "William E. Sabin"
> <sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
> >I really think that many of us are not aware of the *real* agenda in
> >this discussion of Morse CW vs other modes. These other modes are
> >presently available to anyone who wants to experiment with and use them.
> >Or, STAs from FCC are available.
> >
> >The name of the game is "control", where a certain small but strident
> >and militant group is not satisfied to do what they want to do, they
> >want to tell everyone else what to do. And anyone who doesn't want to
> >fall into line is subjected to ridicule and name calling,
>
> [and imposition of government force.]
>
> Yes that's exactly what the code test forever crowd is trying to do.
> It is "my way or the highway". We''ve all heard it often enough.

> And we've heard the ridicule heaped on those who disagree with
> the lodge initiation that this group wants to maintain embedded in
> public law as a condition of access to amateur HF frequencies.
>
> What we've heard from the other side is a call for freedom of choice
> rather than public subsidy. The merits of various communications
> techniques should be judged in free and open competition, and in
> free and open debate and discussion. Let the systems which best
> suit the needs of particular individuals be chosen by those individuals
> as a matter of informed choice, and let the choices of others be similarly
> made based on their own objectives and needs without imposition
> of government force into the matter.
>
> That's the real crux of the matter. One side wants to win their point
> through the use of government force to maintain a subsidy for their
> particular methodology. The other side is content to let individuals
> make a free and open personal choice based on the merits of the
> techniques in question, confident that Adam Smith's invisible hand
> will bring them success in the marketplace of ideas.
>

# 3675. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <4s4GcMAjpfR0Ew0B@lfheller.demon.co.uk>
Source record: 89865
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <01bcd9c9$5475ee40$0b00a8c0@eros.int.quicknet.com.au>, jb
<jose@quicknet.com.au> writes
>Hiya,
>
>Sorry for being stupid but what is a TNC.
>
>Not the Threaded Naval Connector that was talked about a week or so ago is
>it.
>
>regards,
>andrewm at quicknet dot com dot au
>
>Andrew Chin <chinny@netspace.net.au> wrote in article
><3444DFFD.79FDECF@netspace.net.au>...
>> Has anyone built their own TNC? If anyone has, could they point me to a
>> site or post a circuit diagram or something.
>

It's a Terminal Node Controller used for AX25 amateur packet radio
communications. It consists of a modem and CPU, and goes between the
radio and a terminal/computer.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3676. Re: Ham-Homebrew Digest V97 #601

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Andromedo@aol.COM
Message-ID: <971016022435_-1394640294@emout18.mail.aol.com>
Source record: 89866

FOR THE 100th time stop sending me this

# 3677. Re: Building a radio (transmitter side)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34460ba6.149062516@news.atl.bellsouth.net>
Source record: 89867

On 15 Oct 1997 01:39:54 -0700, Tovar <kd6pag@nospam.mocha.ecofe.com> wrote:

> For a single chip 2m FM transmitter, see the Motorola appnote for the
> MC2833 (follow it with a single transistor tripler to get to 2m, or two
> triplers to get to 70cm).
>
>A similar chip, the MC2831A, was written up by W1FB in _QST_, March 1990
>(pp. 31-33). Alas, it was designed for 10 meter (not even 6 meters). And
>yeah, and it already had to double the 14.5 MHz VXO to get 29 MHz (with 28
>KHz adjustment). It suggests using an 18 MHz crystal and doubling the
>results of their design twice to go from the 36 MHz to 144 MHz. But
>that would only have 120 KHz of adjustment, e.g. not enough to even cover
>the whole satellite sub-band. And then there's spectral purity issues...
>
>You're right Gary, a tripler to get to 48 MHZ and another tripler to get
>to 144 MHz, and you're in business. Maybe put in a Toko helical filter
>and not even think about emissions (or pagers on the receive side). But
>for FM, you're stlll rock-bound to a tiny segment of the 2 meter band.

The MC2833 is designed for the 49 MHz cordless phone and baby monitor
market. So you only need a single tripler to get up to 2m. Another tripler
can then put you on 70cm. I wouldn't try to VXO this. Since the chip is FM,
I'd just crystal it for a desired channel and call it a day. In fact that's what
I did. If you want more channels, add more crystals and a rotary switch
just like the old days. (Note, you can use this chip directly on 6m.)

The PA hybrid I used is the MHW607-2. This gives 7 watts out for 1 mW
in on 2m. I use a Toko helical filter on the output, doubles as the receive
front end filter for the MC13135 receiver chip too (that chip works directly
up to 200 MHz). This combo makes a fine basic FM rig. It'll serve nicely
for packet (1200 and 9600 baud), for example.

>I'm *still* looking for a decent homebrew project for 6 meters or above
>that has useful results for under three figures. (Ramsey doesn't count,
>i want reasonable sensitivity or good spectral purity. R2/T2 still need
>sophisticated VFO at VHF or above, and either pre-amp or PA.) And let's
>not compare apple with oranges, people are working HF QRP under three
>figures, and that's a fairer comparison. That is, can one at least work
>someone across town under poor conditions?

Well, I'm using a simple crystal oscillator with my R2/T2. If you want
frequency agility, then you might want to look at the Fujitsu MB1501
frequency synthesizer chip. It is good up to 1.1 GHz. It has everything
but the target VCO included on the chip. I've used it in a couple of
designs and it is easy to work with. On VHF+, you don't have to
readjust the RF phasing network unless you make a *large* frequency

change. On HF you do, so you might prefer a DDS with a quadrature output built in for that.

I haven't looked for any hybrid power modules for 6m, so I can't advise about that, but there are suitable linear power modules for 2m and 70cm available to take you up to at least 30 watts. That'll do more than work across town. These need more drive than the T2 can supply, so you'll want to use a CATV trunk amplifier hybrid between the output of the T2 and a high power PA. All this stuff is basically plug and play. Operating the CATV hybrid at 50 ohms instead of 75 ohms doesn't seem to bother it. There's still plenty of gain available to drive the high power PA.

>The theoritical projects are fine for experienced people with decent
>test equipment; i'm interested in something more along the lines of
>reproducible project. And heck, i'd even settle for CW-only if it were
>something a Technician could use. Even if they can't decode it by ear,
>with a decent amount of hacking, their computer probably could. If one
>can hand-send and only responds to CQs from stations that one's software
>is currently able to decode, rather than issuing CQs, the other end may
>not even know it's not being received by ear... And the technician has
>gotten out of the FM rut.
>
>How about something real to build that isn't HF?

I suggest you go ahead and build a R2 and T2. Get the Kanga kits if you don't feel up to scratch building them. This gives you the heart of a SSB/CW rig with proven performance. You can use a simple crystal oscillator with this in the beginning. Later you can build a PLL or DDS for it. (I'd suggest a DDS with a very simple clean up PLL.)

You can even use a VFO with it if you operate it on HF and use a transverter up to VHF+. Most transverters want to see the drive level the T2 provides. The Suffolk transverter (in the RSGB VHF DX Book) would be a good one for this, or a quick and dirty approach would be to use the Hamtronics XV2 kit. If you set the T2/R2 up for 20m, you can use the Ten-Tec transverter kit to 6m. (Of course remember that the T2/R2 *will* work directly up to 500 MHz with the proper LO. It's your choice.)

You can use the T2/R2 as a fixed IF with a crystal LO and make the transverter LO tunable. There can be some advantages to this approach, though it is more complex than using them directly on frequency. For example, you can have a number of switched transverter decks for multiband capability. Since the transverters will normally be using a LO with a high multiple, you can use a crystal VXO for this. That's simple, cheap, and nearly foolproof. (Remember that most of the cheap QRP HF rigs are crystal controlled too, and they won't have nearly the pulling range you can get with a high multiple for VHF or UHF.)

The key thing is to keep everything modular so you can concentrate on one thing at a time while initially getting it going, and then improve one thing at a time later. This should keep you out of major trouble.

Having accesss to a spectrum analyzer is nice (and downright essential
if you use one of the crappy Hamtronics modules), but you can get away
with just a tunable receiver as your test equipment if you stick to the plug
and play hybrids.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3678. Re: 6m amp help??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: al.dolgosh@hamradio.org
Message-ID: <8E1A21A.002C000401.uuout@hamradio.org>
Source record: 89868

-> From: hamm4fun@aol.com (Hamm4fun)
-> Subject: 6m amp help??
-> Date: 13 Oct 1997 17:57:05 GMT
-> Message-ID: <19971013175700.NAA25178@ladder02.news.aol.com>
-> Organization: AOL http://www.aol.com
->
-> I recently came by a tube soket assembly for a pair of 4cx250's. Thought
-> they may make a nice building block for an amp. They have a built in screen
-> bypass cap which measures 120nf total for both tubes. Apparently this
-> assembly was designed for UHF/VHF use. My question is what is the minimum
-> freq that tthe sreen bypass would be effective. I was thinking about
-> building a 6/10 meter amp. I have figured out a way to augment the existing
-> capacitors but had rather not. I may even cosinder using them in a 2 meter
-> amp instead. Any help would be gratly appreciated.
->
-> Jim

The integral coaxial screen bypass capacitor is a feature that was demanded by VHF/UHF frequency operation where the length of the path to ground was kept as short as possible in the interest of stability. If you are planning on using the socket assembly at HF, just hang some additional capacity on the sockets' screen terminals and don't worry about it.

Al Dolgosh - K8EUR

---
Cleveland Hamnet BBS | (440) 942-6382 uucp--> hamradio.org
Willoughby, Ohio USA | The World's Meeting Place since 1985
Dedicated to Amateur Radio and Electronic Subjects
---

# 3679. Re: Weather Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: cjX@hth.com
Message-ID: <344632e4.13115333@news.buller.se>
Source record: 89869

Hi Jeff,

Jeff <jluther@lucent.com> wrote:

>Hello all
> I am looking for plans to build a home weather station, wind gage,
>barometer, thermometer, etc. and to be able to log the info
>electronicaly I have an old pc that can be made into dumb terminals to
>collect the data.

Check out L.O.S.A at http://www.hth.com/losa.htm

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

# 3680. ** FLEA at MIT ** Sunday October 19th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <625bqq$hms@senator-bedfellow.MIT.EDU>
Source record: 89870
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday..

*** !!!! WE ARE BACK IN THE GARAGE !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
October 19th, 1997
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >1000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Seperate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)

Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

**********
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 397082 MIT Br Cambridge MA 02139-7082 617 258 3754
**********

# 3681. FS: Admirality Wireless Signals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Siegfried Rambaum <siram@light.lightlink.com>
Message-ID: <Pine.SUN.3.95.971016112238.17527A-100000@light.lightlink.com>
Source record: 89871
Cross-posted to: Rec.radio.swap,alt.ham-radio.marketplace,rec.antiques.radio+phono,rec.ham-radio.swap,rec.radio.amateur.boat anchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

For Sale:

The Admirality List of
Wireless Signals
Volume II

Regulations, Details of Codes
List of Observation Stations
and General Information

Third edition, 1937
Published by His Majesty's Stationery Office, London, UK
310 pages
Condition of the book: Good
on a scale of Mint
Fine
Good
Fair
Acceptable
Junk
Price: Ten dollars inclusive of postage within USA-48

Respond by email only

# 3682. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EI5HsD.ELA@world.std.com>
Source record: 89872

Cecil replied:
> What percentage of CBers use SSB? Just going by the odds.

I wouldn't know, haven't listened to chicken band since '76.

Since multi-service radio mags CB columns and radio reviews
discuss things like the advantages of SSB and people talk about
it being crowded, I assume they take advantage of it.
Although I'd be sure other folks use AM so they can QRM two SSB
conversations at once. If they try to use their linear with AM,
hey, why should we complain? Might make them harder to finger to
the FCC field office, but ...

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 3683. HIGH VOLTAGE FUSE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: doug johnson <iix@pop.interaccess.com>
Message-ID: <34464793.F418B27F@pop.interaccess.com>
Source record: 89873

I AM BUILDING AN AMP POWER SUPPLY, SCEMATIC SAYS TO USE A 2KV, 1AMP FUSE
IN HIGH VOLTAGE LINE, I CANT LOCATE ONE, ANY SUGGESTIONS? DOUG,W9IIX

# 3684. LOOKING FOR A EASY BUILT ATV TX PLANS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: jolly@here.com
Message-ID: <3445c66e.72417050@news.tip.net>
Source record: 89874

Can any1 help me with a URL where i can find plans for a esay built
ATV Transmitter Pse

# 3685. Re: school project-need info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: aa9gg@flash.net
Message-ID: <34467200.27686927@news.flash.net>
Source record: 89875

On Sun, 05 Oct 1997 22:21:27 -0400, Brian Shea <thebigo@usa.net>
wrote:

> I am doing a Junior year project at school for the electronics
>course I am taking. I decided to do this project on Ham Radios. I want
>to build a Receiver or maybe transmitter.

If you DON'T have a license I don't suggest the transmitter!!!!!!!

Paul Mateer, aa9gg@flash.net
Elan Engineering Corporation
http://www.qth.com/elan

# 3686. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Don Huff <"don huff"@hp.com>
Message-ID: <34467B8B.3D54@hp.com>
Source record: 89876
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Andrew Chin wrote:
>
> Has anyone built their own TNC? If anyone has, could they point me to a
> site or post a circuit diagram or something.
HI Andrew OM,

Over a dozen years ago now, TAPR, Tucson Amateur Packet Radio Assn,
kitted a very good
design with excellent documetation available, for building an AX.25
packet protocol
Terminal Node Controller. I built both a TNC-1 and a TNC-2, the latter
of
which I still use. Keep in mind that today, multimode controllers are
sometimes
erroneously called "TNC's" even by their manufacturers in
advertisements. "TNC"
applies only to AX.25 protocol, not Pactor, Amtor, RTTY, CW, etc. As
such,
the TAPR TNC-1 and TNC-2 were strictly AX.25 packet TNC's. See the ARRL
Web
Page for links to TAPR.

73,
Don, W6JL

# 3687. Re: HIGH VOLTAGE FUSE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3446885e.509209@news.online.no>
Source record: 89877

On Thu, 16 Oct 1997 11:57:56 -0500, doug johnson
<iix@pop.interaccess.com> wrote:

>I AM BUILDING AN AMP POWER SUPPLY, SCEMATIC SAYS TO USE A 2KV, 1AMP FUSE
>IN HIGH VOLTAGE LINE, I CANT LOCATE ONE, ANY SUGGESTIONS? DOUG,W9IIX
>
An indirect reply...
Lately it has been a practice for large transmitters (5-10kW TV, FM
broadcast etc) HT fuses are avoided for transmitters, but include a 50
ohm 50W resistor between power supply and power supply. Use only mains
fuse. The extra series resistor is always a good practice.
---
Email: LA8AK at online dot no

## 3688. 6M duplexer construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Graham Warrington <ve1fc@nbnet.nb.ca>
Message-ID: <01bcda75$203e16a0$1a98b3cf@ve1fc.brunswickmicro.nb.ca>
Source record: 89878

We are putting together a repeater ans would
like some info on can construction....

Such as diameter outer and inner, length
loops length and capacitor used for Q switch ..

Also need lengths of harness....

Any help appreciated !
ve1fc@nbnet.nb.ca
Graham

# 3689. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: nielsen@primenet.com
Message-ID: <slrn64d2vc.1kn.nielsen@nielsen.tus.primenet.com>
Source record: 89879
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <625ihv$pno$2@kodak.rdcs.Kodak.COM>, Andrew Pavlin wrote:
>In article <3444DFFD.79FDECF@netspace.net.au>, Andrew Chin <chinny@netspace.net.au>
writes:
>> Has anyone built their own TNC? If anyone has, could they point me to a
>> site or post a circuit diagram or something.
>>
>
>You might try contacting TAPR (Tucson Amateur Packet Radio, http://www.tapr.org).
>They were the designers of the original TNC-2 that most of the basic TNC's these
>days are clones of, and they sell plans and kits.

TAPR no longer sells TNC kits, but the schematic, manuals and eprom images
for the TNC-2 are available at TAPR's web site, www.tapr.org in the
software library.

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
http://www.primenet.com/~nielsen

## 3690. Planet of the Grapes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19971016231200.TAA22727@ladder02.news.aol.com>
Source record: 89880

Planet of the Grapes

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 3691. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3446920b.16018745@news.crosslink.net>
Source record: 89881
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 16 Oct 97 00:24:05 GMT, "jb" <jose@quicknet.com.au> wrote:

>Hiya,
>
>Sorry for being stupid but what is a TNC.
>
>Not the Threaded Naval Connector that was talked about a week or so ago is
>it.

"Terminal Node Controller" leaves me cold, too.

You have a Modulator/Demodulator (MODEM) on your PC or you wouldn't be here. Imagine that instead of the serial data stream going back and forth between the MODEM and your PC, that instead it's going back and forth with a similar box that listens to the audio from your ham receiver and sends commands and data to the ham transmitter. The TNC is usually designed to do many different "modes" (RTTY, CW, Packet, etc) whereas the MODEM only has to do one (convert serial bit stream to tones and vice versa).

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

## 3692. Dual point modulation info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Alan Tabourian <71203.1307@CompuServe.COM>
Message-ID: <eF2AAMq28GA.68@nih2naac.prod2.compuserve.com>
Source record: 89882
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I am looking for information about dual point modulation to be able to achieve a good frequency response down to DC or so. Are there any app. notes or books that discuss this technique in detail?

In addtion to posting the reply on usenet, I would appreciate it if you could copy me in as I have problem with usenet from time to time.

Many thanks,

Alan+

## 3693. PLATE trans.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: marty gunnarsson <marty@fia.net>
Message-ID: <3446AF1B.7647@fia.net>
Source record: 89883

knoweledgable people can you tell what to expect [voltage and current]
from running a 50 hz.transformer at 60 hz.What i mean is percentege wise
higher or lower.say its 6000 volt center tap at 1.5 amp sec. at 50hz.
220 in,what would i get on 60hz. thanks marty@fia.net

# 3694. Drake MN-75 tuner $125.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcdac1$4f407960$bd9ed8cc@km3g.cts.com>
Source record: 89884
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

matches the 7-line. 200 watts. $125.00 you pay shipping from San Diego zip 92139

## 3695. Can you help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <34461477.636690@news.azstarnet.com>
Source record: 89885

Slightly off topic but I recently acquired a Yaesu FT208R and NC-3A power supply sans manuals.

I'm looking for a copy of these manuals. The usual payment for postage and expenses is offered.

Thanks and 73,

Wes N7WS

# 3696. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: al.dolgosh@hamradio.org
Message-ID: <8E1A228.002C000402.uuout@hamradio.org>
Source record: 89886

-> From: "R.Morris K2RK" <robrk@pgh.net>
-> Subject: Re: high voltage power transformers
-> Date: Tue, 14 Oct 1997 12:36:08 -0400
-> Organization: Very Little
-> Message-ID: <34439F78.1A9E@pgh.net>
->
-> Amplifier---If you can pick it up...it ain't big enough....
->
-> Carefull what you ask for. Heard of someone asking Peter Dahl for a 4000
-> volt transformer
-> and got it, forgetting to do 1.4x and ended up with a 5600 volt supply.....

Right! Then, the only way to properly recover from this mistake is to buy an
expensive filter choke and make it a choke-input filter supply (about 0.9 RMS).

Or, add some bias to the GG amplifierto keep it out of thermal meltdown from
high idling current, and be even louder while you cross your fingers and hope
for decent tube life!

Al Dolgosh - K8EUR

---
Cleveland Hamnet BBS | (440) 942-6382 uucp--> hamradio.org
Willoughby, Ohio USA | The World's Meeting Place since 1985
Dedicated to Amateur Radio and Electronic Subjects
---

## 3697. Building a radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199710161350.JAA23302@pop.uky.edu>
Source record: 89887

A few people have asked for the address and
phone number for Edlie Electronics and Elenco Electronics.
I don't info for Elenco but Edlie is as
follows:

Edlie Electronics
2700 Hempstead Turnpike
Levittown, NY 11756
PHONE: 800-645-4722

Edlie is an old electronics company kind of like
Olsen and B&A was.

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

# 3698. FS: Heathkit Weather Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Ricky <*kc4kin@geocities.com>
Message-ID: <6258so$5tk@bgtnsc02.worldnet.att.net>
Source record: 89888

I have an ID-4001 Weather station that is inoperative. Some of the LED's

light up, but
I can seem to set the time, etc. on it. It looks great cosmetically. I
don't have any sensors
or documentation on it. I will take offers on it till October 25th and
let it go to the best
offer. I will confirm offers by return email. Send offers to:

kc4kin@geocities.com

Thanks,
Ricky

# 3699. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <3446366E.29E9@ccm.intel.com>
Source record: 89889
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

jb wrote:
> Sorry for being stupid but what is a TNC.

Hi JB, it's a box of electronics usually used for Packet but has been
applied to a box to do other HF modes also.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

## 3700. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: plains.parson@NOSPAMworldnet.att.net
Message-ID: <625iqh$k8a@bgtnsc02.worldnet.att.net>
Source record: 89890
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.misc

On 15 Oct 1997 07:19:56 GMT, Greg Dean <n9nwo@gte.net> posted:

>I think that we need a discussion what place Morse Code will
>play in the next century. While some will remark that the
>military, including the Coast Guard, have deserted Morse,
>others will comment that the Navy Academy is still teaching
>it. There is a move to bring it back into MARS but that is
>due to some of the older members wish to continue using it.

The "status quo, way we've always done it" bunch. Change IS
difficult, more so for some than for others.

>
>We need to have people like Jeff Herman, who was there when
>the Coast Guard stopped the use of code, to give their insights
>of what the military and merchant marine communities are heading
>towards. We need the insights of others.

Both sides, equally as humanly possible.

>
>I am Army, still serving. We do not use the code, even morse
>intercept is gone. Digital is king. Even the Navy is highly
>dependant on digital with the Tactical Digital networks at the
>fleet level (I completed four years of Navy ROTC at Purdue just
>for fun and relief from my engineering courses). Most of business
>is going digital. But someone should keep the skills alive, if
>for no other reason than just fun and the romance of the old days.

Fine, keep it alive; many will do so. However, the "doing so" need
not be forced on others by government, as there is no justification
for government to continue to do so, IMO.

>
>I believe that we see the Morse requirement be lowered to 10-12
>wpm. The 21 wpm will most likely disappear. But some familiarity
>is needed, just not a high skill level. This is in line with the
>rest of the western world. (Along with tougher but few testing
>elements.)

Why, if at all, is familiarity, "needed"? Awareness of its
existence, yes; curiosity, yes; capability, yes; ability and skill,
yes. But by choice, not by force, IMO.

# 3701. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: apavlin@nasa.kodak.com
Message-ID: <625ihv$pno$2@kodak.rdcs.Kodak.COM>
Source record: 89891
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <3444DFFD.79FDECF@netspace.net.au>, Andrew Chin <chinny@netspace.net.au>
writes:
> Has anyone built their own TNC? If anyone has, could they point me to a
> site or post a circuit diagram or something.
>

You might try contacting TAPR (Tucson Amateur Packet Radio, http://www.tapr.org).
They were the designers of the original TNC-2 that most of the basic TNC's these
days are clones of, and they sell plans and kits.

--

_____________________________________________________________________
Andrew Pavlin, KA2DDO
Eastman Kodak Company, Office Imaging Division
901 Elmgrove Road, Bldg. 11
Rochester, NY 14653
_____________________________________________________________________

# 3702. Re: Weather Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: apavlin@nasa.kodak.com
Message-ID: <625i73$pno$1@kodak.rdcs.Kodak.COM>
Source record: 89892

In article <3445409E.4AD0@lucent.com>, Jeff <jluther@lucent.com> writes:
> Hello all
> I am looking for plans to build a home weather station, wind gage,
> barometer, thermometer, etc. and to be able to log the info
> electronicaly I have an old pc that can be made into dumb terminals to
> collect the data.
> Thanks for any help!
>
> Jeff
> jluther@lucent.com

Tab Books had a book entitled (I think) "How to Build Your Own Earthquake, Solar, and Weather Sensors" (or something of that ilk; I'll have to check my bookshelf when I get home). This book covered all the electromechanical issues of constructing the sensors; however, it does not have any computer stuff in it on how to encode the sensor outputs into digital form.

For the digital side, I recommend looking in old issues of BYTE magazine (10+ years back, when it was for hobbyists instead of academic scientists & corporate engineers) for the various columns by Steve Ciarcia, or Steve's books "Ciarcia's Circuit Cellar"; Steve covered a lot of different computer-to-arbitrary-thing interfacing techniques, and gave actual schematics with part numbers. You may want to update his circuits to use modern chips, but the theory is sound. There were other articles in the old issues (I remember one cover article on computerizing a large model train layout, with the software to simulate a real railroad switch control center, and the sensor interfaces to provide closed-loop feedback of train locations on the tracks) that also covered non-standard interfacing issues.

If all you want is a weather station (as opposed to the educational opportunity of designing and building it), you can get commercial computer-compatible systems for less than it would cost for you to design and build one from scratch. In my shack, I have the Peet Bros. Ultimeter 500 weather station with the optional electronic rain gauge and PC data logger interface. It works very nicely, and has a battery backup system for the control unit's weather history memory (one 9V transistor radio battery, not a $500 UPS). Now, if I can just figure out how to tie this to my ISDN router, so I can have remote "time & temp" from my shack.... :-)

Hope this helps.

--

---
Andrew Pavlin, KA2DDO
Eastman Kodak Company, Office Imaging Division
901 Elmgrove Road, Bldg. 11
Rochester, NY 14653
---

# 3703. Re: FS: Heathkit Weather Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Ricky <*kc4kin@geocities.com>
Message-ID: <625k62$lqs@bgtnsc02.worldnet.att.net>
Source record: 89893

Ricky wrote:

> I was just re-reading my post and saw a mistake. The previous message
> said that "I

can set the time" It should be, I can't set the time. Sorry for the
mistake.

> kc4kin@geocities.com
>
> Thanks,
> Ricky
>
> ������������������������������������������������������������
> ////////////////////////////////////////////////////////
>
> Attention: The e-mail address in the header is bogus
> to help prevent SPAM in my mailbox. If you want to
> reply send email to: kc4kin@geocities.com
> Remove the * from the front of the message header
>
> Ricky L. Ponder http://www.geocities.com/~kc4kin
> ������������������������������������������������������
> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

# 3704. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Edward A Slimak <afn01212@afn.org>
Message-ID: <34465535.F92@afn.org>
Source record: 89894

Yea, they are in thousands of ARRL handbooks all over the world! Sparks

# 3705. Re: Manual for Tek 190B Sig. Gen.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <625mfc$e45$1@news1.teleport.com>
Source record: 89895

In article <3444555F.132C@erols.com>, astone@erols.com wrote:
>Hi -- Picked up one of these instruments for free at a hamfest and it
>seems to work very well. Would be nice to have the manual though or at
>least the schematic and some key specs. from the manual. Wonder if
>anyone happens to have the manual and wouldn't mind copying a few pages
>for me (will reimburse). Alternatively, perhaps someone can
>suggest a source for obtaining the manual. Thanks.
>
>73,
>
>Ron (KA3J)

THE source of manuals for old Tek equipment is Deane Kidd (W7TYR). His phone number is (503)625-7363.

Roy Lewallen, W7EL

# 3706. Need HELP or INFO on SC-1019 Power Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Pieter Ibelings <n4ip@amsat.org>
Message-ID: <62666g$bsr@camel20.mindspring.com>
Source record: 89896
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for information on the SC1019 power module. Is it a 2 meter or 432 MHz module. Thanks

Pieter

# 3707. Re: QSL Buro question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: NORMANMO@miavx1.muohio.edu
Message-ID: <3446736F.256E@miavx1.muohio.edu>
Source record: 89897

Before this thread ends (I also understand it's not related to this group, but it's the only one I read) just how do I change my address like I've seen others do to avoid junk Email? I use netscape on a MAC. Thanks N2ERI

# 3708. Help on Alinco DR-112.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Andre Antunes <andre.antunes@mail.eunet.pt>
Message-ID: <629oak$gbg@news.EUnet.pt>
Source record: 89898
Cross-posted to:
alt.ham-radio.marketplace,alt.radio.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Hello everybody,
I recently purchase an Alinco DR-112. I noticed that it receives/transmits a
little bit out of the frequency on the LCD. Which is the part (variable
condenser) that I must tune?
Which is the part that must also tuned/replace, in order to get more power
than the 25 Watts?
Thanks in advance to all. I'm asking these questions, for I have no manual.
Bye........

--
Andr&#65533; Antunes
andre.antunes@mail.eunet.pt

## 3709. Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Andrew Chin <chinny@netspace.net.au>
Message-ID: <3444DFFD.79FDECF@netspace.net.au>
Source record: 89951
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Has anyone built their own TNC? If anyone has, could they point me to a site or post a circuit diagram or something.

# 3710. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: jb <jose@quicknet.com.au>
Message-ID: <01bcd9c9$5475ee40$0b00a8c0@eros.int.quicknet.com.au>
Source record: 89952
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hiya,

Sorry for being stupid but what is a TNC.

Not the Threaded Naval Connector that was talked about a week or so ago is
it.

regards,
andrewm at quicknet dot com dot au

Andrew Chin <chinny@netspace.net.au> wrote in article
<3444DFFD.79FDECF@netspace.net.au>...
> Has anyone built their own TNC? If anyone has, could they point me to a
> site or post a circuit diagram or something.
>
>

# 3711. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34456f5f.109049405@news.atl.bellsouth.net>
Source record: 89953

On Sun, 12 Oct 1997 07:51:06 GMT, la8ak@online.nospam.thanks (J M Noeding)
wrote:
>On Sat, 11 Oct 1997 00:13:55 GMT, wrt@eskimo.com (Bill Turner) wrote:
>
>>The same thing has been done for years with Baudot RTTY, and
>>especially now with K6STI's program which uses what he calls a
>>"numerical flywheel". It pulls signals out of the noise like magic.
>>And of course RTTY runs at 60 words per minute, far faster than most
>>of us can do CW. Put aside the key for a while and grab the keyboard.
>>You'll be pleasantly surprised.
>>
>>73, Bill W7TI
>>
>100LPM cw is 16.6baud - about 1/3 of RTTY speed
>an optimal cw rx system may have some signal/noise advantage over
>RTTY, or you may use some lower power. CW signals occupy less
>spectrum, more amateurs may be QRV within a bandsegment using cw than
>RTTY
>
>because of the low power needed the use of CW may have an
>environmental advantage, too

If you are still using a fixed speed mechanical teleprinter and fixed
demodulator filters, slow CW may have some advantages for low
signal (IE low power) operation. But with many amateurs using software
demodulation and printing, that advantage can be made to disappear
simply by lowering the data rate and shift of the "RTTY" station and
adjusting the filtering to match.

Software systems like Coherent can lower the signaling rate to as low
as 1 baud, and match filter it. At that point, occupied bandwidth drops
to about 2.33 Hz, much narrower than an OOK Morse modulation,
and required signal levels drop to many times less than needed for
manual CW too.

But because of the decoding advantages of a uniform code and use of a fully
voiced modulation, you don't need to go that slow to beat manual OOK Morse.
Because you *can* match filter the modulation, and because you *can* get a
decoding gain, the required CNR for 100% copy is lower than for systems,
such as OOK Morse, where you can't do that. So you can trade CNR for
speed and increase speed while still keeping CNR at or below the manual
detection threshold.

>By the way, is still the mainline TT/L tube type TU (QST 1964?)
>expected to be the best?

No. It was a very good system for its time, but use of DSP techniques has allowed us to handily surpass it today.

Gary

Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3712. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: inet@intellisys.net
Message-ID: <623tlh$djc@snews3.zippo.com>
Source record: 89954
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <3444DFFD.79FDECF@netspace.net.au>,
chinny@netspace.net.au says...
>
>Has anyone built their own TNC? If anyone has, could they
point me to a
>site or post a circuit diagram or something.
>

I am not even sure if this is a relevant response to your post...

In a fit of enthusiasm, I bid on a couple of ham radio items at
an estate
auction. I had and have no earthly use for either of them.
They are:
1) A Heathkit Electronic Keyer. (This has two paddles, a
speed and volume
knob, and a line power lead for 120/240 50/60 or optional
12VDC)

2) A Computer Patch Interface from Advanced Electronic
Applications Inc
Model cp-1
Six front panel buttons, a var shift knob, a 'tune' led display.
With three connectors.
Requires 16 volt AC (not provided)

I have no idea if these items are functional.
Sell for $10 each as is, or $20 each, with money back
guarantee.

brian whatcott <inet@intellisys.net> Altus Oklahoma USA

## 3713. high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: w1gak@mindport.NET
Message-ID: <199710160402.AAA13612@Eden.mindport.net>
Source record: 89955

Already have what I need. Charging 48uf energy storage caps. to 300 joules.
(2500 V rms * 2^.5 * 48E-6)/2

# 3714. Heath 2kW tuner SA-2040 $185.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcdac1$2653ca20$bd9ed8cc@km3g.cts.com>
Source record: 89956
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Very rugged high power tuner. handles legal limit with ease. 4.5kv air variables. Roller inductor. $185.00. Buyer pays UPS from San Diego zip 92139

# 3715. FS : Transformers ( Reduced Prices )

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: John Finchum <finchum@iquest.net>
Message-ID: <01bcda13$e5d7f320$d200a8c0@main>
Source record: 89957
Cross-posted to: alt.ham-radio.marketplace,rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio.swap,rec.radio.amateur.boat anchors,rec.radio.amateur.homebrew

This list was updated 10/15/97.

I will consider bids.

I have a few transformers I need to get out of my house.

1 Harman Kardon Citation V power transformer, made to operate with two of the Citation V output transformers, $ 65.00 USED

1 Harman Kardon Citation V output transformer, made for push pull 6L6GC output tube use, $ 55.00 USED

1 Triad S-31A output transformer, 8000 ohm p.p. plates to 4/8/16 ohm v.c., 15 watts, vertical encased mounting $ 20.00 NIB

1 Stancor A-3877 output transformer, single 5000 ohm plate to 4 ohms, 5 watts, maximum primary d.c. : 40 ma. $ 10.00 NIB

1 Thordarson 21M55 modulation autoformer, transceiver for use in citizens band, 6750 ohms tapped at 5000 ohms with separate vc winding 4ohm voice coil $ 10.00 NIB

1 Triad F-40X filament transformer, primary = 115 volts 60 cps, filament = 26.8 center tapped @ 1 amp, horizontal channel mounting $ 10.00 NIB

1 Triad V-31 vibrator transformer, 115 cps primary 12 - 16 volts secondary 575 volts center tapped 79 ma. d.c., uncased $ 25.00 NIB

1 Fisher X-100B T951-115A power transformer $ 40.00 USED

2 Fisher X-100B T849-116-5B / 6B output transformers, made for push pull 7868 output tube use, $ 30.00 each, USED

2 Fisher X-100 T781-116-1 / 2 output transformers, made for push pull EL84 / 6BQ5 / 7189 output tube use, $ 30.00 each, USED

Shipping is extra.

E-mail

John
finchum@iquest.net
Indianapolis, Indiana USA

# 3716. Marconi 107A crystal set

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: "Juan A. Albaladejo" <jaalbldj@arrakis.es>
Message-ID: <3445E458.3A3E@arrakis.es>
Source record: 89958

Hello to all!
I�m interested in getting the schematics of the Marconi type 107A crystal set/tuner, and if it is possible, some details about size and n.o. turns of the coils, coupling...
Thanks! Best regards from..
Juan, EA4ALZ -- E-Mail: jaalbldj@arrakis.es

# 3717. AEG YL1260 TUBE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: ntw4axwi@rhds01.rz.fht-esslingen.de
Message-ID: <624va7$1p5$1@news.belwue.de>
Source record: 89959

Hi everybody !

Does anybody know where to get the data sheet of the above
tube ?? Any help will be appreciated !!

Thanks in advance, Axel, DF7ATW
--
Origin : < Axel Thorsten Wittich - FH Esslingen >
Adress : < ntw4axwi@rz.fht-esslingen.de >

--> Uebertragungstechnik - und der Student schlaeft wie ein Murmeltier !

## 3718. Kban PCB CAD & Circuit Editing Freeware for Win95

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Garth Ball <jira@deepsouth.co.nz>
Message-ID: <01bcda27$4daa08e0$76dc24ca@not-applicable>
Source record: 89960

Came across this interesting software of interest to homebrew PCB-Makers at a Japan website but was unable to download it. Had a email chat with the author who has now kindly made it available at http://people.unt.edu/~khirata/temp/

# 3719. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Andrew Chin <chinny@netspace.net.au>
Message-ID: <3445FE47.F289BAB7@netspace.net.au>
Source record: 89961

TNC. Terminal Node Controller. Essentially a modem for the PC which
lets you use the airwaves instead of phone lines.

jb wrote:

> Hiya,
>
> Sorry for being stupid but what is a TNC.
>
> Not the Threaded Naval Connector that was talked about a week or so
> ago is
> it.
>
> regards,
> andrewm at quicknet dot com dot au
>
> Andrew Chin <chinny@netspace.net.au> wrote in article
> <3444DFFD.79FDECF@netspace.net.au>...
> > Has anyone built their own TNC? If anyone has, could they point me
> to a
> > site or post a circuit diagram or something.
> >
> >

# 3720. Re: Need MC34119 audio amp 8pin dip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19971016115300.HAA06421@ladder01.news.aol.com>
Source record: 89962

Hi Tony--

Try ALL ELECTRONICS Corp. , 1-800-826-5432. Their latest ads show MC34119P's for .60 ea.

Rick K1BQT

# 3721. Re: Looking for CW beacon EPROM program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <m8VBIXAWxfR0Ew3k@lfheller.demon.co.uk>
Source record: 89963

In article <MPG.eaf21615c2879fa98968f@news.infoave.net>, "Webster D. Williams" <kr4wm!@sccoast!.net!> writes
>I'm looking for the code needed to send to an EPROM that
>would allow it to be a beacon keyer. Anybody ever do this?

It's much easier to use something like a PIC 16C84 or an Atmel 1200 controller. I've got the code to do this if you are interested.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3722. Re: A/D Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-16 00:00:00 UTC
From: Nicholas R Kennedy <nkenned@entergy.com>
Message-ID: <3446016A.7AC8@entergy.com>
Source record: 89964

Ken--

Are you wanting to build or buy? I built an inexpensive PIA board for the PC from a Radio-Electronics article, then added an ADC, also inexpensive, to interface to the PIA board. The whole mess must have been less than $50. Of course, I have to do my own software.

Nick, WA5BDU

Kenneth W. Schildt wrote:
>
> Hello all,
>
> Can anyone recommend an inexpensive A/D interface for the PC?
>
> Thanks,
>
> Ken N4VSD

# 3723. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971017184547.22211C-100000@oso.slonet.org>
Source record: 89815

I think I am wasting my time. The modern "tiggit twigitts" don't give a
damn. They have then time, but the better answer is of course, they don"t
care since they did not earn it! They can not tell you if the weather
is hot or cold since they do not give a damn.
Brought to you by the ignorant, plodding jerk that put up this for years!
Cliff Buttschardt K7RR

On 17 Oct 1997, Carl R. Stevenson wrote:

> Marijan Miletic <s56a@s55tcp.ampr.ORG> wrote in article
> <12743@s55tcp.ampr.org>...
> > With slight delay I noticed interesting tech debate (again?) on Morse.
> >
> > I have a great respect for a longtime work of Bill, W0IYH and frequent
> > comments from Gary, KE4ZV but Carl, WA6VSE seems to be of Internet age!
>
> Interesting "observation" ... I'm 46, an RF engineer by profession for
> over 25 years, and a licensed ham since 1975 ...
>
> > I am 52, M. Sc. E.E., computer professional, ham since 1962 on 6-160m
> > using CW, SSB and RTTY. I did Ph.D. resarch on HF CW computer detection
> > until 1991. Let me add few thoughts on the beloved Morse code.
> >
> > Morse code was introduced 100 years ago as the only form of direct human
> > digital communication and it is impossible to defend in the 21st century.
>
> Glad to hear someone who likes Morse, and has obviously studied it at
> some length, be that honest about it ...
>
> > It had efficient entropy information encoding using statistical features
> > of English language by assigning short symbols to the frequent letters.
>
> The fact that it was based on ENGLISH statistics doesn't play well into
> the often-cited argument that Morse is somehow a "universal language"
> (which is, of course, a complete pile of bogus dung).
>
>
> > Our DC-THz tech guru Matjaz, S53MV, professor at Ljubljana University,
> > claims the following educational advantages of CW in hamradio comms:
>
> > QSO procedures,
>
> which can be learned as easily or more easily in any other mode ...
>
> >TX/RX protocol,

>
> which can be learned as easily or more easily in any other mode ...
>
> >error detection and correction.
>
> I'm sure that you must agree that modern digital FEC techniques
> can easily outstrip the simple contextual error detection/correction
> afforded by Morse ... in fact, any non-FEC text mode can just as easily
> be checked and corrected in the same contextual manner as Morse ...
>
> > Weak side of CW is poor usage of radio spectrum and power (surprised?).
>
> Not at all ... I have asserted the same thing for many years ...
>
> > Our ears with associated part of brain are so inferior to visual senses.
> > The following table sumarises some important radio communications facts:
> >
> > Modulation type Information speed Bandwidth Efficiency
> > ---------------------------------------------------------------------
> > Human CW - OOK 10bps 500Hz 0.020bps/Hz
> > Radioteletype 50bps 300Hz 0.167bps/Hz
>
> > SSB speech 200bps 2kHz 0.100bps/Hz
> > AM speech 200bps 6kHz 0.033bps/Hz
> > FM speech 200bps 15kHz 0.013bps/Hz
>
> It is not clear to me where the 200bps number for speech came from ...
> Mr. Nyquist would assert that that rate could only handle an upper
> frequency limit of 400 Hz at best ... that would result in pretty crappy
> audio fidelity ... I would submit that the "effective information rate"
> of speech should be much higher, with the result that the "efficiency"
> number would look MUCH better than your numbers in the table above ...
>
> However, the *relative* efficiencies of SSB/AM/FM (relative to each
> other, but not to the other modes) are probably in the ballpark ...
>
> As the *relative* numbers show, "narrowband FM" is pretty bad ... we
> could do MUCH better than NBFM for 6m and up ...
>
> > AFSK/FM packet 1200bps 15kHz 0.080bps/Hz
>
> Yes "traditional" (like we did a decade or more ago) packet radio sucks
> big-time, too ...
>
> > Manchester packet 38.4kbps 200kHz 0.192bps/Hz
>
> Manchester causes an unnecessary expansion of the necessary bandwidth.
> We can do much better here, too ... the WA4DSY modem does 56kbps in an
> occupied bandwidth of about 80kHz at the -30dB points and about 110kHz
> at the -50dB points (interpolated from a spectrum analyzer) ...

> 
> > BPSK packet data 1.2Mbps 2MHz 0.614bps/Hz
> > QPSK GSM mobile phone 271kbps 200kHz 1.355bps/Hz
> >
> > Note: Manchester and 1.2Mb packet networks are implemented in Slovenia!
> 
> Yes, it appears that Slovenia (high-tech power-house that it is)
> has substantially more technically educated and advanced hams than
> the US. But then again, they don't have the ARRL holding them
> back at every turn, either ...
> 
> > CW EME uses 1kW RF, 20dB antennas, 250Hz RX filter for 5bps and 3dB S/N.
> > Malfunctioning Galileo probe sends signals from 1000 times greater
> > distance using only 20W into omnidirectional antenna, RX antenna is 60m,
> > information speed is 10bps with S/N only 30 times lower! These modern
> > communication techniques are available to hams (exception is RX antenna)
> > in the simple form of software, PC and SoundBlaster.
> >
> > PACTOR2 hamradio modem does 1000bps in 500Hz BW, 100 times more than CW!
> 
> Yes and will maintain reliable links at levels far below where an OOK Morse
> signal's presence could even be detected by ear, let alone copied with 100%
> reliability ...
> 
> > 73 de Mario, S56A, N1YU.+
> 
> 73 Mario,
> 
> --
> Carl - wa6vse
> wa6vse@fast.net
> NCI #1052
> Join No Code International!
> Support the modernization of ham radio and
> help to assure its survival into the 21st century!
> 
> 
> 

# 3724. Trade 75A1/270G1 for HF amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcdc12$0409bb80$66a0d8cc@km3g.cts.com>
Source record: 89816
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Material condx is ~ an 8 on a 10 scale. The 75A1 needs to be cleaned up, painted, maybe re-tubed and aligned. Both units are very restoreable to a 10++. I have the original manual which is in pristine condx. The tuning dials are excellent and not tinted yellow.

Recent acquisition of a 75S2 in need of work has demanded all of my "free" time hence the unloading of this "project".

I prefer not to sell but to trade for an HF amp. I am very flexible, just no sweep tube amps please. An amp with or w/o tubes??????? What do you have???

Lane
Kilo Mike Three Gulf
San Diego

# 3725. Auction - Fair Lawn Amateur Radio Club Annual Auction, Nov. 14th - 8 PM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: jas130@juno.com
Message-ID: <628on2$2gs@news.genrad.com>
Source record: 89817

On the evening of November 14th, The Fair Lawn Amateur Radio Club
will host it's Annual Auction.

It will be held at the Fair Lawn Cultural Center,
located at 12-56 River Road, Fair Lawn, NJ 07412,

Ham Radio, CBs, Computers, Electronics, etc.

Those interested in auctioning their merchandise should arrive at 6 PM.
The auction will begin at at 8 PM. For info call Joe, 201-778-3211.
You may Email with any questions at jas130 @ juno.com.

Directions: (or call for more detail)

Route 208 To Fair Lawn Avenue (west)
Fair Lawn Avenue to River Road, left turn
About 2-3 blocks, FLARC will be on right side

# 3726. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.antispam>
Message-ID: <34481CCA.6C20@trader.antispam>
Source record: 89818

Gary Coffman wrote:
> You may want to look at the older version of Coherent (VE2IQ's weak signal
> program). In version 4.3 and older, it used CCW. That's been abandoned in
> favor of BPSK in more recent releases

I've been trying to find Coherent ever since you last mentioned it.
No luck. Any contact pointers would be appreciated.
--
Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3727. Re: PLATE trans.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971017012901.VAA05705@ladder02.news.aol.com>
Source record: 89819

> can you tell what to expect [voltage and current]
>from running a 50 hz.transformer at 60 hz.What i mean is percentege wise
>higher or lower.say its 6000 volt center tap at 1.5 amp sec. at 50hz.
>220 in,what would i get on 60hz.

Voltage will still be 6000 volts, with the increased frequency you probably ought to be able to pull an extra 10-15 percent current for the same heating.

W4ZCB

# 3728. Re: 6M duplexer construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: John Cramond <john@gm4nhi.demon.co.uk>
Message-ID: <ZIvd5BAPzxR0EwQn@gm4nhi.demon.co.uk>
Source record: 89820

In article <01bcda75$203e16a0$1a98b3cf@ve1fc.brunswickmicro.nb.ca>,
Graham Warrington <ve1fc@nbnet.nb.ca> writes
>We are putting together a repeater ans would
>like some info on can construction....
>
>Such as diameter outer and inner, length
>loops length and capacitor used for Q switch ..
>
>Also need lengths of harness....
>
>Any help appreciated !
>ve1fc@nbnet.nb.ca
>Graham

Try a visit to Jim's Duplexer Page for details:
www.dallas.net/~jvpoll/dup6m/dup6m.html

It is not too difficult to build cavities if you can get a source of
materials. I built 2 metre cavities using 4 inch aluminium tube which
had been used as protection for under-sea anodes. If you have any
friends in the oil industry, this would be a place to resource the tube.
I managed to get 83 db of isolation using six cavities, allowing single
ant. working.
Tuning is also simple. All you require is a RX and TX for the
frequencies you will be using, an attenuator to protect the TX during
tuning and lots of patience.
Good luck with the project.
--
John Cramond - GM4NHI
<john@gm4nhi.demon.co.uk>

# 3729. Analogue and RF design.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Atul <andrew@global.internet>
Message-ID: <344774E1.4B7C282@global.internet>
Source record: 89821

Is there a news group dedicated to analogue/RF design ?

Has anyone come across any practical/reference material
for designing RF amplifiers or analogue design in general.

My background is primarily digital and would like to learn
more about the analogue/RF side.

Do people actually use the different y,z, scattering parameters
for designing analogue amplifiers, oscillators, modulators etc ?

Anyone know of any freeware smith charts for speedy calculations ?

Anyone know of any good books for analogue/RF design - which are
more practical based rather than theory ?

Appreciate your help.

atul.

## 3730. Re: 6m amp help??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <34476B0A.50950325@rl.ac.uk>
Source record: 89822

> Eimac VHF bases are typically about 1nF (1000pF), and the HF bases
> about
> 3nF. Even for a two-holer, 120nF sounds extraordinarily high... are
> you
> absolutely certain about that measurement?

It may well be that much. I have more then that on the 4m PA, made up
from the
small low inductance screen capacitor built into the base, plus some
small 100nf bypass capacitors with the aim of HF parasitic suppression,
plus a 4.7uF across
the supply to improve dynamic regulation at AF. It depends where you
make the measurement. A typical fabricated capacitor could be many times
the area of the
EIMAC standard base capacitor. 120nF sounds too high but there may be
some tubular ceramics lurking inside the assembly.

What is most important it the amount of inductance. What is the self
resonant
frequency of this screen capacitor?

--
Mike

(Remove the space from the Email address to reply)

# 3731. Re: QSL Buro question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <34474198.75C0@taxes.net>
Source record: 89823

In Netwscape 3 it's

Options --> Mail and News Preferences --> Identity

Your mail server will probably require a parse-able email address --
by this I mean an address that LOOKS like a real address. It's the
address that Netscape puts in the (F)rom line. Your (R)eply-to can
be anything, AFAIK.

The obvious problem with munging your return is that it makes it
harder for people to reply.

# 3732. Re: Looking For Good Schmatic For a CB linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <34474086.5B64@taxes.net>
Source record: 89824

As a practical matter, no, a single 811A will not give 200 watts
output on AM in GG. GG and AM aren't really compatible, especially
to get decent gain, and the plate dissipation on an 811A is
really too low to see decent output.

I supposed I should have said "200 watts all day long in CW
service." The CW duty cycle is much lower than AM. And while
I could ragchew a single 811A at 200W PEP, I don't think it'd
last for very many hours of contesting or net controlling.

A pair of 811As in push-pull, plate-modulated, was a common
configuration for a 100-watt AM rig back in the dark ages.
Of course, this was before the days of ham radio monologues --
I won't name names but 3893, 3945, and 14313 come to mind.

Now, a pair of push-pull, plate-modulated 811As driving a 4-1000
in GG would make a nice kilowatt broadcast station. And if I recall,
wouldn't that 811A setup match nicely on an untuned input
of four 4-1000s in parallel GG?

THAT would sure be purty in an open rack, or better, a desktop rig
that covered the top of two desks.

# 3733. Re: SSB Demodulation - need theory info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <34479AE9.5592@ccm.intel.com>
Source record: 89825

MTNCLIMB wrote:
> If anyone can explain to me mathematically why this occurs, I
> would greatly appreciate it.

Hi Kevin, no math - just a leading question. Can your ears detect
phase and/or phase distortion?
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3734. Re: Listening to Cell phone on a scanner.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: davencinNO@SPAMtdl.com
Message-ID: <3446f656.7346163@news.tdl.com>
Source record: 89899
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Wed, 15 Oct 1997 12:00:28 -0400, John <johnr@flinet.com> wrote:

>Peter D. Richeson wrote:

>> Now here is the question: Is it possable to hear both sides of a cell
>> phone conversation on a single freq. I say no. Cell phones are full
>> duplex, one freq. goes from the radio to the tower and the other frome
>> the tower to the radio. Two of the people there said that in %90 of the
>> time they can here both sides of the conversation. What is going on.
>>
>> Thanks
>> Peter/KA5COI
Then John Wrote:
>Peter, I hava a AOR900 Handheld scanner and I can hear BOTH sides of the
>conversation most of the time. It seems the closer the cell unit is to
>either the tower or my house it is possible. Don't quite understamd it.

Actually John is half right, it depends upon the cell site, but not on the distance to the site. What matters is the "sidetone" or the ability of the site's electronics to null out the other side of the conversation on a two-wire circuit. It can also depend upon the quality of the phone being used by the landline caller. There are usually a couple of places where a two-wire hybrid-nulled line is switched to a four-wire transmit-receive line in a conversation. Cell sites are FM, and so the audio remains constant no matter what the signal strength is. And by the way, you're right...there really isn't anything to listen to. I heard them once when I was repairing a spectrum analyzer, and found it totally boring.

Dave

# 3735. SSB Demodulation - need theory info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971017074801.DAA03048@ladder02.news.aol.com>
Source record: 89900

Howdy,

I am designing a 20m Single conversion superhet. receiver. I have been going through a lot of single conversions schemes, and everyone I read or look at says nothing about the fact that the carrier of the received signal is surpressed, thus the L.O. and B.F.O. have no way to stay in phase with the Side band of the transmitting signal. Examining the flow of the signal from the antenna to the speaker in a single conversion receiver mathematically, we find that at the speaker, we do not get a perfect reproduction of the modulating signal, rather a distortion that is a function of this phase error. I know that these single coversion receivers work great for SSB, but why is it that we still get the message signal at the speaker, when the L.O. and B.F.O. are not in phase with each other nor the transmitting signal? Is this distortion very minute at audio frequencies, thus making little difference in the intelligibility of the message signal? Or is it the fact that the carrier frequency is much much higher than the modulation frequencies, thus a phase error of great magnitude, causes little distortion to the message signal? I am stumped. If anyone can explain to me mathematically why this occurs, I would greatly appreciate it. Thanks.

73 de AA7YQ
Kevin in Bozeman, MT

# 3736. Re: 6m amp help??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <$LhQ3VA+TyR0Ewm2@ifwtech.demon.co.uk>
Source record: 89901

AL DOLGOSH wrote:

>-> From: hamm4fun@aol.com (Hamm4fun)
>-> I recently came by a tube soket assembly for a pair of 4cx250's. Thought
>-> they may make a nice building block for an amp. They have a built in screen
>-> bypass cap which measures 120nf total for both tubes. Apparently this
>-> assembly was designed for UHF/VHF use. My question is what is the minimum
>-> freq that tthe sreen bypass would be effective.

>The integral coaxial screen bypass capacitor is a feature that was demanded by
>VHF/UHF frequency operation where the length of the path to ground was kept as
>short as possible in the interest of stability. If you are planning on using
>the socket assembly at HF, just hang some additional capacity on the sockets'
>screen terminals and don't worry about it.

On the contrary, if the capacitance really is as high as 120nF (0.12uF)
for two sockets, they are already designed for HF.

Eimac VHF bases are typically about 1nF (1000pF), and the HF bases about
3nF. Even for a two-holer, 120nF sounds extraordinarily high... are you
absolutely certain about that measurement?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 3737. Re: Can you help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <34475837.4F06@ix.netcom.com>
Source record: 89902

Wes Stewart wrote:
>
> Slightly off topic but I recently acquired a Yaesu FT208R and NC-3A
> power supply sans manuals.
>
> I'm looking for a copy of these manuals. The usual payment for
> postage and expenses is offered.
>
> Thanks and 73,
>
> Wes N7WS
---
Good Morning Wes -- In case no one comes forward to help with the
manuals -- try URL:
http://pw2.netcom.com/~ac6v/pageaae.html
Several Manual Vendors there.
Good Luck
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 3738. Need Gunnplexer Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: JM <jmul@iland.net>
Message-ID: <01bcdaf9$e3990720$79e7f2cd@jmul>
Source record: 89903

Hello and thanks for reading. I have recently come across a Gunnplexer out of a security system. It is the C&K model 8140. Anyone have any information on this unit, or have any experience with it? The least I need is the operating voltage and possibly the power connection information. Any info on how to contact C&K? Again thanks. John N0EE

# 3739. Re: SSB Demodulation - need theory info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34475FBC.69DD@crpl.cedar-rapids.lib.ia.us>
Source record: 89904

MTNCLIMB wrote:
>
, and everyone I read or look at
> says nothing about the fact that the carrier of the received signal is
> surpressed, thus the L.O. and B.F.O. have no way to stay in phase with the
> Side band of the transmitting signal.

One of the neat things about SSB is that the receiver does not need to be phaselocked with the incoming signal. In fact the two can have a small frequency offset (0 to 50 Hz). For speech this is acceptable. For music it is not very good, which is why SSB, without phaselock, is primarily a "speech" mode.

There are some systems that transmit a small pilot carrier that the receiver can phaselock to, which then makes SSB a good mode for music. A few shortwave broadcast stations and also some mobile speech-comm systems use this pilot carrier concept.

Another mode is double-sideband-suppressed-carrier (DSBSC). This definitely requires phaselock to the missing (suppressed) carrier. A circuit called the "Costas loop" looks at the sidebands and reconstructs the missing carrier and phaselocks the signal to it. This mode requires not only phaselock, but close to zero phase difference. An integrating (Type II) PLL is needed for this.

There are a large number of books that give a mathematical treatment of SSB and DSBSC.

Bill W0IYH

# 3740. fs-B&W PLug-In Coils!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19971017135200.JAA13635@ladder02.news.aol.com>
Source record: 89905

Hi Fellows;
I have for SALE:
B&W Air Inductor 40TVL coil, new in box!
B&W Air Inductor TVL base, Female ceramic jack bar w/swinging link, new in the box!
ALL BELOW ARE B&W "baby" air inductors, 25 watt, in thier boxes!
80MC
40MC
80MEL
40MEL
20MEL
10MEL
40JVL B&W Junior Air inductor
Price for all is $75- shipped Conus! Any Builders or takers out there?
Thanks es 73.....RICH WA2RQY E-Mail to RLUCCH2098@aol.com

# 3741. Re: TS-530 Power Out

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <344776B5.3BBE@onramp.net>
Source record: 89906

William Saulnier wrote:
>
> Can anyone tell me what the CW output of this radio should be? Mine used
> to put out 100W+ (I'm sure) but Kenwood seems to think 80W (which I get
> now) is within spec. I've replaced the tubes, reneutralized and even
> sent to Kenwood who said its OK. It does about 220 ma at 800V according
> to the meter in the rig. I get about 120W Peak on SSB. I'm using two
> different and good power meters that more or less agree.
>
> If it should do better, any guess as to what the problem might be?
>
> Thanks
> Bill

You didn't say what band but I'm guessing 10m. If so the radio is fine.
The tubes that are available today will not do what the older ones
would. Occasionally you get a set that will do 100w on 10m but more
likely 80-90.
--
Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 3742. SSB Demodulation - need theory info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199710171534.LAA20427@pop.uky.edu>
Source record: 89907

Kevin,
The exact phase of the signal that you hear is not
important nor is the exact waveform. Your ears are only
sensitive to the frequency and amplitude components of the
sounds they receive.
The only time there is a real problem
with a the BFO being in the correct phase is when you
are detecting DSB. There it is necessary that both
side bands are in phase when demodulated. Other wise
they may subtract from each other and reduce the
signal level. If the BFO is slightly off frequency
they will beat against each other making it difficult
to understand.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

## 3743. Looking for info on B-1203 by Motorola

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Frank Bures <fbures@address.in.the.sig>
Message-ID: <zrlmgywasnozt.pminews@frank.chem.utoronto.ca>
Source record: 89908
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Subject says it almost all.

I need to replace two TO-3 transistors Motorola B-1203. Search in NTE database suggests NTE2525 in incompatible (therefore highly suspicious) package. Search on http://www.tds-net.com/ suggests two different types of transistors - again highly dubious.

Would please anyone with a Motorola catalogue old enough to contain this transistor, let me know what it is? PNP-NPN, Si-Ge and pin-out (B-E) would suffice.

Thanks in advance.

Frank Bures, Dept. of Chemistry, University of Toronto, M5S 3H6
fbures@alchemy.chem.utoronto.ca (use this address for replies)
http://frank.chem.utoronto.ca/electronics

# 3744. Re: PLATE trans.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <628kbh$co5@hpcvsnz.cv.hp.com>
Source record: 89909

JohnsonHE (johnsonhe@aol.com) wrote:
: > can you tell what to expect [voltage and current]
: >from running a 50 hz.transformer at 60 hz.What i mean is percentege wise
: >higher or lower.say its 6000 volt center tap at 1.5 amp sec. at 50hz.
: >220 in,what would i get on 60hz.

: Voltage will still be 6000 volts, with the increased frequency you probably
: ought to be able to pull an extra 10-15 percent current for the same heating.

?? The nominal input voltage in the US would be 240, not 220, so expect
about 9% greater voltage. Current will be limited by heating as W4ZCB
says, but heating is typically half core loss and half copper loss; copper
loss will be nominally the same for the same current, and core loss
will be quite similar at the increased voltage: a bit more power
because of the higher voltage, but my recommendation is to not expect to
draw more current. Be careful about the current rating: is that a
rating for center-tapped full-wave service, or bridge rectifier service,
or RMS current in the full winding, or...??? It does matter: a choke
input filter draws far lower RMS current than a capacitor input filter,
for the same DC output current. Heating in the windings is RMS current
squared times resistance, for each piece of winding with a current in it.

--
Cheers,
Tom
tomb@lsid.hp.com

# 3745. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: alan@g3kfn.ndirect.co.uk
Message-ID: <3447d19d.0@hades.ndirect.co.uk>
Source record: 89910
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

nielsen@primenet.com (Bob Nielsen) wrote:

>In article <625ihv$pno$2@kodak.rdcs.Kodak.COM>, Andrew Pavlin wrote:
>>In article <3444DFFD.79FDECF@netspace.net.au>, Andrew Chin <chinny@netspace.net.au>
writes:
>>> Has anyone built their own TNC? If anyone has, could they point me to a
>>> site or post a circuit diagram or something.
>>>
>>
>>You might try contacting TAPR (Tucson Amateur Packet Radio, http://www.tapr.org).
>>They were the designers of the original TNC-2 that most of the basic TNC's these
>>days are clones of, and they sell plans and kits.

>TAPR no longer sells TNC kits, but the schematic, manuals and eprom images
>for the TNC-2 are available at TAPR's web site, www.tapr.org in the
>software library.

>Bob

>--
>Bob Nielsen Internet: nielsen@primenet.com
>Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
> http://www.primenet.com/~nielsen
TNC 2 Boards are still available and if you visit my Website you can
get all the information and I can supply programmed eproms as well

73 Alan
**********************************************
* Alan Baker (G3KFN) *
* Plymouth, England *
* BakerSoft Web Site: TNC's and Amateur Info *
* http://www.ndirect.co.uk/~thebakers *
**********************************************

# 3746. Need Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Bob Remo <typhon@mindspring.com>
Message-ID: <3447E4A1.E2A394A5@mindspring.com>
Source record: 89911

Can anyone give me plans to build a low cost receiver. I am new to amateur radio and have a little electronics experience. I would also eventually like to build a transmitter, but only after licensing. Please e-mail me with this info.

thanks,
Bob

# 3747. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcdb51$d74839c0$0100005a@wa6vse>
Source record: 89912

Marijan Miletic <s56a@s55tcp.ampr.ORG> wrote in article
<12743@s55tcp.ampr.org>...
> With slight delay I noticed interesting tech debate (again?) on Morse.
>
> I have a great respect for a longtime work of Bill, W0IYH and frequent
> comments from Gary, KE4ZV but Carl, WA6VSE seems to be of Internet age!

Interesting "observation" ... I'm 46, an RF engineer by profession for
over 25 years, and a licensed ham since 1975 ...

> I am 52, M. Sc. E.E., computer professional, ham since 1962 on 6-160m
> using CW, SSB and RTTY. I did Ph.D. resarch on HF CW computer detection
> until 1991. Let me add few thoughts on the beloved Morse code.
>
> Morse code was introduced 100 years ago as the only form of direct human
> digital communication and it is impossible to defend in the 21st century.

Glad to hear someone who likes Morse, and has obviously studied it at
some length, be that honest about it ...

> It had efficient entropy information encoding using statistical features
> of English language by assigning short symbols to the frequent letters.

The fact that it was based on ENGLISH statistics doesn't play well into
the often-cited argument that Morse is somehow a "universal language"
(which is, of course, a complete pile of bogus dung).

> Our DC-THz tech guru Matjaz, S53MV, professor at Ljubljana University,
> claims the following educational advantages of CW in hamradio comms:

> QSO procedures,

which can be learned as easily or more easily in any other mode ...

>TX/RX protocol,

which can be learned as easily or more easily in any other mode ...

>error detection and correction.

I'm sure that you must agree that modern digital FEC techniques
can easily outstrip the simple contextual error detection/correction
afforded by Morse ... in fact, any non-FEC text mode can just as easily
be checked and corrected in the same contextual manner as Morse ...

> Weak side of CW is poor usage of radio spectrum and power (surprised?).

Not at all ... I have asserted the same thing for many years ...

> Our ears with associated part of brain are so inferior to visual senses.
> The following table sumarises some important radio communications facts:
>
> Modulation type Information speed Bandwidth Efficiency
> ---------------------------------------------------------------------
> Human CW - OOK 10bps 500Hz 0.020bps/Hz
> Radioteletype 50bps 300Hz 0.167bps/Hz

> SSB speech 200bps 2kHz 0.100bps/Hz
> AM speech 200bps 6kHz 0.033bps/Hz
> FM speech 200bps 15kHz 0.013bps/Hz

It is not clear to me where the 200bps number for speech came from ...
Mr. Nyquist would assert that that rate could only handle an upper
frequency limit of 400 Hz at best ... that would result in pretty crappy
audio fidelity ... I would submit that the "effective information rate"
of speech should be much higher, with the result that the "efficiency"
number would look MUCH better than your numbers in the table above ...

However, the *relative* efficiencies of SSB/AM/FM (relative to each
other, but not to the other modes) are probably in the ballpark ...

As the *relative* numbers show, "narrowband FM" is pretty bad ... we
could do MUCH better than NBFM for 6m and up ...

> AFSK/FM packet 1200bps 15kHz 0.080bps/Hz

Yes "traditional" (like we did a decade or more ago) packet radio sucks
big-time, too ...

> Manchester packet 38.4kbps 200kHz 0.192bps/Hz

Manchester causes an unnecessary expansion of the necessary bandwidth.
We can do much better here, too ... the WA4DSY modem does 56kbps in an
occupied bandwidth of about 80kHz at the -30dB points and about 110kHz
at the -50dB points (interpolated from a spectrum analyzer) ...

> BPSK packet data 1.2Mbps 2MHz 0.614bps/Hz
> QPSK GSM mobile phone 271kbps 200kHz 1.355bps/Hz
>
> Note: Manchester and 1.2Mb packet networks are implemented in Slovenia!

Yes, it appears that Slovenia (high-tech power-house that it is)
has substantially more technically educated and advanced hams than
the US. But then again, they don't have the ARRL holding them
back at every turn, either ...

> CW EME uses 1kW RF, 20dB antennas, 250Hz RX filter for 5bps and 3dB S/N.
> Malfunctioning Galileo probe sends signals from 1000 times greater
> distance using only 20W into omnidirectional antenna, RX antenna is 60m,
> information speed is 10bps with S/N only 30 times lower! These modern
> communication techniques are available to hams (exception is RX antenna)
> in the simple form of software, PC and SoundBlaster.
>
> PACTOR2 hamradio modem does 1000bps in 500Hz BW, 100 times more than CW!

Yes and will maintain reliable links at levels far below where an OOK Morse signal's presence could even be detected by ear, let alone copied with 100% reliability ...

> 73 de Mario, S56A, N1YU.+

73 Mario,

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3748. Re: Need Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <3447FBBD.19AC@tir.com>
Source record: 89913

Bob,

Take a look at Harry's homebrew page http://user.tninet.se/~acz732k/

and for parts... Dan's Small Parts http://www.fix.net/dans.html.

Enjoy,

Bill KU8H

# 3749. Help - Battery Charger Combo For Shack Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-17 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcdb6e$75d04440$0c8a92d0@bitnet.bit-net.com>
Source record: 89914
Cross-posted to:
alt.home.repair,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'd like to use a 12v battery with a charger to power my rigs in my
basement "Ham" shack.
I need the setup to keep the battery safe, both preventing explosive fumes
from building up, and to properly charge and monitor the battery.
I'm thinking of putting the battery in either a plastic tool box that I can
lock (I have a very curious and versatile 2 year old) or in a small pet
carrier (I won't have to drill lots of holes for ventilation in the pet
carrier as I would in the tool box).

Questions:

1. What car, marine, etc. heavy duty battery is best?
Critical Specs
or
Specific Model

2. What battery charger should I use to prevent damage to the battery and
to keep it
properly and fully charged - without generating rf noise in the
process (and to
preferably have a reasonably accurate display of the battery
condition).
Critical Specs
or
Specific Model

Thanks for any help! DavidC

# 3750. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3447f758.3772853@news.online.no>
Source record: 89826
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Fri, 17 Oct 1997 20:56:27 GMT, alan@g3kfn.ndirect.co.uk (Alan
Baker) wrote:

>nielsen@primenet.com (Bob Nielsen) wrote:
>
>>In article <625ihv$pno$2@kodak.rdcs.Kodak.COM>, Andrew Pavlin wrote:
>>>In article <3444DFFD.79FDECF@netspace.net.au>, Andrew Chin <chinny@netspace.net.au>
writes:
>>>> Has anyone built their own TNC? If anyone has, could they point me to a
>>>> site or post a circuit diagram or something.
>>>>
>>>
>>>You might try contacting TAPR (Tucson Amateur Packet Radio, http://www.tapr.org).
>>>They were the designers of the original TNC-2 that most of the basic TNC's these
>>>days are clones of, and they sell plans and kits.
>
>>TAPR no longer sells TNC kits, but the schematic, manuals and eprom images
>>for the TNC-2 are available at TAPR's web site, www.tapr.org in the
>>software library.
>
I have built over a half douzen of the danish version TNC2C-OZ, this
is almost the same as the German version TNC-2C, but has some
corrections and the pcb looks much better. The pcb was available
through some sources in Denmark, I believe some more official address
exists, it uses TCM3105 (or TCM3101). Unfortunately it cannot operate
with fm transceiver using open squelch.
I have collected components from different sources and without TCM3105
the cost is somewhere about $15.-
I have also an MFJ1270B and an MFJ1270BT and TNC2C-DL in use.
Main use has been for netrom nodes
I found it to be an advantage (fault finding and adjusting TX
deviation) to have constant audio from the TNC, so the MFJ1270's are
modified for this. I use 110mV RMS into 1000 ohm load for all TNC's.

---
Email: LA8AK at online dot no

## 3751. FS - Tubes, radios, books...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971018012001.VAA02462@ladder02.news.aol.com>
Source record: 89827

FOR SALE: NOS Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco, and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1650 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #1010-T.

# 3752. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: old_man@mdi.ca
Message-ID: <628pc9$gip@van1s03.cyberion.com>
Source record: 89828
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

frogger@megsinet.net wrote:

>On Mon, 29 Sep 1997 01:03:27 GMT, kmccoy@stetson.edu (Ken McCoy)
>wrote: Ken: 6hf5 tubes are the type of "TV sweep tubes" you should
>use. 6146 tubes are used in more modern rigs and probably are
>screwing things up in the SWAN. I have a SWAN 350 and it is like
>yours. I use 6hf5 tubes, and it is a real performer. Visit the old
>remaining TV repair shops and make an offer to get their 6hf5 tubes!
>Or you could peruse the YELLOW SHEETS or QST to find a tube guy or
>maybe even RF PARTS Co. will still sell some 6hf5's in matched pairs.

Great to hear other guys using the old swans!
I put a pot in the screen voltage supply and I am able to run the rig
with it only puting out 5 watts or full power, the pot is a 5 meg ohm
if I recall and when set for low power you can never over heat your
finals and burn them out,even with no ant connected!
6hf5 tubes are hard to get, so are all most any tube that will work.
Good luck finding them!

# 3753. Re: Dual point modulation info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: bengtson@swbell.net
Message-ID: <34483ee2.9753799@news.swbell.net>
Source record: 89829

On Thu, 16 Oct 1997 22:18:45 -0400, Alan Tabourian
<71203.1307@CompuServe.COM> wrote:

The only published source I have seen that covers dual-port modulation
is "Phase Locked Loops," by P. V. Brennan. ISBN # 0-07-007568-9

This is a recent publication that actually has 20 page chapter on
modulating PLL's.

Dave Bengtson
>I am looking for information about dual point modulation to be
>able to achieve a good frequency response down to DC or so. Are
>there any app. notes or books that discuss this technique in
>detail?
>
>In addtion to posting the reply on usenet, I would appreciate it
>if you could copy me in as I have problem with usenet from time to
>time.
>
>Many thanks,
>
>Alan+

# 3754. Alinco DR-150 mod.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Andre Antunes <andre.antunes@mail.eunet.pt>
Message-ID: <629oam$gbg@news.EUnet.pt>
Source record: 89830
Cross-posted to:
alt.ham-radio.marketplace,alt.radio.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Hello, everybody,
I bought an Alinco DR-150 E, new in the box. I know that it can expand TX/RX
coverage by key combination.
Can anybody help on this?

Thanks to all. Please, reply by mail.
Cheers.

--
Andr&#65533; Antunes
andre.antunes@mail.eunet.pt

# 3755. Re: Help - Battery Charger Combo For Shack Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: codeman@gj.net
Message-ID: <3448c1b8.0@news.gj.net>
Source record: 89831
Cross-posted to:
alt.home.repair,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"DavidC" <davidc@bit-net.com> wrote:

>I'd like to use a 12v battery with a charger to power my rigs in my
>basement "Ham" shack.
>I need the setup to keep the battery safe, both preventing explosive fumes
>from building up, and to properly charge and monitor the battery.
>I'm thinking of putting the battery in either a plastic tool box that I can
>lock (I have a very curious and versatile 2 year old) or in a small pet
>carrier (I won't have to drill lots of holes for ventilation in the pet
>carrier as I would in the tool box).

Good idea about putting the batteries in a child proof container..

>Questions:

>1. What car, marine, etc. heavy duty battery is best?
> Critical Specs
> or
> Specific Model

About any ( good condition , of course ) 12Volt battery would work
but when you say "best" then I would suggest two (2) 6-volt deep cycle
golf cart type batteries. There is typically only one size, so when
you find "golf cart type" battery, there is only one size, but can be
manufactured by many companies. Connect them together to acheive 12
-13.4 volts. I got mine from Sams Club for $35 each. I have also
used a little $16 , 12 volt garden tractor type battery to power my 50
watt 2 meter rig with success. If you can not find golf cart types,
then any "deep cycle" 12 volt battery would be my second choice.

>2. What battery charger should I use to prevent damage to the battery and
>to keep it
> properly and fully charged - without generating rf noise in the
>process (and to
> preferably have a reasonably accurate display of the battery
>condition).

I would suggest getting a low amperage input model, say 3-4 amps,
maybe 6. Again, Wal-mart, Target, Sears, ect handle these at
reasonable prices.... This charger would simulate a solar powered
setup and if left on 24 hours a day should provide plenty of power to
recharge those 2-6 volt (now 12 volt) batteries mentioned above. I
would strongly suggest you get a on-off timer to be placed between
electric wall outlet and the battery charger. I found an excellent

one at Grangers ($25) that can be set in half hour increments for the full 24 hour day. The timer controls the battery charger so you do not overcharge or boil the batteries. Of course, you will have to experiment a little to find out how much time the charger should be on to maintain your batteries. Last item is a volt meter to gauge the charge of the battery(s). An el cheap-o handheld type ($9.95) will do , and is much better than anyting that would come on a battery charger, or you can hard wire it in and have the face of the meter facing you for ease of monitoring. With this, you can regulate the timer-battery charger better. Suggestion, have the timer-battery charger come on when you are not in the shack so you do not have to worry about rf interference.. The batteries will have or should have enough storage capacity to operate without the charger being on... Depends then on what battteries you go with, right?

Ross
N7VWX

> Critical Specs
> or
> Specific Model

> Thanks for any help! DavidC

# 3756. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <3448C65B.5293@emily.net>
Source record: 89832

Dennis Erwin Thurlow wrote:
>
> Gary Coffman wrote:
> > You may want to look at the older version of Coherent (VE2IQ's weak signal
> > program). In version 4.3 and older, it used CCW. That's been abandoned in
> > favor of BPSK in more recent releases
>
> I've been trying to find Coherent ever since you last mentioned it.
> No luck. Any contact pointers would be appreciated.
> --

Bill de Carle's Web BBS is at http://w3.ietc.ca/home/bill/bbs.htm

The last version of COHERENT (v 4.9) that supported CCW is included in COHERENT.ZIP version 7.2. In my experience copying LowFER and MedFER beacons, COHERENT's CCW mode is _not_ as effective as the unaided ear in pulling weak signals out of the static crashes (at least, not if you start with a good receiver). However, Bill's COHERENT implementations of BPSK _will_ decode a beacon ID when there is no trace of audible signal. If you want an apples-to-apples comparison of BPSK and CCW, try listening for 100-milliwatt MedFER beacons STLMO (St. Louis, MO, 1690.798 kHz) or MIN (Aitkin, MN, 1648.330 kHz). Both beacons send alternating 12WPM CCW and 10-baud BPSK identifiers, approximately one minute of each. The BPSK ID uses VE2IQ's ET (error tolerant) coding. The proper settings for COHERENT are MS100, ET1.

73

Lyle, K0LR

## 3757. Belden Twinax

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Toolman <poustie@concentric.net>
Message-ID: <62akb5$j9l@examiner.concentric.net>
Source record: 89833
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

I have obtained a quantity of coaxial cable and am trying to find a good use for it. It is Belden 9207 Twinax------100 ohms-----2 conductors-----.330 inch dia. My question is: What effect on impedance, if any, will tying the conductors together have? Will that halve the impedance value? I think it would make good feedline for a scanner, somehow. Thanks to all.

# 3758. FS: Heathkit Weather Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Ricky <*kc4kin@geocities.com>
Message-ID: <62akdc$klo@bgtnsc02.worldnet.att.net>
Source record: 89834
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.scanner,rec.radio.cb

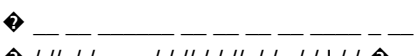
>I have an ID-4001 Weather station that is inoperative. Some of the
LED's
>light up, but
>I can't seem to set the time, etc. on it. It looks great cosmetically.
I
>don't have any sensors
>or documentation on it. I will take offers on it till October 25th and
>let it go to the best
>offer.

I will confirm offers by return email. Send offers to:

*******Current offer is $50.00 plus shipping*******

>kc4kin@geocities.com

>Thanks,
>Ricky

>
> ////////////////////////////////////////////////////////
> 
> Attention: The e-mail address in the header is bogus
> to help prevent SPAM in my mailbox. If you want to
> reply send email to: kc4kin@geocities.com
> Remove the * from the front of the message header
>
> Ricky L. Ponder http://www.geocities.com/~kc4kin
> \\\\

# 3759. Re: HP 8640B problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971018165300.MAA22375@ladder02.news.aol.com>
Source record: 89835

>
>I obtained recently a HP8640B generator. Low cost, surplus, you know
>I suspect the step attenuator to be defective: the 20 dB section is at
>fault. Does anyone know if that can be repaired (easily)? As I have
>more HP RF test equipment of age I'd like to know if there is a source
>for HP spare parts.
>
>
Hoo Boy! Typically, some idiot inadvertently transmits into one. Although I have occasionally seen an amplifier under test go unstable and oscillate with enough soup to blow the attenuator. Usually the first stage of attenuation sacrifices itself and protects the rest of the pad. Precision resistors are available from HP, and all you need is a good low temp silver solder to replace the bad ones with. They are swedged in place but can be soldered to if done carefully. 1000 screws on bottom cover to be removed first. The cover with the clip on it is the TOP cover, removal will buy you nothing but a view of the cams.

W4ZCB

## 3760. need scematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: nikatnit@esslink.com
Message-ID: <3448e50e.4638251@news.esslink.com>
Source record: 89836

hello to all,

looking for a scematic for a VHF Engineering 70 cmtr.
amplifier. model no. BLE 10/80 Willing to pay for copying and
postage.

Please reply to nikatnit@esslink.com

Thank You

## 3761. WTB:Telegraph-Wireless Pieces

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Steve Massey <N6TT@worldnet.att.net>
Message-ID: <62arkc$pqb@bgtnsc01.worldnet.att.net>
Source record: 89837

Hi Im looking to buy Telegraph-Wireless Items,
Keys,Bugs,Paddles,Kob,Books,catalog and other related Items....Im a private collector and will pay a fair price....Thanks Steve N6TT

Soon to come: http://www.telegraph-wireless.com

Test page there now....

# 3762. FS: HI VOLTAGE FILTER CAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <62as14$djc@bgtnsc01.worldnet.att.net>
Source record: 89838

Only one left: 53.5 MF at 5000 WDV. new, $35 +UPS. WS0E, Joe at
Joe.7hc@juno.com

# 3763. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <3448F545.29A7@ccm.intel.com>
Source record: 89839

Dennis Erwin Thurlow wrote:
> I've been trying to find Coherent ever since you last mentioned it.
> No luck. Any contact pointers would be appreciated.

Try http://members.aol.com/part15/coherent.txt
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3764. FS: VARIOUS TRANSFORMERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <62artt$djc@bgtnsc01.worldnet.att.net>
Source record: 89840

Have many various transformers including: Interstage, Modulation, Plate, and Filament(2.6-12.6v), plus chokes. WHAT DO YOU NEED?? PLEASE SEND UR REQUIREMENTS FOR A REPLY. WS0E, Joe at Joe.7hc@juno.com

# 3765. seek 1981 QST article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: mugshot77@mail.geocities.com
Message-ID: <mugshot77-ya02408000R1810971511540001@news01.equinox.net>
Source record: 89841

Would someone post a summary or mail me a copy of this article?

1981 March
QST p 40 (3 pages)
A Kite-Supported 160- (or 80-) Meter Antenna

I'm curious about what kind of materials are used and how much weight
a kite can support.

# 3766. Coming Soon!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: "Daniel Hicks, Jr." <dhcom@DHCOM.COM>
Message-ID: <3448FF09.794@DHCOM.COM>
Source record: 89842
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.scanner

Coming very soon to KB8UYZ.COM ...
The Amateur Radio Mod FTP Archive, where you can find over 500 radio mods for many different brands
and models of radios. This site should be completed within a week or so, so be sure to visit
KB8UYZ.COM for the latest and information on how to access the site.

http://kb8uyz.com

73
dh/dhcom.com

# 3767. Doorknob cap's req.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <hxdHBAA$bRS0EwPv@two-way.demon.co.uk>
Source record: 89843

These are like hens teeth here in the UK, but maybe someone can help.
I'm after the following values or something close, new or used and at a
fair price.
All help greatly appreciated.

960pf X 2
2500pf X 2
480pf X 2
1250pf X 2
270pf X 2
680pf X 2

(((73)))

Phil G4ZOW/M

# 3768. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <QdMLaIA4oNS0Ewru@two-way.demon.co.uk>
Source record: 89844

In article <34439358.7F4@ccm.intel.com>, Cecil Moore
<Cecil_A_Moore@ccm.intel.com> writes
>Derk & Linda Haag wrote:
>> Does any one know of any amp circuits for the 27.Mhz range
>> Approximately 35 - 50 - 100 watt
>
>Hope you realize that using a 35 watt linear driven by a 5 watt AM
>CB signal will result in about 8 watts output, about 1/3 of an S-unit
>improvement. Linears are *very* inefficient for AM. The truckers using
>their high-powered linears are primarily heating their trucks with it.
Cecil,
You've been listening to the wrong truckers.
We can hear your guys on the 19 when the skip's running and they ain't
running no 8w:-)

Phil G4ZOW/M

# 3769. Re: Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <ctHImGAXnNS0EwJO@two-way.demon.co.uk>
Source record: 89845

>> I would like to hear from anyone with experience homebrewing
>> a solid state HF power amplifier, especially at the legal limit
>> level. I see a lot of postings about tube amplifiers, but
>> no solid state. Outside of ham radio, I believe that no
>> new designs are using tubes at the 1500 watt level. Am I
>> unaware of some reason why tubes are great for ham amplifiers?
>> Also, is anyone aware of a commercially available ham linear
>> that runs 1500W PEP output using solid state devices? All
>> the solid state ham linears I've seen are not legal limit.
>>
>> Rick Karlquist N6RK
>> rick@area.com
>>
>>
>
>Hi Rick,
>
>There's a fellow that lives a few blocks from me who produces
>the "Skywalker" brand of solid state HF amps. He produces them
>in either kit form, or already built. They're made in power
>levels of 300-600-1200-1500 watts. If you need his phone number,
>write me back and I'll look it up for you. It's in practically
>every 73, CQ, QST magazine. Look for the classified advertisement
>with an address in Myrtle Beach, SC on Chickasaw Lane.
Web,
I thought Lee only made three different kits, 250/300, 500/600 and
1000/1200 depending on how old your info sheet is:-)
What's this about 1500w? Without crazy IMD you'll not see that out of
the 8-pill, I run one and use double 00 gauge wire to feed it from the
Leece Neville 200A alternator and the Bird still won't read anything
like 1500w.
Rick,
If you need more power, why don't you track down some ex service plasma
generators. hese are made by many US companies and probably several
european ones. They tend to use 50V FET's. My next mobile HF amp will be
using four boards, each with 8-pills each. I'm presently working on how
to charge the bank of four batteries in series to give me my 50V. The
finished unit should pull around 200A @ 50V and bang the Bird to around
5-6KW out.

Good luck.

(((73)))

Phil G4ZOW/M

# 3770. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcdc0a$8fa266e0$0100005a@wa6vse>
Source record: 89846

Carl R. Stevenson <wa6vse@fast.net> wrote in article
<01bcdb51$d74839c0$0100005a@wa6vse>...
> Marijan Miletic <s56a@s55tcp.ampr.ORG> wrote in article
> <12743@s55tcp.ampr.org>...

> > Our ears with associated part of brain are so inferior to visual senses.
> > The following table sumarises some important radio communications facts:
> >
> > Modulation type Information speed Bandwidth Efficiency
> > ---------------------------------------------------------------------
> > Human CW - OOK 10bps 500Hz 0.020bps/Hz
> > Radioteletype 50bps 300Hz 0.167bps/Hz
>
> > SSB speech 200bps 2kHz 0.100bps/Hz
> > AM speech 200bps 6kHz 0.033bps/Hz
> > FM speech 200bps 15kHz 0.013bps/Hz
>
> It is not clear to me where the 200bps number for speech came from ...
> Mr. Nyquist would assert that that rate could only handle an upper
> frequency limit of 400 Hz at best ... that would result in pretty crappy
> audio fidelity ... I would submit that the "effective information rate"
> of speech should be much higher, with the result that the "efficiency"
> number would look MUCH better than your numbers in the table above ...

I misspoke above ... 200 bps would support far less than 400Hz of audio
bandwidth ... assuming multiple bits/sample and sampling according to
Nyquist's criteria ... I was *thinking* one would have to sample at
AT LEAST 400 samples/sec (bare minimum) to demodulate 200bps (and that
bare minimum approach would make timing recovery and other aspects a bear)
... one would really want to oversample by some reasonable amount ...
but what I typed was sort of "turned inside out" and not at all what I
really intended to say ... I apologize for any confusion I may have
caused by misspeaking ...

73,--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3771. Re: seek 1981 QST article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34493194.627F@crpl.cedar-rapids.lib.ia.us>
Source record: 89847

I. I. Crash Knorr wrote:
>
> Would someone post a summary or mail me a copy of this article?
>
> 1981 March
> QST p 40 (3 pages)
> A Kite-Supported 160- (or 80-) Meter Antenna

I can either fax or snail-mail a copy of that article, if you like.

Send fax number or address.

Bill W0IYH

# 3772. Re: Coming Soon!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Shadow <shadow@ricochet.net>
Message-ID: <34493D92.24F9@ricochet.net>
Source record: 89848
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.scanner

Good
One can never have access to too many mods.
--------
> Coming very soon to KB8UYZ.COM ...
> The Amateur Radio Mod FTP Archive, where you can find over 500 radio
> mods for many different brands
> and models of radios. This site should be completed within a week or
> so, so be sure to visit
> KB8UYZ.COM for the latest and information on how to access the site.
>
> http://kb8uyz.com
>
> 73
> dh/dhcom.com

# 3773. NiCad Cell Voltage????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: jphipps@aztec.asu.edu
Message-ID: <62biba$g5r@news.asu.edu>
Source record: 89849

I blush to admit that I do not know the nominal open circuit voltage of a fully charged NiCad cell. Can anyone enlighten me?

John Phipps K7BTA
--

# 3774. WTD: surplus magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: worley@snowhill.com
Message-ID: <877219520.27705@dejanews.com>
Source record: 89850

I am looking for at least 3 or 4 lbs. of surplus #25 magnet wire. Will consider #24 or #26 also. Must be surplus, not over $2/lb. please. Willing to buy up to 10 lbs. of one size. Email or call 334-347-5281.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3775. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Rick Mainhart <mainhart@sprintmail.com>
Message-ID: <3449533A.3158@sprintmail.com>
Source record: 89851

Brooke,

WWVB has no modulated time code. The carrier frequency IS the time reference, ID is by a 45 degree phase shift at 10 minutes past the hour, returning at 15 minutes past the hour.
Time base reference is typically done by comparing a local oscillator with WWVB directly, and charting the phase difference in picoseconds. To get long-term stability, you adjust your local oscillator to match phase on a day-to-day basis (thus the necessity for a GOOD STABLE oscillator).

The phase difference is so noticeable, that with commercial WWVB equipment onboard a Coast Guard Cutter (1979-1980), we could see a course change by the phase chart recorder! We used the master oscillator to feed our transmitters and receivers to keep them all within the alloted frequency allocation ... HF through UHF.

The company that made the equipment is (was?) in Rochester New York, but their name escapes me.

IMHO, you can purchase an inexpensive GPS receiver with time-code output for far less than you can buy or build a WWVB receiver/chart recorder. Another inexpensive option is to use the broadcast television time interval signal reference transmitted on one of the blanked horizontal sweep lines ... time code is imbedded, is traceable to NIST standards, and was written up in one of the ham radio or general electronics magazines several years ago.

There was also a nice article on using LORAN-C as a time-base. LORAN-C is traceable to NIST and is generally good for 1 X 10-13. Receivers are inexpensive, extracting the timebase data is fairly straightforward ... written up in one of the ham rags a few years ago.

If that isn't what you want, then you can extract the 100 Hz subcarrier BCD time code information from WWV, which is how Heathkit's "World's Most Accurate Clock" worked. Probably can build all the detection and display hardware into a PIC processor ... and with a 7.5 MHz local oscillator, easily receive 5 and/or 10 MHz by switching passband filters in/out.

If you need more information on WWVB, you can read a very informative page at http://www.bldrdoc.gov/timefreq/pubs/sp432/s_wwvb.htm. They also point you to the time code data in an appendix.

Hope this helps.

73,

Rick, WB3EXR

Brooke wrote:
>
> I would like to receive the time code from WWVB on 60 kHz (not the
> carrier frequency). Does anyone know of a simple circuit and/or
> chip that outputs the time code?
>
> Thanks,
> Brooke
> N6GCE
> remove "nospam" to reply

--
It is not necessary to understand things in order to argue about them --
Beaumarchais

# 3776. Re: Need Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <344965A3.38E8@ix.netcom.com>
Source record: 89852

Bob Remo wrote:
>
> Can anyone give me plans to build a low cost receiver. I am new to
> amateur radio and have a little electronics experience. I would also
> eventually like to build a transmitter, but only after licensing.
> Please e-mail me with this info.
>
> thanks,
> Bob
---
Hi Bob --- maybe try builing a receiver kit -- see URL:
http://pw2.netcom.com/~ac6v/pageay.html

For several kit projects.

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 3777. Re: NiCad Cell Voltage????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <344966B7.35B@ix.netcom.com>
Source record: 89853

JOHN PHIPPS wrote:
>
> I blush to admit that I do not know the nominal open circuit voltage of a
> fully charged NiCad cell. Can anyone enlighten me?
>
> John Phipps K7BTA
> --
Hi John -- take a look at URL:
http://www.cc.columbia.edu/~fuat/cuarc/NiCd.html

All about care & feeding of NiCads

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

## 3778. Re: WTD: surplus magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: me <ham@hamshack.net>
Message-ID: <344965A7.945F6CEF@hamshack.net>
Source record: 89854

Egads! someone willing to spend $6 to eight dollars....wonder if that includes shipping....

Come on folks!

> 
> I am looking for at least 3 or 4 lbs. of surplus #25 magnet wire. Will
> consider #24 or #26 also. Must be surplus, not over $2/lb. please.

# 3779. Re: Alinco DR-150 mod.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Toolman <xpoustie@concentric.net>
Message-ID: <62bv4d$dmk@examiner.concentric.net>
Source record: 89855
Cross-posted to:
alt.ham-radio.marketplace,alt.radio.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Remove top cover--------see the red and blue wires peeking out from the front panel? Snip the red and you receive 430-512. Snip the blue and you transmit 138-165. You must reset the microprocessor!! You will lose all your stored memory. Enjoy!

Tim

Andre Antunes wrote in message <629oam$gbg@news.EUnet.pt>...
>Hello, everybody,
>I bought an Alinco DR-150 E, new in the box. I know that it can expand
TX/RX
>coverage by key combination.
>Can anybody help on this?
>
>Thanks to all. Please, reply by mail.
>Cheers.
>
>
>--
>Andr&#65533; Antunes
>andre.antunes@mail.eunet.pt
>
>
>

# 3780. info needed on voice inversion company

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: "Witek G. Busse" <witek@argus.rs-systems.com>
Message-ID: <34499379.7C90FEC@argus.rs-systems.com>
Source record: 89856

I was web surfing and found a British company that sells voice inversion IC also I think they sell packet radio chips. The problem is that I forgot their web address. The only things I remeber is that their voice inversion IC were HIGH TECH not the plain jane. Even though they were analog there voice scrambling was not only plain voice inversion but also time based? They sold several types, from plain inversion to military grade encryption. They have a US dealer which also has a web page, but I cannot find it either. If any one could help me find this web page or even the name of the company I would greatful. Thank you in advance.

WGB

--
**********

"...the most important thing in life is not the triumph but the struggle..."

Baron Piere De Coubertin

**********

# 3781. Re: Antenna for Attic????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: michael gene sherrill <msherril@bellsouth.net>
Message-ID: <3449167A.37B7@bellsouth.net>
Source record: 89857
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec,radio.shortwave,rec,radio.scanner

3W8PE1B wrote:
>
> John,
>
> Depending on how concerned you might be to any
> directional nature of the antenna, you might
> consider a multiple dipole arrangement. I've
> done this for the Ham Bands at 40, 20, 15 & 10 Meters,
> and it worked well.
>
> Run coax to center of roof reak beam on longest axis
> of roof (assume that is the 70' measurement). Depending
> on which side of the argument you subscribe to, you
> may want to use a balun. The same goes for the utility
> of using a tuner at the receiver end.
>
> Cut dipoles for each "World Band" you wish to receive and
> connect to the center insulator/balun.
>
> Dipoles should end up as either straight dipoles or
> inverted "V" antennas. One can run the length of the
> roof beam, two to opposing corners (e.g., NW-SE and NE-SW),
> one could run perpendicular to the center roof beam, and
> the others can be installed to provide a broad
> Fan Dipole type arrangement.
>
> This will give you a pretty broad banded antenna, with some
> directional impact, and still have some benefits from the
> individual elements being cut to length.
>
> The coax run might avoid some noise pick up in the house.
>
> FYI - Some insulation is foil backed and may cause some
> shielding problems if installed on the roof portion, rather
> than on the attic floor.
>
> Have Fun! Dave K7HMP
>
> John wrote:
> >
> > I am interested in putting a wire antenna in attic for listening only on
> > the "world bands". My usable space in attic is approx 25 ft wide by 70ft
> > long. Can anybody help me out with some ideas??? I will be getting a

> > Radio Shack DX-394 soon and want to be ready.
i tried running a wire antenna all the way up the ceiling
and got some killer results. also you might want to try this...
run the wire from a loop or wherever the slack is, to the wall
going straight up towards the ceiling. then fasten some kind of
steel or metal object to the upper part of the wire.
i have a piece of thin cut metal clipped on mine with a clothespin
and can pick up a lot more stuff than i did with a standard
mount antenna.

# 3782. Motorola GP-300

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-18 00:00:00 UTC
From: Kenneth Gyld <sm3vro@lls.se>
Message-ID: <3448F723.9AAE0E44@lls.se>
Source record: 89858
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amareur.misc,alt.ham-radio.marketplace,alt.radio.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Hi there!

I'm locking for any program to program the GP300 with!
I have the rib, but i need a program that i can use with my 2m radio. I have a program that works fine on the hi 70cm band, and I have a program that works on frekv over 146MHz.

I'm now locking fore a program that supports frev. below 146MHz.
Do you perhaps have any program that supports what I'm looking fore, ore maybe you know someone that might have it?

Many thanks, and I hope that you can help me!

/Kenneth

---
sm3vro@lls.se
http://gyld.online.se

## 3783. DTMF memory dialler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: "T. Calvete (KA2OMQ)" <calvete@rpa.net>
Message-ID: <344A1D7B.5423@rpa.net>
Source record: 89766

I have a Kenwood TM-201 which I would like to add a DTMF auto-dialler.
Any ideas??

# 3784. Re: CB to 6m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <344A37BC.4E@earthlink.net>
Source record: 89767

The 148 is likely a good candidate to change...IF I recall, the 148 uses the UDP divide by chip.....the same chip in my Yaesu FT227R...it is BCD controllable and we once had a 148GTL on 10mtrs as a BCD controlled remote base from our 440 rptr....was great working 10SSB from the UHF HT....
To go to six, all that is neccessary is to change the xtals and retune the RF stages (may need some caps changes)....
Would be neat now that 6 is becoming a true world wide band and the sunspots
are on the way up again!

Chris
WB5ITT

Pedro Pedroso wrote:
>
> Does anyone knows if a CB with PLL MB8719 can be changed to 6m ??
> I used to have a Cobra 148GTL, is it possible to change it to
> 6m ?
>
> thanks !
> | Pedro Pedroso | |
> | l38217@alfa.ist.utl.pt | CT1ELP |
> | Eng. Electrotecnica e Computadores | Founder member of GPDX |
> | (Telecomunicacoes e electronica) | |
> ----------------------------------------------------------------------
> | Address: P.O.Box 116 , 2806 Almada Codex , PORTUGAL |
> ----------------------------------------------------------------------

# 3785. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <344a3fcc.424598408@news.atl.bellsouth.net>
Source record: 89768

On 18 Oct 1997 21:13:59 GMT, "Carl R. Stevenson" <wa6vse@fast.net> wrote:
>Carl R. Stevenson <wa6vse@fast.net> wrote in article
><01bcdb51$d74839c0$0100005a@wa6vse>...
>> Marijan Miletic <s56a@s55tcp.ampr.ORG> wrote in article
>> <12743@s55tcp.ampr.org>...
>
>> > Our ears with associated part of brain are so inferior to visual senses.
>> > The following table sumarises some important radio communications facts:
>> >
>> > Modulation type Information speed Bandwidth Efficiency
>> > ---------------------------------------------------------------------
>> > Human CW - OOK 10bps 500Hz 0.020bps/Hz
>> > Radioteletype 50bps 300Hz 0.167bps/Hz
>>
>> > SSB speech 200bps 2kHz 0.100bps/Hz
>> > AM speech 200bps 6kHz 0.033bps/Hz
>> > FM speech 200bps 15kHz 0.013bps/Hz
>>
>> It is not clear to me where the 200bps number for speech came from ...
>> Mr. Nyquist would assert that that rate could only handle an upper
>> frequency limit of 400 Hz at best ... that would result in pretty crappy
>> audio fidelity ... I would submit that the "effective information rate"
>> of speech should be much higher, with the result that the "efficiency"
>> number would look MUCH better than your numbers in the table above ...
>
>I misspoke above ... 200 bps would support far less than 400Hz of audio
>bandwidth ... assuming multiple bits/sample and sampling according to
>Nyquist's criteria ... I was *thinking* one would have to sample at
>AT LEAST 400 samples/sec (bare minimum) to demodulate 200bps (and that
>bare minimum approach would make timing recovery and other aspects a bear)
>... one would really want to oversample by some reasonable amount ...
>but what I typed was sort of "turned inside out" and not at all what I
>really intended to say ... I apologize for any confusion I may have
>caused by misspeaking ...

That's Ok, you're still confused anyway. What the table is showing is
the bps equivalent of the *words per minute* conveyed by speech.
That's the information content being measured.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3786. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: cs <s@t.net>
Message-ID: <62dfqi$4p5$1@gte2.gte.net>
Source record: 89769

Rick Mainhart wrote in message <3449533A.3158@sprintmail.com>...
>Brooke,

Snip>>>>>
>
>Another inexpensive option is to use the broadcast television time
>interval signal reference transmitted on one of the blanked horizontal
>sweep lines ... time code is imbedded, is traceable to NIST standards,
>and was written up in one of the ham radio or general electronics
>magazines several years ago.

Snip>>>

>
>73,
>
>Rick, WB3EXR

Rick:
The TV Vertical interval time-code is not dependable, as many
programs are delayed and may contain time code that is several
weeks old and many hours off. Also during commercials the time code
may or may not drop out.

Another myth that the Color Burst Freq(3.579545mhz) is
dependable.
Since the advent of satellite program distribution all Color Burst signals
come
from the stations sync generator. In most operations this has not been
adjusted
since the generator was manufactuered. The tolerance is +- 20 HZ, so they
aren't very close. Some stations have this freq monitered, most don't.

There was a time when the networks used Cesium standards on the
Color Burst for stablilty before the availability of good Frame Sync's. This
was abandoned at least 15 years ago.

Cliff, W7VVA

# 3787. Over 2000 places to ADVERTISE FREE on the internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: beacon@mail-response.com
Message-ID: <344a4699.0@209.3.22.4>
Source record: 89770

Over 2000 places to ADVERTISE FREE on the internet....

http://www.mail-response.com/entry126.html

# 3788. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <344a4370.425530743@news.atl.bellsouth.net>
Source record: 89771

On Sat, 18 Oct 1997 20:24:27 -0400, Rick Mainhart <mainhart@sprintmail.com>
wrote:
>IMHO, you can purchase an inexpensive GPS receiver with time-code output
>for far less than you can buy or build a WWVB receiver/chart recorder.

The time coming out the NMEA port of inexpensive GPS receivers is only
trustworthy to +/- 1 second. Internally, the time is much better, but you have
to hack the receiver to get it. There are some board level GPS receivers which
can be used. Tom Clark's Totally Accurate Clock (see TAPR's webpage)
extracts this signal and gives you an accurate time reference.

>Another inexpensive option is to use the broadcast television time
>interval signal reference transmitted on one of the blanked horizontal
>sweep lines ... time code is imbedded, is traceable to NIST standards,
>and was written up in one of the ham radio or general electronics
>magazines several years ago.

PBS sends a time signal, but again it isn't trustworthy to more than
+/- 1/30th of a second, often quite a bit worse. That's due to the use
of frame synchonizers internal to the station which resynchronize
the network signal to the local station's house reference, which is
usually a simple crystal oscillator. Frequently, the signal may be
routed through more than one frame sync, each of which adds
another 1/30th of a second delay. Or it may be routed through a
production switcher which adds another delay of up to 1.5 TV
lines, about 100 micoseconds. And this can change moment by
moment depending on requirements internal to the broadcast
station. This signal is intended to resync the clocks in Sony TVs
and VCRs (Sony is paying PBS to distribute it), and is not intended
to be a highly precise time reference.

The other networks also sometimes embed timecode in the
vertical interval, but this is time into the program, and not
real time. Network programming is distributed to the affiliates
via satellite, and feed origination points may change from
program to program, IE one show may come out of NY,
another out of Washington, and yet another from Burbank.
And they may take a different number of satellite hops
along the way (turn arounds we call them). These all create
differential delays. And of course there is still tape delayed
broadcasting whose embedded time code is obviously out
of date by hours, perhaps days.

These network timecodes may not be rebroadcast in any
event. Local stations are now permitted to resell the vertical
interval of their signals. Many do. They strip out the network

signals and insert their own local signals. A number of for pay services are now transmitted in the vertical interval.

In the old days, when distribution was by terrestrial microwave out of NY and there weren't any frame syncs at the local stations, you could figure out the offset due to transmission path delays and derive an accurate time or frequency reference from the network signals, but that has all changed now. Distribution is via geosync satellites, and those aren't really geostationary. They introduce a doppler error of a few parts per million. And transmissions may be dynamically switched. This precludes local stations from genlocking or they'd find their local in house production work disturbed by these dynamic switches.

The received signals are then frame synced at the local station to bring them into time with the local station reference so that transitions to and from the network will be seamless and so supers can be put over the network signal. A frame sync introduces a 1 frame delay, (+/- the difference in frequency between the signal and the local station reference at the moment). For production purposes, the signal may be routed through other delays from time to time before being transmitted. You can't know this, so you can't develop an offset to compensate for it.

You *may* notice if frame syncs are cascaded. The lip sync gets off because the audio is not delayed but the video is. To solve that problem, stations are now adding audio frame delays to bring the programs back into lip sync. We recently had to do this for in-house purposes because our new studio uses a digital component switcher which is defacto a frame sync. That extra delay made lip sync errors noticable and we had to add an audio frame delay to bring things back in sync.

In summary, if you want an accurate NIST traceable time or frequency reference, you won't get it from broadcast TV. That was attempted years ago, with the three networks (before Fox and PBS) using rubidium references in NY referencedto NIST and local stations slaving their references to the network (called genlocking). But those days are long gone. Changes in broadcast technology and distribution mooted any traceability.

A few broadcast stations use rubidium standards for their transmitters, or for their house references, but these aren't NIST tracable, and are generally not being replaced with similarly precise references as they are retired from serivice. The FCC only requires broadcasters to maintain a frequency precision which is easily obtainable from a normal crystal oscillator, so the rubidiums are more trouble to maintain than they are worth.

>There was also a nice article on using LORAN-C as a time-base. LORAN-C
>is traceable to NIST and is generally good for 1 X 10-13. Receivers are
>inexpensive, extracting the timebase data is fairly straightforward ...
>written up in one of the ham rags a few years ago.

Loran C is being phased out in favor of GPS. It is scheduled to begin shutting down in 1998. Omega has already shut down (that was a better reference than Loran C). It is coming down to WWVB or GPS if you want an accurate time reference. WWVB is currently going though an upgrade to boost its transmit power to improve coverage, but there are still areas of the US where reception is difficult.

GPS is globally available. Due to the SA dither and the varying propagation delays through the atmosphere, GPS time isn't that locally precise, but if you have a way to locally average it, you can reduce those errors to a reasonable value, IE you can use the signals to discipline a local oscillator. That's the idea behind the TAC. This gives better accuracy than HF WWV because HF propagation variations are much more extreme than those experienced by GPS.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3789. HAMFEST October 26 - Lindenhurst, NY LI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: tomka2d@aol.com
Message-ID: <19971019202700.QAA07811@ladder02.news.aol.com>
Source record: 89772

HAMFEST October 26, 1997 Lindenhurst, LI

GREAT SOUTH BAY AMATEUR RADIO CLUB
LONG ISLAND HAMFEST-COMPUTER SHOW - OCTOBER 26, 1997

LINDENHURST, LI - NY

On October 26, 1997 the Great South Bay Amateur Radio Club will again sponsor an indoor Hamfest-Computer Show. The location will be at the Knights of Columbus Hall located at 400 South Broadway, Lindenhurst, NY.

This is an ARRL approved Hamfest.

There will be radio equipment, electronic componets, computers and access-ories, softeware, books, technical manulas, ARRL information, Amateur Radio License Exams and information. General admission is $ 6.00. $5.00 with coupon. (Coupons will be available at the door.)

For exam candidates please remember to bring your original FCC Amateur Radio license (if licensed), any C.S.C.E. forms that are pending, plus a photocopy of each, pens, calculator, formal form of ID (preferably photo ID), and the examination fee, to the exam seesion. 1996 ARRL/VEC fee is $ 6.25, exact change is appreciated. Novice exams are free.
The VE team is from ISLIP ARES Group and GSBARC. Thanks guys.

For vendor and additional information pleas contact, Walter Wenzel KA2RGI at (516)957-0218, or Tom Carrubba KA2D at (516)422-9594 during EVENING HOURS ONLY (7PM-10PM). NO TABLES WILL BE RESERVED WITHOUT PRIOR PAYMENT due to the limited space available. Tables are 2.5ft x 6ft.

Talk-in will be via GSBARC Repeaters on 146.685 4Z(136.5) PL and 223.86 OC.

Food Service during the Hamfest will be provided by members of the Knights of Columbus Council.

Information is also available during the GSBARC 2 meter info net every Monday evening at 7:00 pm on the W2GSB repeater, 146.685 -600 4Z(136.5) PL required. You may also write to:

Great South Bay ARC
P.O. Box 1356
West Babylon, NY 11704

Visit GSBARC online at http://www.li.net/~tomcar/gsbarc.htm

73,
Tom Carrubba KA2D
President, GSBARC

ka2d@li.net

# 3790. HI VOLTAGE FILTER CAP SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <62dvq9$arp@bgtnsc02.worldnet.att.net>
Source record: 89773

THE 53+mf AT 5W KV HAS SOLD. HAVE A FEW 3.5 KVAT 10MFFOR $18 LEFT. Tns
WS0E at Joe.7hc@juno.com

# 3791. Ham Radio Mags plus

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: "Robert L. Willsey" <w4nul@brightok.net>
Message-ID: <344A763A.1B54BADF@brightok.net>
Source record: 89774

I have the below listed Ham Radio Magazine mags to give away. There are not many of these but as I am able to go through things I will offer many more. All I want is the shipping for them. The first person who e-mails me and says he/she wants these I will accept. Then they should send me enough postage to get them shipped.

Here is the list:
June 1971
August 1972
August 1973
January, Feb, Mar 1976
October 1981
April, Sept, Oct, Nov 1982

These weigh about 4 lb and I do not have them in a package for shipping. I will probably have to buy a large shipping envelope from the post office.

I also have a Heathkit assembly manual for the reflected power meter and swr bridge. This is model HM-15.

The same applies on shipping for this. It is only about 15 pages and is just about the same size as the new QST mags. I did not weigh this as it is quite light.

There will be many more mags 73, CQ, and QST as I am able to unpack them. As I am retired, disabled, and diabetic it may be a slow process but I do want to send them off before I am forced to leave them sit.

73 Bob w4nul@brightok.net

Robert L. Willsey
Box 10, 221 N. Main
Martha, OK
73556

# 3792. FS: Test Equipment, NOS Tubes, Used tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <62e02d$6bf$22@ha1.rdc1.occa.home.com>
Source record: 89775

```
NOS Tubes, large quantities of each available.
-----------------------------------------
6AZ8 Philips, $3.00 each
JAN 5751 GE, $4.00 each
6186W (6AG5WA) philips, $.25 each
JAN 6922 Philips, $3.00 each
7062/E188CC Amperex,$4.00

Used Tubes, Untested, large quantities of each available,
Pulled from Surplus Equipment, sold "as is"
-----------------------------------------
5U4G, $2.50 each
6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $1.00 each
6AU6A $0.50 each
6CL6 $.50 each
6X4 $.50 each
12AT7 $1.50 each
5651A $0.50 each
5726 $.25 each
5963 (12AU7A) $1.50 each
6080 $2.00 each
6189 (12AU7WA) $1.50 each
8068 $7.50 each
8136 $0.50 each

Test Equipment, turned on and checked,working condition,but may need
minor repairs, has not been calibrated, no manuals or accessories
included .Re-conditioning, calibration, accesories & manuals are
available at extra cost, e-mail us for a quote.
-----------------------------------------
HP 141T with 8552B, 8553B, 8554B, 8555A Spectrum Analyzer $2495.00
HP 1741, 100 MHz Oscilloscope, $345.00
HP 8405 Vector Impedance Meter, $260.00
HP 8505A with 8503A & 8501A Network Analyzer $4275.00
HP 8614A, Signal Generator, 800 to 2400 MHz, $415.00
HP 8616A, Signal Generator, 1.8 to 4.5 GHz, $340.00
HP 8640B/323 ( AN/USM 323 ) Signal Generator, $485.00
HP 8640B, opt. 1 & 3, Signal Generator, $1095.00
Kay 5071B Signal Generator, 10 to 250 MHz, CW & Pulse, works, but has low
output, $75.00
Kikusui COS6100, 100 MHz 5 channel scope, $450.00
Tek 453, 50 MHz Oscilloscope, $200.00
Tek 455, 50 MHz Oscilloscope, $300.00
```

Tek 464, 100 MHz Storage scope, $375.00
Tek 465, 100 MHz Oscilloscope, $450.00
Tek 465M, 100 MHz Oscilloscope, $375.00
Tek 475, 200 MHz Oscilloscope, $545.00
Tek 485, 350 MHz Oscilloscope, $645.00
Tek 492, Spectrum Analyzer, $3995.00
Tek 1502 with thermal chart recorder & battery $1325.00
Tek 067-0520-01 Standard Amplitude calibrator $165.00

Microwave Components, used, untested, sold "as is".
---
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $30.00 each
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $40.00 each
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $40.00 each
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $40.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $100.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $40.00 each
HP X752A, 3 dB Directional Coupler, X Band, $12.50 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.
For shipping cost outside of USA & Canada, e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 137%
of the US $ amount ( conversion rate .73 ). No minimum order.
Prices valid until 10-31-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"

Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

## 3793. antenna tuner plans wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: Dan Perez <perezd@ix.netcom.com>
Message-ID: <344A4840.74CF@ix.netcom.com>
Source record: 89776

Does anyone have any good antenna tuner plans. pls post

# 3794. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971019184752.11846B-100000@oso.slonet.org>
Source record: 89777

Now that's a big 10-4! Big mouth that is==not big signal!

On 18 Oct 1997, WA8ULX wrote:

> > I apologize for any confusion I may have
> >caused by misspeaking ...
> >
> >73,--
> >Carl - wa6vse
> >wa6vse@fast.net
>
> No problem we our use to you misspeaking
>
>

# 3795. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <344ABECA.6D96@popd.ix.netcom.com>
Source record: 89778

I hate to say it, but the easest way is probably to go to Radio Shack and part with $40 and buy one of their radio controlled clocks.... They seem to use the wwvb time code info to drive a nice little time of day clock. They seem to be (I'm guessing here) using a fairly sophisticated dsp receiver which I can say is pretty effective. I live in an area where bith wwvb and loran are virtually useless due to serious power line noise and yet the RS clock sits there displaying the time... I'd like to know how they do it!

73 Dan AC6AO

# 3796. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: Dale Allen <daleal@cyberhighway.net>
Message-ID: <01bcdcdc$d0479800$8f3e8bcd@daleal>
Source record: 89779
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,re

Well, sir,
I for one have not seen this piece of legislation, but, unless it directly affects Amateur Radio then good luck trying to get the Amateur Radio "community" to listen to you and help out the people that want to continue to be able to listen to other services. The amateur "community" has nothing else but it's own interests at heart, this includes if it reduces other people's ability to hear EMERGRENCY communications which may directly affect the life (lives) or property of those who would be (illegally) listening to police, fire, paramedics, cellular, etc. If these people would get off their duffs and let their congressman (woman) know how they felt there would be no threat at all to either the rights of hams or others to listen to whatever they want to, whenever they like. By the way, the way around the "scanner ban" is to buy your equipment from dealers in Canada!!!!!
--
Dale Allen
KB7TNR/NNN0ARM(T)

Ray Pfaff <raypfaff@erols.com> wrote in article
<343e46b2.3046140@news.erols.com>...
> sco@sco-inc.com (SCO) wrote:
>
> >Erv <kb8tnq@voyager.net> wrote:
> >

>

# 3797. Wanted: High Current transformer for homebrew 12 volt supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: mfunaro@worldnet.att.net
Message-ID: <34497f10.216085136@netnews.worldnet.att.net>
Source record: 89859

Hello, I am building a 13.8 volt power supply at 30 amps. I am looking
for a heavy transformer that puts out around 18volts. If you have
anything laying around please email me.
Thanks, Mike N0XD
mfunaro@worldnet.att.net

# 3798. Re: SCA Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <62cmjt$2kk$4@alice.walrus.com>
Source record: 89860

Matt J. McCullar (saturn@isrc.net) wrote:
: Many FM radio stations carry extra programs on subcarriers of their main
: transmitting signal. You need a special decoder in your receiver to
: listen to these. I've always been fascinated by this and only recently
: was able to hear it.
:
: I'd gathered several articles on SCA (Secondary Carrier Audio, or some
: such) and I'm still quite intrigued by the fact that a decoder is not
: really all that difficult to build. I ordered a kit from Ramsey and put
: it together and it works quite well. Finding an FM radio to try it out
: on, however, was a bit of a challenge.
:
: I had also built a Ramsey FM radio receiver with an output jack
: specifically designed to attach to the SCA adapter, and it kinda
: worked. But I wanted something that was not so easy to misalign (my
: mistake!). Then, a couple of weeks ago, I bought a junked AM/FM car
: radio at a garage sale. The owner said the cassette deck in it was bad,
: but that the radio should still work.
:
: So I tried this out today: the radio runs from +12 VDC, and I attached a
: standard eight-ohm speaker. With the cover off, I was surprised by how
: small the radio receiver itself was. It was old enough, fortunately, so
: that there was no surface-mount circuitry, and everything was right out
: in the open where I could get to it. I started probing with an
: oscilloscope.
:
: I tuned in an FM station and just started probing until I found what I
: was looking for: the audio waveform, with something riding on top of
: it. With the very first place I probed, I thought I had found it and
: attached the SCA decoder to that point. Know what? It worked! A
: friend of mine told me that car radios are built to be stable and tough;
: just right for this type of a project. I heard a conversation in
: Korean, plenty of Muzak, and even digital data. I plan on building a
: single version of this so I can listen to it at home and not piece
: everything together on the bench.
:
: Has anyone else played with SCA decoders, and if so, what all have you
: heard?
:
: 73 DE KJ5BA
: Matt J. McCullar
: Arlington, TX

I' ve never been able to get clear audio out of the ramsey SCA unit...how did you manage to fix the problem?

## 3799. Re: 6m amp help??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3449eda7.1175120@news.online.no>
Source record: 89861

On Tue, 14 Oct 1997 10:45:09 -0700, Len
<ln@hagagymnasiet.norrkoping.se> wrote:

>Hamm4fun wrote:
>>
>> I recently came by a tube soket assembly for a pair of 4cx250's. They have a built in screen bypass cap which measures 120nf total for both tubes.
>
>The built-in cap for UHF use is usually 1000 pF, while 2700 pF is common
>for VHF use. The latter is enough for frequencies down to 30 MHz. Either
>your measurement is wrong or there is some other cap connected to the
>sockets.
>73 de Len SM5DFF
have you megged the capacitor?

---
Email: LA8AK at online dot no

## 3800. GE MPD cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: Graham Warrington <ve1fc@nbnet.nb.ca>
Message-ID: <01bcdc97$3283c480$4498b3cf@ve1fc.brunswickmicro.nb.ca>
Source record: 89862

Need pinout for GE MPD programming cable from programmer box to radio..

Thanks
Graham

ve1fc@nbnet.nb.ca

# 3801. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: William W Janssen <billj@calweb.com>
Message-ID: <344A2329.6684@calweb.com>
Source record: 89863

Rick Mainhart wrote:
>
> Brooke,
>
> WWVB has no modulated time code. The carrier frequency IS the time
> reference, ID is by a 45 degree phase shift at 10 minutes past the hour,
> returning at 15 minutes past the hour.
> Time base reference is typically done by comparing a local oscillator
> with WWVB directly, and charting the phase difference in picoseconds. To
> get long-term stability, you adjust your local oscillator to match phase
> on a day-to-day basis (thus the necessity for a GOOD STABLE oscillator).
>
> The phase difference is so noticeable, that with commercial WWVB
> equipment onboard a Coast Guard Cutter (1979-1980), we could see a
> course change by the phase chart recorder! We used the master oscillator
> to feed our transmitters and receivers to keep them all within the
> alloted frequency allocation ... HF through UHF.
>
> The company that made the equipment is (was?) in Rochester New York, but
> their name escapes me.

The name of the company was probably Spectracom. They are located
in Rochester and make receivers for WWV and Loran and other equipment
for time and frequency standard use.

I understood thet WWVB amplitude modulated their signal with a slow
data rate with time and perhaps other information. Haven't checked
latly so can't say for sure.

Bill K7NOM

# 3802. Re: Help - Battery Charger Combo For Shack Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-19 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <344A127E.E51@one.net>
Source record: 89864
Cross-posted to:
alt.home.repair,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

DavidC wrote:
>
> I'd like to use a 12v battery with a charger to power my rigs in my
> basement "Ham" shack.

<snip>

> Questions:
>
> 1. What car, marine, etc. heavy duty battery is best?<snip>
>
> 2. What battery charger should I use to prevent damage to the battery and
> to keep it
> properly and fully charged - without generating rf noise in the
> process (and to
> preferably have a reasonably accurate display of the battery
> condition).

Ross "codeman" N7VWX gave some practical advice in a separate posting. I'd like to offer a few variations on the theme.

The "best" battery may depend on how you operate. If you expect to be discharging the battery many times (versus keeping it continually charged to full/nearly full capacity), then you need a deep cycle battery. I use a Sears marine deep cycle battery (12 V) in my shack. I thought it provided the most amp-hours for the buck. If you rarely or never do deep discharges, any automotive battery will do fine. Be advised that the deep cycle batteries usually have a weaker sulfuric acid inside (specific gravity about 1.25 vs 1.28), so their resting voltage is somewhat lower than the auto battery's (12.7 vs 13.2 V). There's nothing wrong with this, but it does affect the charger settings you should use for a float charge.

I use a variable-voltage homemade linear power supply (4-A nominal) to keep the battery charged. It has no make or model number, but it also has no RFI. After a significant discharge (either type of battery), it should be charged for a while at 14 to 14.5 V with current limiting to 4 - 6 A. If you don't do deep discharges, you can maintain either battery on float charge (about 13.2 V for the deep cycle, 13.6 for the auto (I think??)).

I use a hydrometer to check the battery. Reading the voltage is fine for day-to-day monitoring, but you need to know the strength of the acid when the battery starts to go bad. I successsfully revived my last battery when the voltage readings said it was in steady decline, but the hydrometer said it just needed a high-voltage charge.

I can't remember the Web pages, but there are some good ones around on batteries and charging. I recommend that you try a quick search.

Rich W2RG

## 3803. Nor-Cal transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: willard561@aol.com
Message-ID: <19971020015401.VAA07870@ladder02.news.aol.com>
Source record: 89780

Can anyone direct me to a sight that has plans
for the Nor-Cal transciever
Thanks
Bill Higdon Willard561@aol.com

# 3804. Re: Help - Battery Charger Combo For Shack Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcdd24$aea2d780$0a8a92d0@bitnet.bit-net.com>
Source record: 89781
Cross-posted to:
alt.home.repair,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Rich:

Thanks! I tend to lose track of time when on the air, so I imagine the battery might get discharged if I forget to turn the cahrger on, am oerating a lot, or if we lose power and I use it to power a light (and maybe the rig).

I like the idea of a power supply/charger that doesn't generate rfi - hints on your design?

Thanks! DavidC

# 3805. Re: Sync Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <344B3CF0.E52@erols.com>
Source record: 89782

Dennis Erwin Thurlow wrote:
>
> Gary Coffman wrote:
> > You may want to look at the older version of Coherent (VE2IQ's weak signal
> > program). In version 4.3 and older, it used CCW. That's been abandoned in
> > favor of BPSK in more recent releases
>
> I've been trying to find Coherent ever since you last mentioned it.
> No luck. Any contact pointers would be appreciated.
> --
> Spam Defense: Click <A HREF="mailto:geosynq@trader.com">HERE</A> to reply.
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM

Try Jim's Gazette at http://www.n2hos.com/digital/. I believe he still
has a section on CCW.

## 3806. decal type transfer material?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <344AB3EB.9CD2F8CB@tri.net>
Source record: 89783

I lost the thread on this:

Where do I get the decal type material that works with an ink-jet printer, can be wet transferred to a panel and lacquered on?

Thanks

N0UU

# 3807. hv transformers/ heavy duty 13.8 volt power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: sw1gak@polaris.mindport.NET
Message-ID: <Pine.SUN.3.96.971019225848.20830A-100000@polaris.mindport.net>
Source record: 89784

Last week I was looking for a source of high voltage/power transformers.
Replacement should be here next week from Peter Dahl.

I still have the 3 bad transformers. Hopefully the secondarys are bad.
I plan to remove the secondary wndings and replace them with the correct
number of turns to build the mother of all 13.8 volt DC power supplies.

The old transformers are rated @ 2500 vac 4kw, and weigh 70 lbs.
Does anyboby know of a method to determine which winding is bad on a
transformer?
73
Spencer
W1GAK

## 3808. Dentron info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
Message-ID: <344B646E.B6D090F9@era.ericsson.se>
Source record: 89785

Did Dentron ever make a 'DLA-1200 model ' and what tubes sits inside it
???

I think I have seen DLA-1000 (4xsweeptubes) and DLA-2500 (2x887n)
in old ham-magz. ads. so far.

73 Chris SM0NCL

## 3809. Dentron info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
Message-ID: <344B6476.4F8F4443@era.ericsson.se>
Source record: 89786

Did Dentron ever make a 'DLA-1200 model ' and what tubes sits inside it
???

I think I have seen DLA-1000 (4xsweeptubes) and DLA-2500 (2x887n)
in old ham-magz. ads. so far.

73 Chris SM0NCL

# 3810. Re: FM Stereo, How does the seperate channel audio work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.000000cd.0071808a@gto.gto.net.om>
Source record: 89787

Stereo Sound Transmission

Hi,

With a mono transmission only the sum of the left and right (L + R) signals is transmitted but with stereo the difference (L - R) is also sent out. Now if you do some basic analogue arithmetic in the receiver you get :-

[(L + R) + (L - R)]/2 = L (the two R's cancel out)

and

[(L + R) - (L - R)]/2 = R (the two L's cancel out)

So there you have your separate Left and Right signals.

To work this magic a low level pilot carrier is generated at 19kHz. The (L - R) component is amplitude modulated onto the subcarrier's second harmonic of 38kHz to produce a double sideband suppressed carrier signal. This along with the (L + R) signal, and the 19kHz pilot, are all frequency modulated onto the main carrier. The purpose of the 19kHz subcarrier is to help recover the (L - R) part signal from the DSSC signal - a sort of a BFO if you will.

I hope this helps.

73 de Joe, G3LLV

## 3811. FS: Homebrew supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Frank Huguenard <frank@icast.com>
Message-ID: <344B87EB.9EA0195F@icast.com>
Source record: 89788

```
This is a multi-part message in MIME format.
--------------3D7609DDB3A45FCEDEF4B36D
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have a large quantity of Grolsch (16 oz) bottles with ceramic caps as
well as a dozen 5 gallon glass carboys and 1 7 1/2 gallon glass carboy.

Email me if you are interested.

--------------3D7609DDB3A45FCEDEF4B36D
Content-Type: text/x-vcard; charset=us-ascii; name="vcard.vcf"
Content-Transfer-Encoding: 7bit
Content-Description: Card for Frank Huguenard
Content-Disposition: attachment; filename="vcard.vcf"

begin: vcard
fn: Frank Huguenard
n: Huguenard;Frank
org: ICAST Corporation
email;internet: frank@icast.com
title: Software Engineer
x-mozilla-cpt: ;0
x-mozilla-html: FALSE
version: 2.1
end: vcard

--------------3D7609DDB3A45FCEDEF4B36D--
```

# 3812. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <344B8ADB.41CE@boeing.com>
Source record: 89789

> > Modulation type Information speed Bandwidth Efficiency
> > ---------------------------------------------------------------------
> > Human CW - OOK 10bps 500Hz 0.020bps/Hz

This table bothers me. Bits is a useless parameter for comparing.
Characters or sylables would be better.

Assuming PARIS which is 34 bits long, this would be 17.6 word/min. It
is about 6.8 bits per character. Baudot is 7 bits per charector with 5
having any meaning to the text.

A 500 Hz Morse channel would be able to handle much more than 17.6 wpm.
I don't remember exactly, BUT I think a 10 bps Morse channel would
require about 28 Hz. This would be 0.357 bps/Hz. This factor would be a
constant for all code speeds. (Actually, I think it is sqrt(2)/4) I'll
have to look this up.

Voice typically takes at least a couple kHz. The intellegability is a
function of bandwidth. The narrower the bandwidth, the slower you have
to speak to be understood.
Ralph AF4EZ

# 3813. Re: hv transformers/ heavy duty 13.8 volt power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <344B4752.4DB5@taxes.net>
Source record: 89790

Spencer Trombly wrote:

> Does anyboby know of a method to determine which winding is bad on a
> transformer?

Uhh, typically we use an ohmmeter.

You should see essentially infinite resistance to ground from
all terminals on the transformer (unless a ground tap is provided),
a series resistance on the primary that is consistent with its
power rating (a few ohms, typically), and infinite resistance
between any primary and any secondary terminal.

If you're lucky, the primary is the inside winding. Disassemble the
core laminations, discard the secondary, and wrap about 20 turns
of #18 stranded insulated wire on the primary. Reassemble (not
COMPLETELY) and apply primary voltage. This will give an approximate
turns/volt rating for the secondary. Now calculate how many turns
you need for your desired voltage, and the largest size wire you
can use. I've successfully rewound lo-volt secondaries with
paralleled windings made from discarded 12 ga insulated electrical
wire. If you have the bucks, there is a square enameled wire made
specifically for motor and transformer winding, in sizes up to
8/0, I believe (like 5000 amp service).

Have fun!

N6OTQ

## 3814. Dentron info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
Message-ID: <344B6405.6115C6B1@era.ericsson.se>
Source record: 89791

Did Dentron ever make a 'DLA-1200 model ' and what tubes sits inside it
???

I think I have seen DLA-1000 (4xsweeptubes) and DLA-2500 (2x887n)
in old ham-magz. ads. so far.

73 Chris SM0NCL

## 3815. Dentron info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
Message-ID: <344B6424.D9464651@era.ericsson.se>
Source record: 89792

Did Dentron ever make a 'DLA-1200 model ' and what tubes sits inside it
???

I think I have seen DLA-1000 (4xsweeptubes) and DLA-2500 (2x887n)
in old ham-magz. ads. so far.

73 Chris SM0NCL

# 3816. Re: FM Stereo, How does the seperate channel audio work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <62g2mh$qqq@hpcvsnz.cv.hp.com>
Source record: 89793

Joe Mayenschein (mayen1@mwt.NET) wrote:
: Hi,
: I know this isn't really the place to ask this question but I haven't
: found any place better to ask it. So here goes.
: How does A stereo FM transmitter transmit the seperate audio channels.
: Simple question right?

Sure, fairly simple. (L+R) comes on the "normal" audio modulation channel.
(L-R) comes as a double-sideband modulation on a 38kHz suppressed carrier,
and that is simply mixed with the baseband (L+R) signal. There is also a
"pilot tone" at 19kHz, so that if you double the 19kHz and get the phase
right, you have the carrier that must be re-inserted to demodulate the
double-sideband signal. Once you have (L+R) and (L-R), it's easy to add
and subtract them to get (L) and (R). So...with this system, a receiver
that ignores the dsb (L-R) signal will still get (L+R) in mono.

--
Cheers,
Tom
tomb@lsid.hp.com

# 3817. Re: Free Scope and spectrum analyser for you PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <344b59b1.5204742@news.crosslink.net>
Source record: 89794
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.policy,rec.radio.amateur.space,rpi.union.ham-radio,slac.rec.ham_radio,su.org.ham-radio,tnn.radio.amateur

On Sun, 19 Oct 1997 16:56:10 -0500, "Steven Hull"
<kc5wee@email.msn.com> wrote:

>What do you think? Hats off to vk1eme.
>

Where's the Beef?

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 3818. Re: S-METER DIGRAM METER WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971020144837.430A-100000@Stratus.CAM.ORG>
Source record: 89795

Ask in rec.radio.scanner. I remember a circuit for this (it was a simple buffer and detector that tapped into the IF strip before the limiter) in Monitoring Times a few years ago. Someone over there might have the information handy.

Michael VE2BVW

On 20 Oct 1997, Bill Frovik wrote:

> DOES ANY ONE HAVE A SIMPLE DIAGRAM FOR ADDING A S-METER
> TO A SCANNER OR ANY OTHER RECEIVER. JUST WANTED TO ADD ONE TO AN OLD
> SCANNER. REGENCY MX3000
>
> THANKS
>
> n0mnb@minn.net
>
>

# 3819. Re: Analogue and RF design.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <344B85FB.6574@boeing.com>
Source record: 89796

europa@primenet.com wrote:
>
> In article <344774E1.4B7C282@global.internet>, Atul
> <andrew@global.internet> wrote:
>
> :Anyone know of any good books for analogue/RF design - which are
> :more practical based rather than theory ?
> :
> :Appreciate your help.
> :
> :atul.
>
> Search for books by Carson and G. Gonzalez. Both, I forget their titles,
> are advanced books on RF design and have extensive coverage of Smith chart
> and S params. Also, Wes Hayward's "RF Design" book is very good. Unless
> you can afford to spend $100/pc on the first two books, I'd suggest
> checking the local university library.
>
> Rob
Hayward is available from ARRL @ $30 W/SW.

# 3820. Re: FM Stereo, How does the seperate channel audio work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: yaesutom@aol.com
Message-ID: <19971020215500.RAA13485@ladder01.news.aol.com>
Source record: 89797

>Sure, fairly simple. (L+R) comes on the "normal" audio modulation channel.
>(L-R) comes as a double-sideband modulation on a 38kHz suppressed carrier,
>and that is simply mixed with the baseband (L+R) signal. There is also a
>"pilot tone" at 19kHz, so that if you double the 19kHz and get the phase
>right, you have the carrier that must be re-inserted to demodulate the
>double-sideband signal. Once you have (L+R) and (L-R), it's easy to add
>and subtract them to get (L) and (R). So...with this system, a receiver
>that ignores the dsb (L-R) signal will still get (L+R) in mono.
>
Just curious, why do they use a double sideband, suppressed carrier at 38khz...why don't they just make it a normal AM (L-R) signal at 38khz? Why even need a 19khz pilot then? If it was just a 38khz AM signal it seems like it would be less complicated then going through the trouble to generate a 19khz pilot, doubling that, AM'ing the 38khz, supressing the 38khz carrier, blah, blah....

yaesutom@aol.com
http://members.aol.com/yaesutom

# 3821. 2m and/or 6m Linear Amp schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: petsits@surf.galacticis.com
Message-ID: <62grce$23m@drn.zippo.com>
Source record: 89798

Am looking for schematics for 1000 to 1500 watt linear amplifiers for 2 and 6 meters. Will pay for copying and postage.

Thanks

# 3822. Re: Homebrew supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Jim Johnson <km7h@gte.net>
Message-ID: <62ghoi$hes$1@gte1.gte.net>
Source record: 89799

I wonder what the amp hour rating is?

Frank Huguenard wrote in message <344B87EB.9EA0195F@icast.com>...
>I have a large quantity of Grolsch (16 oz) bottles with ceramic caps as
>well as a dozen 5 gallon glass carboys and 1 7 1/2 gallon glass carboy.
>
>Email me if you are interested.
>

# 3823. Re: Building a TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: altavoz <altavo19@mail.idt.net>
Message-ID: <344C1A05.3F01@mail.idt.net>
Source record: 89800
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

altavoz
I hope you are not talking the RAMSEY/Baycom !!!!
I found many mistakes in the N4PLK/RAMSEY/TIGERTRONICS
modems , so did my own . Still have 10 left .
The RAMSEY has no chip input protection , turning up
the speaker volume blows the chip .

_____thread below_____

Nathan Johnson KC7JHO
What about the P-IBM kit from ramsy. Has any one tried to use it?

# 3824. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.antispam>
Message-ID: <344C1A61.5CFA@trader.antispam>
Source record: 89801

Ralph Reinhold wrote:
> Voice typically takes at least a couple kHz.

Playing with wave files, the person's voice is still recognisable
at 4410 (8 bit)samples/sec. It barely sounds _human_ at 2205 s/s.
Analog is just the opposite! Even if I can't understand what's being
said, I can recognise _who_ is speaking.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3825. Gear for sale!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: darryl.linkow@grinder.com
Message-ID: <8E1E213.01A70028D7.uuout@grinder.com>
Source record: 89802

10/20/97

HAM GEAR FOR SALE

Communications Specialists TE-64D PL box - BRAND NEW!
------------------------------------ $125.00 including shipping

4 Motorola MT1000 HT's - 5 Watt - 146-174 Mhz. band - 16 channels,
can program the frequencies and PL's that you want - absolute
MINT CONDITION - each comes with antenna, belt clip & battery --
$450.00ea/incl shipping

I have 23 Motorola HT-600 portables available for immediate sale.
These HT's are 5 Watt, 6 channel, 155-174 Mhz. bandsplit. I will have them
programmed to your frequencies and PL's as you specify. I also
have a few speaker/mics, six-bank chargers, some single rapid
chargers, and a few other accessories for these radios. I will sell
these accessories with purchase of radios only! Radios
are all in excellent condition, and come complete with
battery, antenna, and belt clip or drop-in holster. Price is
$325.00 each incl shipping. Please Email me for quantity pricing.

CQ Magazine - August 1995 issue - $2.50 including shipping
CQ Magazine - Sept. 1995 issue - $2.50 including shipping

To purchase any of the above, leave message here or send Internet
Email and mail check or money order to me:
Darryl Linkow - KE6IHA
4958 Marmol Drive
Woodland Hills, CA 91364

Internet: darryl.linkow@grinder.com

---
. OLX 2.2 . Email: darryl.linkow@grinder.com

# 3826. Re: FM Stereo, How does the seperate channel audio work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEIEwK8.EL2@netcom.com>
Source record: 89803

In article <344A3CAD.45C4@mwt.net>, Joe Mayenschein <mayen1@mwt.net> wrote:
>I know this isn't really the place to ask this question but I haven't
>found any place better to ask it. So here goes.
>How does A stereo FM transmitter transmit the seperate audio channels.

There are two ways to think about it.

A timewise way to look at the multiplexed signal is that every 1/76000
of a second, an alternate left or right channel is sampled.

```
r
r l r
rl l r
l r rl
r l
l
RLRLRLRLRLRLR
```

Looking at this frequencywise, it breaks down into two components
(after being lowpass filtered). The low frequency component of
the combined signal is the sum of the left and right channels. The
ripple on the top of the envelope of the signal becomes (a cycle for
every two alternate samples of) a carrier (at 38 kHz) modulated (with
signed multiplication) the amplitude difference between the left and
right channels. Another way to call that is Double SideBand modulation.

Added to this signal is a 19 kHz pilot tone to phase the demodulation
so that it can determine left from right.

You can use either alternate sampling, or a summing and differencing
and an analog multiplier to generate the signal. I gather that most
quality equipment uses the seperate analog multiplier scheme, but the
low cost single chip FM multiplexers (and transmitters) used in wireless
CD to radio adapters and wireless microphones from Rohm and New Japan
Radio use the sampling scheme.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 3827. Re: NiCad Cell Voltage????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <62gfgh$hb3$2@news1.teleport.com>
Source record: 89804

In article <62biba$g5r@news.asu.edu>,
jphipps@aztec.asu.edu (JOHN PHIPPS) wrote:
>
>I blush to admit that I do not know the nominal open circuit voltage of a
>fully charged NiCad cell. Can anyone enlighten me?
>
>John Phipps K7BTA

It runs about 1.3 - 1.35 volts immediately after charging, then will drop
to about 1.25 volts over time. While charging at C/10 or greater, the cell
voltage can be as high as 1.5 volts.

Roy Lewallen, W7EL

# 3828. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-20 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcddab$ff29b200$0100005a@wa6vse>
Source record: 89805

Gary Coffman <ke4zv@bellsouth.net> wrote in article
<343e4f54.246977789@news.atl.bellsouth.net>...
> On Mon, 06 Oct 1997 11:32:24 -0500, "William E. Sabin"
>
> >4) The problem lies in the HF CW bands, which are narrow and are often
> >crowded, especially during contests and during DXing activities. There
> >are some who have a certain disdain for these activities, but I couldn't
> >care less about that. For example the 20 meter CW band is only 100 kHz
> >wide, and half of that is occupied by data stations (which is OK).
>
> Carl will probably ping you vigorously about the "HF CW bands" phrase.

Actually, I was going to let him slide on it ... this time <grin>.
But I do take exception with some of his other comments below.

> I know that you mean the portions of the data segments of the HF bands
> where CW has been traditionally used, however, and won't make an
> issue of it. But I will note that we can go narrower with some digital
> modulations and codings than we can with OOK Morse, so if packing
> them in like sardines is what you want, that's the way to do it. But we
> have to lower the data rate down near that of OOK Morse to do so.
> And that's just what VE2IQ and his gang are doing.

And if one wants to be narrow and slow, that's fine ... it doesn't
*have* to be orders of magnitude faster than OOK Morse to be more
efficient in its use of spectrum, though it *can* be (in terms of
bits/sec/Hz, which is the only valid metric of spectral efficiency).

> But there are other ways to multiplex use of scarce spectrum than
> by going narrower. Especially for things like working Dxpeditions
> where speed and number of contacts per hour are important, use of
> relatively high speed digital techniques in an ordered TDMA que is
> much better, and much less chaotic. This does require cooperation,
> however, something often lacking on the HF bands.

This argument, while true, runs into that "If I can't dig it out
by ear, it's not a 'Real Contact'" argument, though, right? I guess
folks like Larry can only be expected to claim that "Only 'Real Hams'
(who, by their standards must beep) can tell what's a 'Real Contact'
and what 'isn't'." (NOT)

> Or, use of SS technique can allow us to share the spectrum in a more
> efficient way while also giving us another tool to deal with severe multipath
> problems. The spreading bandwidth is too small to give us huge coding
> gains at HF, but other attributes of SS still make it attractive as an
> alternative to packing narrowband signals into a slice of spectrum as

> densely as we possibly can. The latter requires an extremely high,
> and very dynamic, degree of operator cooperation, which as noted,
> is often lacking on our HF bands. SS maintains packing density
> automatically by maintaining a flat spectrum across the band, so less
> overt operator cooperation and coordination are required to maximally
> exploit the available spectrum resource.

I still haven't figured out a way to convince some of these guys that
just because a signal is as wide as a band, that doesn't mean that it
precludes the use of the *same* band by others at the same time. There
have been many (to me) clear, concise, and intelligible explanations of
that principle, but many still seem not to be able to "get it."

> >8) The approach that I and others are advocating is to **OPTIMIZE**
> >Morse code usage as a desirable alternative to eliminating it,

You (Sabin) are the only one who keeps harping on the "elimination of
Morse." (in this thread ... other pro-coders toss the same red herring out
in other threads, though, but I've not seen it from a "no-coder")
I've stated many, many times that that is NOT *my* goal, that I would
not support any movement to band the use of Morse, and that I firmly
believe that Morse usage will continue for decades, perhaps "forever,"
even in the absence of forced learning and mandatory testing.

> >for the
> >very precise reason that in the crowded HF CW bands it makes a lot more
> >sense than the wider bandwidth alternatives.

You keep stating that as if it were some sort of "fundamental truth" ...
that is clearly NOT the case ... saying it over and over will not make it
come true (not even if you click your heels together 3 times).

> >If you listen on 20 meters
> >or on the commercial/military frequencies you find that a data station
> >takes up much more spectrum than a CW station. This illustrates the
> >problem very clearly. A high speed data stations completes a message
> >faster, but creates wideband interference. A CW station takes longer but
> >creates less interference.

If the efficiency of the "data system" in bits/sec/Hz were (only) identical
to the OOK Morse system (it is *highly* unlikely that any operational data
system would be so poor, but I'm willing to take that "handicap" for the
moment for the sake of making a point), the "interference potential" would
be identical ... it's a time/bandwidth/data_transfer product as far as
efficient usage of the spectrum is concerned ... the idea that a slower Morse
transmission is somehow "more spectrally efficient" than a faster, but
proportionally wider, digital signal of proportionally shorter duration is
patently bogus. This "dealing from the bottom of the deck" approach to
analysis is one of the primary reasons that I object so strenuously to most
of Sabin's posts.

> The wideband interference is a greater problem, in practice.

Baloney ... see above.

Only for stations "stupid" enough to be "victims" ... Gary's comments vis
a vis "time-sharing" are something that you seem to continually ignore ...
I think it's because you're desperately trying to find a way to "bring
Morse up to date," but the problem I see with that approach is that you
always seems to "assume" that Morse is somehow the "superior" or "preferred"
mode that "must be protected *at_all_costs* from 'all those evil' modes."

> >9) There are those who have examined the bit error rate vs S/N ratios of
> >the various waveforms and have made up their minds, no arguments
> >allowed. Numbers are numbers, right? Wrong! What I am telling you is
> >that this is not good engineering or good science unless it also
> >considers the realities of the *channel* and the *spectrum* that is
> >being used for communication. The *real* experts deal with these
> >realities every day of the week. The simplistic answer is to ignore all
> >of these bothersome details.
>
> Now *this* requires a touch of heat. It would appear that the *real*
> experts have unanimously chosen to discard OOK Morse as a way
> of dealing with these realities. They've looked at *all* the numbers,
> which *do* consider the channel and the aggregate spectrum utilization
> as part of the equation. And those numbers don't favor OOK Morse.
> You're slipping away from that disclaimer you made at the top of the
> post again.

Ditto Gary's paragraph above from me ... Sabin desperately needs to
take his reality medication.

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3829. REQ: Scematics for HAM reciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: "Dr. Cosmo-SYS" <drkosmo@server.iso.net>
Message-ID: <Pine.BSF.3.95q.971021092419.2949C-100000@server.iso.net>
Source record: 89668

Can somone mail (or post ;> ) The scematics for a simple
HAM reciver? i dont have a licensce thingy but i do know morse code.
and you guys on here seem to have fun!
i enjoy the disscusstion and stuff so thank you for keeping this group
alive!
thanks to all of you!
Cosmo
--
"To keep milk from turning sour: Keep it in the cow."

# 3830. Used B&K oscilliscope value ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Michael Melland <badger@vbe.com>
Message-ID: <344CD62B.32D2@vbe.com>
Source record: 89669

Hello All:

What is the value of a B&K 30 MHz, dual trace oscilliscope, model 1479B (1985/86 vintage). In very good working condition and with probes and all manuals....

Tnx de Mike KB9QHU

## 3831. amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Glenn Schultz <glenn@spacestar.net>
Message-ID: <01bcde46$1565c780$a8c0bfce@larry.spacestar.net>
Source record: 89670

OK you radio/amp detectives, here's one for you work on:

I have recently acquired a homebrew amp, that appears to be built as a push-pull circuit. It has a 6CL6 as a driver, with 2 6KD6 sweep tubes as finals. My questions are this: how much power should be used to drive this amp? What would the approx. output be?
Also, there is a plate and load adjustments for both the drive and final. I assume this is to peak the driver tube and then the finals after for max output. This amp has no band-switch, so I don't know what band(s) it will work on, any ideas?

--
Glenn
N0VYK
10X #68391
n0vyk@spacestar.net
glenn@spacestar.net
Check out the N0VYK Antique and Amateur Radio Homepage:
http://www.spacestar.net/users/glenn/index.html

# 3832. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.intel.com>
Message-ID: <344CFAA5.4145@ccm.intel.com>
Source record: 89671

Dennis Erwin Thurlow wrote:
> It barely sounds _human_ at 2205 s/s. Analog is just the opposite!
> Even if I can't understand what's being said, I can recognise _who_
> is speaking.

Who is speaking is a very small piece of information. What is being
said is usually the most important data.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 3833. FS: Heathkit Weather Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Ricky <*kc4kin@geocities.com>
Message-ID: <344CDD97.8A6833B0@geocities.com>
Source record: 89672
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchor,rec.radio.swap,rec.radio.scanner,rec.radio.cb

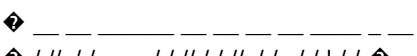
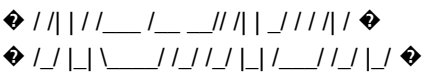
>I have an ID-4001 Weather station that is inoperative. Some of the
LED's
>light up, but
>I can't seem to set the time, etc. on it. It looks great cosmetically.
I
>don't have any sensors
>or documentation on it. I will take offers on it till October 25th and
>let it go to the best
>offer.

I will confirm offers by return email. Send offers to:

*******Current offer is $50.00 plus shipping*******

>kc4kin@geocities.com

>Thanks,
>Ricky

>
> ////////////////////////////////////////////////////////
> 
> 
> Attention: The e-mail address in the header is bogus
> to help prevent SPAM in my mailbox. If you want to
> reply send email to: kc4kin@geocities.com
> Remove the * from the front of the message header
>
> Ricky L. Ponder http://www.geocities.com/~kc4kin
> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

# 3834. Re: Looking for Derry NH Ham Flea Contact Info (NE Flea List on WWW)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIEpLK.2Mr@world.std.com>
Source record: 89673
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <Pine.GSO.3.94.971021000154.17395B-100000@Stratus.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:
> I notice that someone is posting a listing of New England area (somehow
> Montreal gets included) in rec.radio.swap on a regular basis. I've never
> looked in the newsgroup (I found that particular post via dejanews), but
> perhaps someone else posts a similar list for other areas.

It' Steve, W1GSL, coordinator of the MIT Flea, who maintains
and distributes the list. He includes anything within an
un-reasonable drive, for the die-hard collectors/sellers, and
anything of particular interest to him. It also goes out on
the reflectors (barc-list, ne-ham, scan-mass-east & scan-tech;
I'm not sure if it's also on EMA-list or NEDIV-list or not,
it probably ought-to-be) and packet and is archived on WWW; I'll cut
and paste from the Oct.03 edition:

"This list has been posted... as a service of the individual home
page owners, to the following WWW sites.

http://www.berkshire.net/~robbins/flea.html
http://www.connix.com/~wz1v/ne-fleas.html
http://www.mmra.org/~mmra/flealist.htm
http://www.qsl.net/ema-arrl/info/flea.txt +
http://www.qsl.net/vhfnews/ne-fleas.html
http://www.senie.com/arrl/flealist.html
http://www.webss.com/fleas
http://uhavax.hartford.edu/~newsvhf/ne-fleas.html

List is normally updated twice a month - look for the latest version
Be sure to check for the latest version as updating is under the
control of the page owner.

73 Steve F
W1GSL

The Listing for Derry is Londonderry actually, the other side of I-93
from Derry --

8 Nov Londonderry NH IRS @Lions Club $10@7 $2@8
Paul K1LLX 603 432 1538 F+

The other two events near Boston before New Years are

15 Nov Plymouth MA Mayflower RC @Mem Hall $2@9 $14/T@8
Jon WS1K 508 746 0162 F

22 Nov Newton MA WARA/1200RC Auction @Masonic $2@11
Eliot W1MJ 508 664 0773 F+

See the full list for decoding and for outlying regions (NY, Maine, PQ, etc) and farther future (it includes HossTraders dates through the year 2000, which should help others avoid schedule conflicts).

73 de N1VUX
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 3835. Re: REQ: Scematics for HAM reciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <344d0d67.0@newshost.pcug.org.au>
Source record: 89674

mtnclimb@aol.com (MTNCLIMB) wrote:

(much good info on DC receivers snipped)

There's also some good circuits on the Internet. However, some are so pathetically simple they don't work particularly well, but they are at least a starting point. Check my QRP website (URL below) for links to pages with schematic diagrams of DC receivers.

A good DC receiver design is a NE602 detector, 741 AF preamp and LM386 or CD4007 or similar audio amp. A couple of 741s as an audio low pass of band pass filter will be worthwhile. As for the choice of band, I'd go for 80 or 40 metres.

73,

--


Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

# 3836. Re: FM Stereo, How does the seperate channel audio work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <344CED83.1152@boeing.com>
Source record: 89675

I read the original Collins paper on this years ago. The reasoning was all there. To keep it simple, DSBSC was chosen because there were a number of ratio detectors in use at the time. Some of these ratio detectors don't care whether there is AM/FM or what. AM would produce products in the base band. The Collins system was compatible with all existing detector schemes. Some of the competing systems were not always. At least one of which had an FM subcarrier and at least one had an AM subcarrier.
Ralph

# 3837. Re: Crystal or razor blade radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: "John D. Farr" <johnfarr@ro.com>
Message-ID: <62jb8e$2tn$1@news.ro.com>
Source record: 89676

A good place to start is http://www.midnightscience.com/ . GL, John

W. Hodgins wrote in message <344d10fe.3095730@news.sprint.ca>...
>I am looking for a simple circuit description of either a crystal or
>razor blade home made am radio
>Thanks in advance

## 3838. High-power 50 ohm resistor for large dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: aor@gteais.com
Message-ID: <877477872.4300@dejanews.com>
Source record: 89677
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap

Large non-inductive 50 Ohm resistor for large dummy load.

Carborundum 275 watt continuous,
50 Ohm 5%,
non-inductive

12" long, aluminized ends, 1" diameter.

Brand new, never used or placed in-circuit.
Could be used for 1000+ watt air cooled, or,
2000+ watt oil-filled dummy-loads.

A MUST for QRO operators!

$30 dollars + $5 for shipping.

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3839. Re: FM Stereo, How does the seperate channel audio work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Linley F Gumm <Linley.F.Gumm@$$nospam.tek.com>
Message-ID: <62jfhm$nle$1@bvadm.bv.tek.com>
Source record: 89678

YaesuTom wrote:
>
> >Sure, fairly simple. (L+R) comes on the "normal" audio modulation channel.
> >(L-R) comes as a double-sideband modulation on a 38kHz suppressed carrier,
> >and that is simply mixed with the baseband (L+R) signal. There is also a
> >"pilot tone" at 19kHz, so that if you double the 19kHz and get the phase
> >right, you have the carrier that must be re-inserted to demodulate the
> >double-sideband signal. Once you have (L+R) and (L-R), it's easy to add
> >and subtract them to get (L) and (R). So...with this system, a receiver
> >that ignores the dsb (L-R) signal will still get (L+R) in mono.
> >
> Just curious, why do they use a double sideband, suppressed carrier at
> 38khz...why don't they just make it a normal AM (L-R) signal at 38khz? Why
> even need a 19khz pilot then? If it was just a 38khz AM signal it seems like
> it would be less complicated then going through the trouble to generate a
> 19khz pilot, doubling that, AM'ing the 38khz, supressing the 38khz carrier,
> blah, blah....
>
>
When you draw or measure the modulation waveforms of a stereo FM system, you discover that because they used a suppressed carrier, you can sample the composit audio waveform at the correct instant to recover the audio channels. In other words, recovering the audio in each channel does not require using filters to seperate the different components, demodulating them and then combining the results. All that is required is to sample the composit waveform and low pass filter the result. If you review the schematics of most decoders, they make use of this principle.

Another reason to avoid the use of AM subcarrier modulation is that the carrier will use up valuable modulation capability. The FCC or other authority will allow FM stations only so much (75 kHz peak in the U.S.) deviation and the operator wants to use it for his audio signal, not waste it on a subcarrier. The broadcasters rule is loud is better.

Linley Gumm
K7HFD

I do not speak for my employer

# 3840. Re: U.K Supplier CirKIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <344D5239.3D10@popd.ix.netcom.com>
Source record: 89679

Cirkit have an e-mail address: <mailorder@cirkit.co.uk>
They have a catalog they publish once or twice a year, and, yes they
will take your plastic.
Another uk company that has a very good range of bits for the home
brewer, including the full range of murata filters is Bonex, tel +44
175349502, the same applies to them (catalog plastic)
73 Dan AC6AO G3NCR

# 3841. Re: High-power 50 ohm resistor for large dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Bill Smith <bilsmith@crl.com>
Message-ID: <344D550D.1161@crl.com>
Source record: 89680
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap

aor@gteais.com wrote:
>
> Brand new, never used or placed in-circuit.
> Could be used for 1000+ watt air cooled, or,
> 2000+ watt oil-filled dummy-loads.
>
> A MUST for QRO operators!
>
> $30 dollars + $5 for shipping.

What do these cost from distributors? They are still available.

## 3842. Cross reference 7036 vacuum tube?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: bryan@prodistributors.com
Message-ID: <344d0f77.19103853@news.nts-online.net>
Source record: 89681
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Does anyone have a cross reference number for a GE 7036
vacuum tube? Would appreciate any info on this number.

Bryan W5KFT

# 3843. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Tom Van Baak <tvb@veritas.com>
Message-ID: <344D489A.4D6@veritas.com>
Source record: 89682
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Brooke wrote:
>
> I would like to receive the time code from WWVB on 60 kHz (not the
> carrier frequency). Does anyone know of a simple circuit and/or
> chip that outputs the time code?
>
> Thanks,
> Brooke
> N6GCE

Brooke,

An excellent 3 part article by Bob Roehrig on building a
WWVB receiver can be found in the Jan/Feb/Mar issue of '73
magazine.

The old HP 117A VLF receiver has a signal level output that
can be used to decode the subcode. The manual has an example
where a strip chart recorder is used to decode the signal.

See http://www.bldrdoc.gov/timefreq/pubs/sp432/s_appc.htm
for a description of the 60 second WWVB time code format.

See http://gorzarg5.phy.bnl.gov/~scott/radio-clocks.html
for a bibliography of time and frequency radio receivers.

Perhaps the easiest way these days is to extract the raw
subcode from one of the many battery-powered desktop WWVB
radio clocks on the market.

I have been unable to decode the VLF receiver output of
the Oregon Scientific, Brookstone, or Junghans WWVB radio
clocks, but have had great success with the Arcron Zeit.

There are two ICs inside the desktop model of the Zeit:
one is the 60 kHz VLF receiver and the other, hidden
under the LCD, is the uP which decodes the 1 Hz subcode
and drives the display. One of the traces that runs
between the two ICs is the receiver enable and the other
is the 1 Hz subcode output. Logic low (0 V) on this line
corresponds to full WWVB power and logic high (3 V) to
10 dB reduced power.

When the receiver is on and reception is good the 0.2,
0.5, and 0.8 second width bit frames are clearly visible
on the 1 Hz subcode output. This output can be sampled

and decoded by a PC or microcontroller (such as a Basic
Stamp).

At the end of June 1997 I used this technique to observe
how WWVB handled the leap second. In the following log
the date and time are PC local time (PST), "P" indicates
a frame or position marker (0.8 second of 10 dB power
reduction), "1" indicates a binary one (0.5 second power
reduction), and "0" indicates a binary zero (0.2 second
power reduction):

1997-06-30.16:55.P10100101P001000011P000101000P000100010P010101001P011100111P
1997-06-30.16:56.P10100110P001000011P000101000P000100010P010101001P011100111P
1997-06-30.16:57.P10100111P001000011P000101000P000100010P010101001P011100111P
1997-06-30.16:58.P10101000P001000011P000101000P000100010P010101001P011100111P
1997-06-30.16:59.P10101001P001000011P000101000P000100010P010101001P011100111PP
1997-06-30.17:00.P00000000P000000000P000101000P001000101P010101001P011100011P
1997-06-30.17:01.P00000001P000000000P000101000P001000101P010101001P011100011P
1997-06-30.17:02.P00000010P000000000P000101000P001000101P010101001P011100011P
1997-06-30.17:03.P00000011P000000000P000101000P001000101P010101001P011100011P
1997-06-30.17:04.P00000100P000000000P000101000P001000101P010101001P011100011P

Use SP432 to decode the :59 and :00 minute frames:

59 minutes, 23 hours, 181 days, UT1 = -0.5 seconds, year 97,
leap second pending, and DST active.

00 minutes, 00 hours, 182 days, UT1 = +0.5 seconds, year 97,
no leap second pending, and DST active.

/tvb

# 3844. Re: Crystal or razor blade radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Mike <NoSpam@Today.Thanks>
Message-ID: <344D8EB1.4107@Today.Thanks>
Source record: 89683

John D. Farr wrote:
>
> A good place to start is http://www.midnightscience.com/ . GL, John
>
> W. Hodgins wrote in message <344d10fe.3095730@news.sprint.ca>...
> >I am looking for a simple circuit description of either a crystal or
> >razor blade home made am radio
> >Thanks in advance

Well, the next logical step is a regenerative - preferably vacuum tube!
Anybody doing something similar!

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

## 3845. Intelligent Amateur Radio parts list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: kingpop <joe@blow.com>
Message-ID: <344D5EDB.64BCFBD7@blow.com>
Source record: 89684

I was wondering if anyone has a compiled parts list for the radio in Randy L. Henderson's book" Build your own Intelligent Amateur Radio Transceiver". I would also like to hear comments from anyone who is/has

built one.

de N4YFX
Please respond to: kingpop@sanasys.com

## 3846. Trying to build a timer for rocket carring foxmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: n9jxu@aol.com
Message-ID: <19971021001801.UAA26759@ladder01.news.aol.com>
Source record: 89806

73!
I'm trying to build a timer ( possible a 555 type timer ) for a staging system for a model rocket that will carry a foxmitter. My problem is the saftey factor. The switch I'll use will engage when the rocket is moving. But if I drop the rocket before it will set off the timer! What I need is a way to have the timer start after the switch is engaged for a half second or so. Can you help?
Thanks!
John P.
n9jxu@juno.com

# 3847. Re: FM Stereo, How does the seperate channel audio work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <62gv3g$gh3@hpcvsnz.cv.hp.com>
Source record: 89807

YaesuTom (yaesutom@aol.com) wrote:
: Just curious, why do they use a double sideband, suppressed carrier at
: 38khz...why don't they just make it a normal AM (L-R) signal at 38khz? Why
: even need a 19khz pilot then? If it was just a 38khz AM signal it seems like
: it would be less complicated then going through the trouble to generate a
: 19khz pilot, doubling that, AM'ing the 38khz, supressing the 38khz carrier,
: blah, blah....

For one thing, I think it's relatively much easier to make a very low
distortion detector if you inject a carrier, than if you just do an
envelope detection. Note that the carrier in this case is not far
above the bandwidth you want to pass...envelope detectors get tricky.
Also, you don't have a really big 38kHz signal modulating your transmitter
all the time, so you have more of the available FM broadcast bandwidth
available for interesting signals; the 19kHz pilot tone is at only about
8-10% (if memory serves) deviation. Detection is actually pretty easy,
given the pilot tone; it's not nearly so complicated as a synch. AM
or DSB detector where there is no pilot.

--
Cheers,
Tom
tomb@lsid.hp.com

# 3848. Re: Trying to build a timer for rocket carring foxmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971021031801.XAA16128@ladder02.news.aol.com>
Source record: 89808

John,

Howdy, I read you post in the homebrew newsgroup. I think I can help you out. I thought your need for a switch delay would be a nice little challenge, I am a EE student at MSU. Anyhow, I designed a little circuit around a LM-741 op amp that is adjustable to delay a switch from .015 to about 3.5 seconds. It runs off a 9 volt battery, which is the power source I assumed you were using, if it needs to be changed it can be done easily. After the power is applied to the circuit, it delays for the set time the provides an 8.7 volt DC output, with a max current draw of about 200mA. If you need a higher current limit, that can be easily modified as well. Your timer circuit can be hooked up directly to the DC output and will start timing after the delay has passed. Let me know if you need a good timer circuit as well, I know a bunch of good ones, I can draw one of those up to. I would be glad to e-mail you the schematic, it was drawn using Microsim Schematics, ver 8. If you dont have that, I can mail it to you via snail mail. Is your address good on the www.qrz.com book? Anyhow, let me know if you would like it, I'd be more than happy to help.

73's de AA7YQ
Kevin Ames
Bozeman, MT

# 3849. Looking for Derry NH Ham Flea Contact Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcdde3$66815d40$168a92d0@bitnet.bit-net.com>
Source record: 89809
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I understand there is a ham flea scheduled for Nov. 8 in Derry, NH
Anyone have details or a contact number for details and perhaps how to
get a table? Thanks!
--
Who we are depends on Whose we are, DavidC

## 3850. Re: Dentron info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Steve <NOamradioSPAM@thebizlink.com>
Message-ID: <344C6C6B.2890@thebizlink.com>
Source record: 89810

That would be MLA-2500 and 2500A. These ran a pair of 8875. The
GLA-1000 (I think) used a bunch of sweep tubes.

Dentron did make a model ???-1200 but I can't remember what tubes it
used. 8877? I know the model ???-1500 used a single 8877.

Christer Jogenborn wrote:
>
> Did Dentron ever make a 'DLA-1200 model ' and what tubes sits inside it
> ???
>
> I think I have seen DLA-1000 (4xsweeptubes) and DLA-2500 (2x887n)
> in old ham-magz. ads. so far.
>
> 73 Chris SM0NCL

## 3851. WTB-Fillament Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: Nelson <5560@notso.net>
Message-ID: <344CA6F2.66F2@notso.net>
Source record: 89811

Hello to all:
Looking for transformer with the following secondary ratings: 30V@21A
or 15V@42A. for filament supply on homebrew project.
Please contact by e-mail at shiso@ici.net
Thanks. Bruce KD1MW

# 3852. 75A1/270G-1/TS930 for TS-850

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcdee3$5f4f3460$0dddd8cc@km3g.cts.com>
Source record: 89812
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Trade my 75A1 with 270G-1 spkr and TS-930SAT for TS-850SAT. Collins gear needs work and TLC. 930 recently aligned my local engineer. E-mail for details.

Lane
Kilo Mike Three Gulf

# 3853. 75A1/270G-1/TS930SAT for TS850SAT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcdea8$c6fbe440$af9ed8cc@km3g.cts.com>
Source record: 89813
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I just spent 20 minutes writing all the details for this post and lost it by hitting the wrong key. The Collins gear needs work and TLC. About a 7 to an 8. the Knwd 930SAT works perfect and was recently aligned by a local engineer. S/N is ~ 2 mil.

I want to trade the 75A1, 270G-1, and TS-930SAT for a TS-850SAT.

Lane
Kilo Mike Three Gulf

e-mail for the details

# 3854. 75A1/270G-1/TS930SAT for 850SAT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-21 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcdea8$d55ac920$af9ed8cc@km3g.cts.com>
Source record: 89814
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

There is a catch. The 75A1 is a fixer upper. On a scale of 1 to 10 is rates about a 7 to an 8. The audio gain pot does function but also free spins. There is no output from the rcvr other than white noise. It needs cleaned up. The pots are "noisey" as well as the switches. The tuning dials and scales are very very nice. Not tinted yellow but clear. The dial cord works fine. There is minor corrosion on the inside of the rcvr but the chassis is not rusted (looks like really old dust and dirt). No holes drilled to the top, front, or sides of either the 270G-1 spkr or to the 75A1 rcvr. I have the original manual and it is in pristine condx. The rcvr weighs 57 pounds and the spkr weighs 9 pounds minus boxes and packing. The rcvr and spkr would clean up to about a 9 w/o new paint. With new paint they would both look new.

The TS-930SAT works like new. Recently aligned by a San Diego engineer. S/N is in the 2 mil range. Gen. coverage xmit has been enabled for MARS ops. cosmetically the main tuning dial paint has rubbed off.

I would like to trade the Collins and Kenwood gear for a TS-850SAT.

Lane
Kilo Mike Three Gulf
San Diego

# 3855. Re: Crystal or razor blade radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971022013001.VAA09042@ladder01.news.aol.com>
Source record: 89685

>
>I am looking for a simple circuit description of either a crystal or
>razor blade home made am radio
>Thanks in advance

We just did this a couple weeks ago.

W4ZCB

# 3856. Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Marijan.MILetic@ijs.si
Message-ID: <344D68D1.534C@ijs.si>
Source record: 89686

On 17 Oct 1997 23:12:04 GMT Carl R. Stevenson <wa6vse@fast.net> commented:

>> I have a great respect for a longtime work of Bill, W0IYH and frequent
>> comments from Gary, KE4ZV but Carl, WA6VSE seems to be of Internet age!

>Interesting "observation" ... I'm 46, an RF engineer by profession for
>over 25 years, and a licensed ham since 1975 ...

As an RF engineer, you must be aware of a great work Bill, W0IYH did in
editing an excellent book on HF SSB by Collins employees and your initial
comments had a lot of flame. I do beter understand your position on CW now.

>> Our DC-THz tech guru Matjaz, S53MV, professor at Ljubljana University,
>> claims the following educational advantages of CW in hamradio comms:
>>error detection and correction.

>I'm sure that you must agree that modern digital FEC techniques
>can easily outstrip the simple contextual error detection/correction
>afforded by Morse ... in fact, any non-FEC text mode can just as easily
>be checked and corrected in the same contextual manner as Morse ...

I prefer Morse method with a string of dots instead of usual DEL key
when correcting TX errors and deep search of audio memory for poor RX!

>It is not clear to me where the 200bps number for speech came from ...

Pitch rate of normal speech which carries information is in this ballpark!

>Mr. Nyquist would assert that that rate could only handle an upper
>frequency limit of 400 Hz at best ... that would result in pretty crappy
>audio fidelity ...

This is exactly what we achieve with DSP MIPS in speech comms these days!

>> Note: Manchester and 1.2Mb packet networks are implemented in Slovenia!

>Yes, it appears that Slovenia (high-tech power-house that it is)
>has substantially more technically educated and advanced hams than
>the US. But then again, they don't have the ARRL holding them
>back at every turn, either ...

Surprisingly it has per head of population :-) And our S53MV was bored in
USA while on Fulbright scholarship in Boulder, CO! He does AMSAT as well.
The only problem we had with ARRL was that 1.2Mb homebrew packet radio was
not published even in QEX. Curious souls may find it at www.hamradio.si .

73 de Mario, S56A, N1YU.

P.S. I hope the following kind of comments will not appear again as I try to keep this thread light while seriously participating at hfsig@tapr.org!

>I think I am wasting my time. The modern "tiggit twigitts" don't give a
>damn. They have then time, but the better answer is of course, they don"t
>care since they did not earn it! They can not tell you if the weather
>is hot or cold since they do not give a damn.
>Brought to you by the ignorant, plodding jerk that put up this for years!
>Cliff Buttschardt K7RR

# 3857. Re: Looking for Derry NH Ham Flea Contact Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: jjm@shore.net
Message-ID: <344d6f50.16237907@news.shore.net>
Source record: 89687
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Tue, 21 Oct 1997 21:17:00 -0400, Rick Miller <rdmiller@bit-net.com> wrote:

>DavidC wrote:
>>
>> I understand there is a ham flea scheduled for Nov. 8 in Derry, NH
>> Anyone have details or a contact number for details and perhaps how to
>> get a table? Thanks!
>> --
>> Who we are depends on Whose we are, DavidC
>
>
>Hi David,
>
>That's news to me. I'll ask around, but I don't remember hearing of
>that one. I do have the listing of all NE hamfests hung up on the wall
>at work. I'll check and get back to you.

It's a new one on me too.
==========
Jim Martin
USAF 73-93 :)
==========

# 3858. Re: Trying to build a timer for rocket carring foxmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Robert Mansfield <bmansfie@interaccess.com>
Message-ID: <344D7AC6.3EBA42FE@interaccess.com>
Source record: 89688

John
You should get a book on model rockets, the ones that I have build used the separation charge
in the first stage to light the second stage. This is much safer, if the first stage does not start or
you drop it nothing happens. As to time delay the engines come with various amounts built in

N9jxu wrote:

> 73!
> I'm trying to build a timer ( possible a 555 type timer ) for a staging system
> for a model rocket that will carry a foxmitter. My problem is the saftey
> factor. The switch I'll use will engage when the rocket is moving. But if I
> drop the rocket before it will set off the timer! What I need is a way to
> have the timer start after the switch is engaged for a half second or so. Can
> you help?
> Thanks!
> John P.
> n9jxu@juno.com

--
Bob Mansfield "Facts do not cease to exist
Freelance Engineer because they are ignored"
WA8USR Aldous Huxley
s/v Shadow Dancer

# 3859. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcdea2$a9f97f20$0100005a@wa6vse>
Source record: 89689

MTNCLIMB <mtnclimb@aol.com> wrote in article
<19971022024601.WAA17703@ladder02.news.aol.com>...
> I have found these discussions of the efficiency of Morse Code quite
> interesting. I think we should have another table though.

OK ... though I think what you propose below has been covered
innumerable times already.

> Why not do a study
> on Noise(dB) vs Signal Intelligibility,]

Modern digital modes win hands-down ...

> Propagation effects(QSB) vs Signal Intelligibilty,

Modern digital modes win hands-down ...

> and Equipment Cost(Minimum requirements) vs Information rate.

Modern digital modes win hands-down ...

> These are more realitistic concerns, than how fast a message can be
> transmitted or received., especially when using HF.

Why? (Even though Morse loses on the above-listed counts, I am curious
why you think so.)

> I think a good CW
> operator can get a message transmitted faster than Voice and certainly
faster
> than digital data when the band is starting to close during a thunderstorm.

You are welcome to insist on holding that view, but your persistence in
adhering to falsehoods doesn't make them true.

> I
> agree that at VHF, CW is probably inefficient, but there is still no
> comparison at HF when considering the above criteria.

Why is there any difference in "efficiency" between VHF and HF???

> Morse still has its place and always will,

I agree with that one ... some minority of hams will probably always
enjoy Morse and/or cling to its use as "tradition."

> pounding brass is the spirit of Amateur radio,

That is little more than dogma.

> where a HAM is judged on how accurate and precise his fist is

That is sad, but too often true ... technical knowledge and skill
should be the primary metric of accomplishment and "value" in a ham
because it's *supposed* to be a primarily technical/experimental service.

> rather than on how much
> money he can fork out into a super-modern, 15 Mode, techno wonder
> transceiver.

I agree that there is no merit/accomplishment in being just a rice-box
operating appliance operator ... however being able to design and build
something modern, efficient, and technical should be the most highly-valued
skill a ham could possess.

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3860. FW: Class B driver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971022053007Z-5268@whpost.wh.lucent.com>
Source record: 89690

```
>----------
>From: Seth Taylor
>Sent: Monday, October 20, 1997 10:14 PM
>To: 'Ham-BoatAnchors'
>Subject: Class B driver
>
>Looking for a class B driver transformer Stancor A-4761, UTC S-10 or equiv.
>Should be 2:1 or 3:1 single to P-P grids and handle at least 7 watts. Check
>those junque boxes please.
>
>Seth KC2WE
>
```

## 3861. Looking to buy Collins gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcdf79$a0cc1f20$be9fd8cc@km3g.cts.com>
Source record: 89691
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I am looking for S-line gear but will consider anything. Would like to find
a 32S2.

Lane
Kilo Mike Three Gulf

# 3862. Re: Crystal or razor blade radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: fry@optics
Message-ID: <62jkjq$em@hacgate2.hac.com>
Source record: 89692

Come visit my brand new web page on this subject.
http://members.aol.com/stevef88/radioloo.htm

3 different schematics, plus how to make your own homebrew
loop antenna.

-- Steve Fry.

# 3863. Re: WTB: Murata filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <EZm1wYATRcT0EwQt@lfheller.demon.co.uk>
Source record: 89693

In article <62j0u6$1no$1@mack.rt66.com>, John W7ZFB <msix@news.rt66.com>
writes
>Need several Murata CFS455I or CFS455J ceramic filters for homebrew
>receiver project.
>Or source(s) for same.
>Appreciate any hints.
>

Cirkit has the CFS455J: mailorder@cirkit.co.uk

73, Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 3864. Over 1000 Ham related links and growing!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Dale Wentz <dwentz@accessus.net>
Message-ID: <01bcdedb$bc54a800$a32404d0@dragon.mcs.accessus.net>
Source record: 89694
Cross-posted to: rec.ham-radio.packet,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

```
http://users.accessus.net/~dwentz
--
-------------------------------------------------------
73's de KB9JJA
dwentz@accessus.net / kb9jja@amsat.org / kb9jja@qsl.net

Links to over 1000 Ham Radio Sites and growing,
http://users.accessus.net/~dwentz
-------------------------------------------------------
```

# 3865. Re: Cross reference 7036 vacuum tube?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <344DF1D1.66A7@pop.valley.net>
Source record: 89695
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

bryan wrote:
>
>
> Does anyone have a cross reference number for a GE 7036
> vacuum tube? Would appreciate any info on this number.
>
> Bryan W5KFT
Hello, Bryan--
The 7036 appears to be nearly identical to a 5915 heptode, but it (the
7036) is packaged in a taller envelope and according to a Sylvania tube
manual, offers 0.9 W plate dissipation compared to 1.0 W for the 5915A.
A 6BE6 has the same pinout.

73,
Brad AA1IP

# 3866. Re: Nov. 8 Derry NH Ham Flea

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcdf00$fc9d69e0$0e8a92d0@bitnet.bit-net.com>
Source record: 89696
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

http://www.derrynh.com/irs/

The I.R.S. is sponsoring a flea market on Sat, Nov 8 at the
Londonderry Lions Club on Mammoth Rd. (Rte 128) 8am to 1pm.
Club members have first choice of seller tables. If you would
like to reserve a table, or get more info, call Paul, K1LLX at
603-432-1538 or e-mail me at k1llx@juno.com.

> It's a new one on me too.
> ==========
> Jim Martin
> USAF 73-93 :)
> ==========

# 3867. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <62ku22$for@sjx-ixn10.ix.netcom.com>
Source record: 89697
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In <344D489A.4D6@veritas.com> Tom Van Baak <tvb@veritas.com> writes:
>
>Perhaps the easiest way these days is to extract the raw
>subcode from one of the many battery-powered desktop WWVB
>radio clocks on the market.
>
>I have been unable to decode the VLF receiver output of
>the Oregon Scientific, Brookstone, or Junghans WWVB radio
>clocks, but have had great success with the Arcron Zeit.
>

Tom,

For awhile I've been interested in using WWVB's 60KHz carrier as a frequency reference. Do you know if this signal (amplified) is accessible in any of the commercial receivers?

Also, what kind of antennas do they use?

Thanks!

- Jeff, WA6AHL

P.S. Anyone tried making an accurate frequency reference using the 1 PPS pulse from, say, the GARMIN GPS engine?

# 3868. Morse code reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <344E1D36.6729@crpl.cedar-rapids.lib.ia.us>
Source record: 89698

This is a multi-part message in MIME format.

--------------663E24B85158
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

This is a repeat of a former article. I want to repeat it for anyone who might be interested and missed it the first time. My opinions on this subject have not changed.

Bill W0IYH

--------------663E24B85158
Content-Type: text/plain; charset=us-ascii; name="morse.txt"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="morse.txt"

The purpose of this article is to encourage the homebrew experimentation

with methods for improving the reception of weak-signal Morse code on

the Amateur Radio bands. The motivations for this are the following:

1) Morse code, also known as on-off-keying (OOK), irrespective of other

interests in speech modes such as SSB and relatively complex data modes

of numerous types, is still, and is expected to remain, a mode of great

worldwide interest in Amateur Radio.

2) Manual CW operation, using very simple eqipment, both transmit and

receive, especially low power (QRP) equipment, and without computer (PC)

assistance, is easily accessible to individuals of limited technical and

financial means. CW has always been the "common denominator" mode in

Amateur Radio.

3) CW operation is conducted within very narrow bandwidths, which means

that a large number of stations can operate simultaneously within narrow

Amateur sub-bands such as the HF CW bands.

4) There are many operators who enjoy the CW mode, and want to preserve

it, in addition to the more tehnically advanced modes that are now

available.

5) Morse code is a signalling method that can easily be "mapped" from dot-dash symbols to a local language such as English, German, etc. In other words it can be translated mentally by the operator without machine assistance.

From a purely technical standpoint, Morse code has limitations, relative to other "waveforms" such as FSK and a large number of phase-coherent methods. FSK requires two separate frequencies, Mark and Space, usually separated by 170 Hz. This means that conventional FSK usage doubles the band occupancy and requires *two* clear receive frequencies for perfect copy. As an alternate to this, CW mode can be received at slow speed on a *single* frequency in a very narrow bandwidth. And very simple equipment is adequate for this purpose.

In a noise background, FSK is more effective partly because there is always a signal present. CW mode, on the other hand, has to deal with "key up" (no signal) states, in which the absence of signal may imply a fairly high noise level. To the human operator these key-up states are significant information because they "separate" dots and dashes, characters and words. In other words, key-up is at least one bit of information. For example a dot followed by a space (key-up) is a two bit message and a dash is a 4 bit message (A.S. Chester, MIEE, G3CCB, Wireless World, August, 1983). Also, sometimes offsetting some of the advantage of FSK is the fact that *some* CW transmitter designs are capable of 3 dB more long-term peak power at the 50% duty cycle of CW. It is also true that FSK must also distinguish between the signal on one frequency and the noise on another frequency. This is identical to the CW problem that I just mentioned. Still, at a very low signal-to-noise density ratio (S/N0) FSK offers an additional advantage in error rate (Carlson "Communications Systems", 1975).

Phase coherent methods such as PSK, MSK etc. offer much more improvement. The problems with these methods involve A) the complexity

of the equipment and B) the very difficult problem of maintaining phase coherence, especially at HF. This is the realm of truly advanced technology that is not readily accessible to most amateur operators.

In view of these considerations a very desirable goal, from a specifically *Amateur Radio* standpoint, would be an experimental homebrew effort to develop a Morse code CW system that would A) greatly improve CW reception under weak signal and interference conditions and B) permit "interoperability" (buzz word) with CW operators who are *not* equipped with the advanced system, so that *anyone* can copy the CW signal under conditions of adequate signal levels and interference and with moderate code speeds.

How can this be accomplished? There are many approaches that could be considered. One European CW expert reports a German design that works quite well. I do not know how that system works. One basic approach could be to store a number, perhaps 10, of consecutive bits, both key down and key up, and use software decoding of these bits into dots, dashes and the three different space intervals, into alphanumeric on-screen text.

The main exercises are to A) distinguish signal from noise, just as in FSK, and B) to determine dot vs dash and the lengths of the spaces. Part B is more difficult than FSK and requires some special ingenuity, but I am sure it is definitely feasible (do-able).

The approach that I would prefer is as follows (and this is just a first cut):

1) The audio output of a conventional CW receiver is further filtered by a DSP filter with narrow bandwidth and phase linearity (zero group delay). This filter is at 500 Hz and has an adjustable bandwidth down to, say as little as 20 Hz or so.

2) The output of this filter is clocked into a CCD (charge coupled device) or "bucket brigade" with 100 taps (10 taps per bit). The clock rate can be initially set and synchronized manually by the operator, but

the subsequent clock synchronization can be maintained by using the kind of "early/late" synch methods that are used in spread spectrum. The clock should have an "inertia" property that prevents rapid fluctuations. These methods are used in many applications. A follow-on project could be the fully automatic lock-up and synch process (not necessary for starters).

3) A threshold detector distinguishes between ON and OFF. This can be set manually or it can be determined "on-the-fly" by the software, possibly using a preamble of 10 dots. An initial up-front manual adjustment would get things started.

4) Each set of ten taps corresponds to a dot length. Each set is converted to positive-going voltages, and then put through an integrate and dump filter.

5) The collection of ten outputs from the ten integrate and dump filters is then compared with the threshold and 1/0 levels are sent out for processing into text.

6) One important aspect is that 3 contiguous ON states at the outputs of the integrate and dump filters are combined to form a dash or 3 space symbol. This combining is equivalent to an additional filtering process. A method somewhat similar to this is the "Welch method", used in DSP work (Oppenheim and Schafer, 1975).

7) An alternate (possibly better) method would use *parallel* bucket brigades that are set up for A) dot plus space, B) dash plus space, C) 3 spaces and D) 5 space intervals. The exercise is then to process these with some kind of "decision making" software algorithm.

8) The processing could be done with a stand-alone gadget that uses an LCD readout plus a printout capability, or a PC interconnect. For starters, the PC approach would be better.

The final result would be a greatly enhanced capability for Morse code CW that would allow a solid interface with both computerized communication and the human operator who knows how to operate CW. This

end result would be a *compromise* between the relatively inefficient Morse ON/OFF system and the other more efficient but more specialized data methods that demand data processing for the human operator.

One powerful tool that CW operators use is the fast QSK break-in mode. This should most definitely be part of the approach, for it allows error correction. This can be manually operated at first, but later on automated. We don't have to do the whole ball of wax at one time, it can be spread out.

I believe this would be a uniquely valuable enhancement of the Amateur Radio Service for this one special reason: the number one thing about CW is that the Morse code can be read mentally or written without any machine intervention, and for Amateur Radio in particular this is powerful. The enhancement in noise and interference adds additional power.

Bill W0IYH

--------------663E24B85158--

## 3869. Meter for amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: David Hand <dhand@mdi.com>
Message-ID: <344E61EB.BC9@mdi.com>
Source record: 89699

I recently purchased a Sigma XR-3000D amp
with a bad plate meter. Anyone have one?

Dave Hand WB4HYP
dhand@mdi.com

## 3870. Heath IB-101 Freq Counter help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Nicholas Thomas <njt@pixeltech.com>
Message-ID: <344E5F31.3686A6B1@pixeltech.com>
Source record: 89700

--
**********
Nicholas Thomas

PixelTech
PO Box 273
Hampton Falls, NH 03844
(800) 867-2732

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**********

# 3871. Re: SSB Demodulation - need theory info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: hanavin@eecis.udel.edu
Message-ID: <62lvbl$psr$1@ren.eecis.udel.edu>
Source record: 89701

Yep, this it true, the sidband sounds bad because the local
ocillator in the receiver is free running, and not in phase
with the orignal transmitting phase. Under demodulation, this
phase difference gives the donald duck sound. If the transmitting
station would transmit a small pilot carrier, and the reciever
used a synchronous detector it would clear up this problem.

Chuck (W3FJJ)

In article <344E1EE3.22D1@thebizlink.com>,
Steve <amradioSPAMX@thebizlink.com> wrote:
>Actually, the human ear is quite sensitive to phase. This is why, even
>a well tuned SSB signal still sounds unnatural. The phase you refer to
>from the hi-fi circles mostly deals with 180 degree phase shifts.
>Specifically, is the phase of the sound coming out of your hi-fi system
>speakers the same as the orginal or is it inverted or shifted 180
>degrees. In this instance, most listeners cannot tell the difference.
>
>

# 3872. Re: Heath IB-101 Freq Counter help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971022182522.8535E-100000@oso.slonet.org>
Source record: 89702

Try and find a match in the Quad latch catagory such as the 7473. It might be CMos or somthing similar, but with effort you can find a match.

## 3873. help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Bob Gross <RPGross@worldnet.att.net>
Message-ID: <344EB47D.EF089717@worldnet.att.net>
Source record: 89703

Hi, I am trying to repair a regulator board from my generator (ONAN).
On the board is an UJT marked MSU305. I need a replacement. Please send
suggestions (ECG # etc) for a substitute. It is a little TO-92 package.
Thanks much for reading!

Bob Gross KD4LGW

# 3874. Heath IB-101 Freq Counter help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Nicholas Thomas <njt@pixeltech.com>
Message-ID: <344E5F38.A0205F45@pixeltech.com>
Source record: 89704

My HEATH IB-101 Freq Counter (built in 1970) has 3 of 5 buffer-storage ICs
that are fried. The other 2 work fine and output good signals to the readout
when interchanged with the fried ICs. I'm unable to locate a source for
replacement parts and would very much appreciate any suggestions. (I know,
the trash bin is an option but, please, last resort only!)

Heath part number is 443-29. No help, not listed in NTE or SK catalogs. IC
was made for Heath by Fairchild Semiconductor. Think both are out of this
business now. Generic or Manufacturer's part number off parts list in manual
is CuL995979. Also not listed in NTE or SK catalogs. Also not listed in
Fairchild section of Gerber Elect Catalog dated 1987. Only markings on IC are
"F" Fairchild logo, Heath p/n 443-29 and date code 7036.

IC is 16 pin DIP. IC contains 4 flip-flops and a gate. Pin 16 is Vcc, 15 thru
10 are input/outputs, 9 = no connection, 8 = gnd, 7 thru 2 input/outputs and
1 is gate.

Anyone know of possible parts sources? Or cross-reference to another part
number (hopefully to something available now)?

Anyone out there have a junk chassis with these ICs intact? The Heath
IB-1100, IB-1101 and IB-1103 are bigger versions of this Frequency Counter
family with more functions/options and would likely have the same
buffer/storage ICs.

Would love to get this baby running again. It is amazingly accurate in the
audio and low frequency ranges.

Again, thanks for the read & best wishes.

Tom Doubek, AA1CA Packet: AA1CA @ WB1DSW.NH.USA.NOAM
PO Box 392
Hampton NH 03843-0392 Phone: (603) 926-6256

--
**********
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**********

# 3875. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <344E3361.435F@boeing.com>
Source record: 89705

Carl R. Stevenson wrote:
>
> M

Carl
I stated on another thread that, although I am a strong advocate of the preservation of Morse Code, I can see no technical justification for keeping it as an amateur requirement. I know that more than a few third world countries have no better. Also, it is an ITU requirement which is to be revisited. These are polico-socio-economic issues.

Likewise, I believe that arguing that Morse is obsolete is not valid because use of HF is obsolete.

If I had a vote, I would recommend that the existing digital bands be subdivided with Morse and other digital. If the preservation of spectrum argument had any validity, I would say 10% would be adequate.

Listening to the bands, I can say that a more realistic figure would be the bottom 20 kHz (or less) of each HF band. I believe that use of these bands probably should have a code test. I have no feeling on the grades. I think the code should be an endorsement. I think 5 wpm is adequate to allow use. I think conditions and competition on the bands would force a faster code speed.
73
Ralph
AF4EZ

# 3876. Need mods for FT-8000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: darryl.linkow@grinder.com
Message-ID: <8E202BD.01A7002918.uuout@grinder.com>
Source record: 89706

Hello all and thanks for reading this. I need the MARS/CAP mods
for a Yaesu FT-8000R. If anyone has them, will you please Email me
with them? Thanks in advance. 73, Darryl KE6IHA
P.S. Please Email to the following NEW Email address, since my
current Email provider, grinder.com, is discontinuuing Email
service. My NEW address is: Soundmixer@prodigy.net

---
. OLX 2.2 . Please note NEW Email address: Soundmixer@prodigy.net

# 3877. Re: hv transformers/ heavy duty 13.8 volt power su

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: bill.shymanski@mwcs.mb.ca
Message-ID: <8E202D8.025400245C.uuout@mwcs.mb.ca>
Source record: 89707

-> From: Jim <jstrohm@taxes.net>
-> Subject: Re: hv transformers/ heavy duty 13.8 volt power supply Date:
-> Mon, 20 Oct 1997 12:58:12 +0100
-> NNTP-Posting-Host: 222.229.249.54
->
-> > Does anyboby know of a method to determine which winding is bad on
-> a > transformer?
->
-> Uhh, typically we use an ohmmeter.
->
-> You should see essentially infinite resistance to ground from
-> all terminals on the transformer (unless a ground tap is provided), a
-> series resistance on the primary that is consistent with its
-> power rating (a few ohms, typically), and infinite resistance
-> between any primary and any secondary terminal.

For a high-voltage winding, you may want to borrow a megger; insulation that tests good with only a couple of volts from your multimeter may break down under, say, plate voltage. Its an excellent check to do at a flea market, though, as you decide if its worth lugging all that iron home.

->
-> If you're lucky, the primary is the inside winding. Disassemble the
-> core laminations, discard the secondary, and wrap about 20 turns of
-> #18 stranded insulated wire on the primary. Reassemble (not
-> COMPLETELY) and apply primary voltage. This will give an approximate
-> turns/volt rating for the secondary. Now calculate how many turns

It's useful to remember the fundamental equation for transformers, which is V=4.44*f*n*A*B, where V is total volts, f is frequency in cycles/second, n is number of turns, A is the area ( L*W) of the core in square units (inches or metres), and B is the flux density of the core( in webers per square inche or square metre) - many small transformers in my experience have a flux density set around 1 weber/square metre, so it is a good place to start.

When re-winding, it's a good idea to aim for a few percent higher no-load voltage than what you'll need under load - there will be a drop due to the leakage reactance of the transformer, and the resistance of the wires.

-> you need for your desired voltage, and the largest size wire you can
-> use.

The ARRL handbook has some guidelines for wire size - Table 11 of Chapter 35 of my 1991 edition says 700 circular mils per amp is a rule-of-thumb for small transformers. You can get the area by squaring the diameter in thousandths of an inche; so a #12 AWG wire is 80.8 mils diameter, 6530 circular mils area, and would be good for about 9.3 amps. Duty cycle, ambient temperature, and cooling all make a difference.

"Reference Data for Radio Engineers, 5th Edition" has a chapter on designing small power transformers...don't know if this is in the newer editions.

(Hmm...a typical ham shack has a Cantenna around...I wonder if anyone has tried out sinking his plate transformer in a can of transformer oil? Probably the mess and inconvenience aren't worth the extra rating you could then get from the TX.)

-> I've successfully rewound lo-volt secondaries with
-> paralleled windings made from discarded 12 ga insulated electrical
-> wire. If you have the bucks, there is a square enameled wire made
-> specifically for motor and transformer winding, in sizes up to
-> 8/0, I believe (like 5000 amp service).
->
Legend has it that your friendly local motor rewind shops are good sources of small amounts of magnet wire; they have tag-ends of spools which will be too short for a motor rewind. I haven't tried this source myself but it's worth investigating.

-> Have fun!
->
-> N6OTQ

Indeed. I was quite proud of the first small transformer I rewound from a 24 V CT winding to two 18 V CT windings for a dual-voltage power supply - even if it did buzz a bit (never did get all the laminations down tight).

Re-winding transformers is a good way to re-assure yourself that the math really does work.

73,
Bill
VE4STW

bill dot shymanski at mwcs dot mb dot ca - blasted junk mailers!

## 3878. **Comparison: Ramsey SR-1 vs. Homebrew SW**

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <62lo4f$amd$1@rosenews.rose.hp.com>
Source record: 89708

Hello there.

I had earlier posted an article regarding the Ramsey SR-1
shortwave kit.

I had started compiling projects I was interested in using
active mixers and many different unique schemes for ham and
shortwave receivers.

Not having any prior experience with NE602/612 mixers, I
thought it would be interesting to see how the Ramsey kit
performed to give me an idea of the performance simple
direct conversion and superhet circuits I should expect.

After completing the SR-1, I found the sensivitity to
be good, selectivity to be lousy and the stability....
well, let's just say there is no stability. I thought
perhaps I had a bad component, but after much surgery
found the NE602 and the rest of the rf deck to be
fine. I got some great feedback from others who have
built this unit and this is the expected performance
for the SR-1. This unit uses Varactor tuning and I
think one person remarked that they may have stretched
the capabilities of the MVAM108 varactor a bit which
is contributing to the instability.

The SR-1 is a 'superhet' but does it in a way in which
the local oscillator sweeps across a front-end bandpass
of about 2.5 MHz. You can select any 2.5 MHz portion
of 4 to 10 MHz. The IF is 260 Khz, and you'll hear
the same station at the local osc +/-260 Khz which
is annoying. The local osc circuit which is part
of the NE602 appears to 'pull' when listening to
a strong broadcast station which is extrememly annoying,
and the stability really SUCKS! as evidenced by any
off it later.

What I did then was build a receiver using an NE612
and used a idea I found in an article in a magazine
from the early 90's that used two MV209 varactors in
a superhet configuration so that the local oscillator
tracks the front end with an IF of 455 Khz. I got
hold of a Toko ceramic filter to hang of the output
of the NE612 and changed some inductance values a bit
so I could lurk around about the 9 MHz shortwave band.
The usual LM386 completed the audio circuit. Used a

couple of 2N3904 BJT's in an RF amp config to get
the ceramic filter output to a germanium diode AM
detector. Found an AGC circuit and put that in,
I still want to add an S-meter and BFO but I haven't
gotten the BFO to oscillate yet. The difference
in performance in incredible. I have great sensitivity
with about 50 feet of wire, great selectivity between
the SW broadcast stations and it is VERY stable with
the addition of NP0 caps for the oscillator section.

I now have a nice little radio that is about 100 times
better than the Ramsey kit.

I guess the bottom line is, if you don't have the capability,
tools and instruments to design and build your own simple
superhet, the Ramsey will do....especially since beginners
don't ..so the kit does have some redeeming value. Maybe some
kid will decide this stuff is very interesting indeed and
go on to better things.

It certainly was interesting comparing the different
superhet schemes and the resulting difference in performance.

My next project is going to be another Shortwave receiver
using other types of active mixers, possibly mosfets etc..
and expanded band coverage... but first I have to get that
BFO working!!!!

See ya,
Your pal Tony

# 3879. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-22 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcde90$46202560$0100005a@wa6vse>
Source record: 89709

Marijan Mileti} <Marijan.MILetic@ijs.si> wrote in article
<344D68D1.534C@ijs.si>...
> On 17 Oct 1997 23:12:04 GMT Carl R. Stevenson <wa6vse@fast.net> commented:
>
> >I'm sure that you must agree that modern digital FEC techniques
> >can easily outstrip the simple contextual error detection/correction
> >afforded by Morse ... in fact, any non-FEC text mode can just as easily
> >be checked and corrected in the same contextual manner as Morse ...
>
> I prefer Morse method with a string of dots instead of usual DEL key
> when correcting TX errors and deep search of audio memory for poor RX!

I understand that you *prefer* Morse ... however, I didn't ask you
about your emotional or recreational preferences, I asked you a technical
question about the relative performance and spectral efficiency of Morse
vs. modern methods.

> >> Note: Manchester and 1.2Mb packet networks are implemented in Slovenia!
>
> >Yes, it appears that Slovenia (high-tech power-house that it is)
> >has substantially more technically educated and advanced hams than
> >the US. But then again, they don't have the ARRL holding them
> >back at every turn, either ...
>
> Surprisingly it has per head of population :-)

I was not my intention to be insulting to Slovenia o Slovenians in any
way ... I certainly hope you didn't take it that way ... my intent was
to try to prod some of the backward, stagnant majority of American hams
into actually learning something and breaking out of the dark ages ...

> And our S53MV was bored in
> USA while on Fulbright scholarship in Boulder, CO! He does AMSAT as well.
> The only problem we had with ARRL was that 1.2Mb homebrew packet radio was
> not published even in QEX. Curious souls may find it at www.hamradio.si .

Don't expect *real* support for new technology from the ARRL ... they
are too busy keeping things in the dark ages and trying to suppress the
"rebel no-code-test movement" ... 3/4 of US hams are not members and the
newcomers are "not joining en masse" ... soon the ARRL be unable to keep
up the farce that it is a progressive organization that "represents US
hams."

73,

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3880. Re: High-power 50 ohm resistor for large dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <62m6jk$16q@bgtnsc02.worldnet.att.net>
Source record: 89710
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap

On Tue, 21 Oct 1997 18:21:17 -0700, Bill Smith <bilsmith@crl.com>
wrote:

>aor@gteais.com wrote:
>>
>> Brand new, never used or placed in-circuit.
>> Could be used for 1000+ watt air cooled, or,
>> 2000+ watt oil-filled dummy-loads.
>>
>> A MUST for QRO operators!
>>
>> $30 dollars + $5 for shipping.
>
>What do these cost from distributors? They are still available.

They cost $6.32 from the manufacturer in large quantities, according
to the BOM list I have. I have no idea what a fair retail or street
price is, but $30 seems OK in one piece.

If the resistor is not ceramic or glazed, it go bad over time as oil
slowly soaks into it. All resistors are not suitable for use in
oil...beware!

A one foot long resistor is not suitable for VHF or even ten meters
unless you enclose it in a metal tube or trough, that has a
characteristic Zo close to the value of the resistor at the point
opposite the resistor. Think of the resistor as the center conductor,
and the trough as an outer shield.

IDEALLY at the feedpoint end, the Zo should be 50 ohms. At the
center, 25 ohms, and the ground end, zero ohms. Of couse you can fudge
a bit if you don't want to use it at VHF, especially since most of
these long resistors go to heck fast anyway above 100 MHz no matter
what kind of enclosure they are in.

The calatlog says the rated dissipation (steady state) is about 11
watts per cubic inch of resistor area. A six inch long and 1.62 inch
diameter resistor in air is rated at 1000 watts for two minutes, 500
watts for seven minutes, and 100 watts continuous.

73 Tom

# 3881. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcdf57$2db337c0$0100005a@wa6vse>
Source record: 89711

MTNCLIMB <mtnclimb@aol.com> wrote in article
<19971022070601.DAA07175@ladder02.news.aol.com>...
> Carl,
>
> >
> >> Why not do a study
> >> on Noise(dB) vs Signal Intelligibility,]
> >
> >Modern digital modes win hands-down ...
> >
> >> Propagation effects(QSB) vs Signal Intelligibilty,
> >
> >Modern digital modes win hands-down ...
> >
>
> During high QRM and QSB conditions on 40m and attempting to do HF packet,

Enough said (when you said "HF packet" and PK-232 ... the HF packet
mode is NOT, repeat NOT, "a modern digital mode." It is over a decade
old, NEVER worked worth a damn, and was a half-assed abortion when it
was new ... and I believe it's creators know that at the time, but
thought it expedient to "get something on the air to generate interest
in digital modes" ... I believe that was a bad decision that has come
back to haunt amateur digital operations in general because so many
people have gotten such a bad taste in their mouths from the astoundingly
BAD performance of AX.25 packet on HF channels.

> I must say though that I think AMTOR and Pactor are great digital
> modes.

AMTOR is better than packet for the HF channel, Pactor is even better.
Newer modes such as Clover, Pactor II, are better yet. And future modes
yet to be developed and fielded will doubtless be even better. However
OOK Morse will always be stuck with the same disadvantages.

> In this case though, Packet was useless.

"Standard" packet, on HF, has ALWAYS been virtually useless.

> >> and Equipment Cost(Minimum requirements) vs Information rate.
> Using the above thunderstorm situation again as an example, you are telling
me
> that a $2000 packet system that couldn't get a packet through and dropped
the
> link after 10 minutes, wins hands down over a $10 50Watt Keyed oscillator
and

> a $10 Direct Conversion Reciever, which would have been able to accomplish
the
> task? I don't think so.

Care to explain the "2000 packet system??? Last I saw, you could get a
PK232 for a couple of hundred bucks on the used market. You can't charge
$1800 for the radio and computer against "packet operation" ... I'm sure
that you use both for other things.

> Well, I am thinking of Amateur Radio applications. For starters, Amateur
Radio
> is a form of two way communications designed for the transfer of information
> from one Ham to another.

That is true ...

> It was not intended for the upload and download of
> 10Megabyte zip files, that is what the Web and internet are for.

Where in Part 97 does it say that??? Is it really your contention that
ham radio is supposed to be limited to contacts of a purely trivial and
useless nature, such as "cookie-cutter" DX and contest exchanges???

Besides, I have repeatedly made the point (which pro-coders seem
to be completely unable to fathom) that by transmitting data in
short bursts using efficient modulation and coding techniques, it
is practical for large numbers of operators to "timeshare" the
same "channel" ... increasing our efficiency in use of spectrum should
be one of our top priorities and OOK Morse is clearly not the best
way to do that.

> Lets step back from todays world

THERE's the major problem with ham radio today ... too many hams insist
on "stepping back from today's world" ... in other words, they ignore
reality and seem to long for days gone by, resisting progress at every
step of the way ... there's a name for folks who do that ... Luddites.

> take a step back and think about what
> information about another ham you are interested in. QTH, RIG, NAME,
ANTENNA,
> WX, OCCUPATION, etc. I am willing to bet that for nearly 70 % of all Ham
> QSOs, this is the primary concern.

That in itself would indicate that our spectrum is largely wasted ... while
it's certainly OK to get to know someone and just have a chat, there is FAR
more to ham radio that goes FAR beyond the perfunctory "cookie-cutter"
exchange ... all of the *intelligent* hams that I know find such contacts
a boring waste of time ... they'll "rag-chew" on technical topics and other
subjects of some substance, all right, but just to do the "QTH, RIG, NAME,
ANTENNA, WX, OCCUPATION, etc." thing isn't worth their time or the electricity.

> Does it really matter if it takes 5
> minutes, to say "QTH IS BOZEMAN, MT" or .005ms?

Sure it does ... if I can say it on just 1 second, that means that
for the other 4 minutes and 59 seconds that you're wasting the spectrum
on your channel with OOK Morse, many others can be using the channel
that I used because I used mine EFFICIENTLY and you didn't.

> The beauty behind this hobby
> is to sit down and take time to relax and "Chew The Rag" with others who
share
> the same interest. Why does eveything have to revolve around speed?

It revolves around efficient use of spectrum ... all around us all of the
other radio services (except broadcasters, perhaps) are using more and more
spectrally efficient techniques to respond to the huge increase in demand
for spectrum and services ... if we continue to grossly underutilize our
bands, we make a FAR better target for requests that our bands be reallocated
to better uses ... "Hey, those hams are still back in the dark ages, with
Morse code, while we're using (fill in the name of a much more modern, more
efficient technology here) and still need more spectrum to meet demand. How's
about you guys (referring to the FCC) blow them off and give us those bands?
WE will make much more efficient use for them and serve the public far more
than a few old coots using Morse code."

> A message sent via the NTS contains only a 25 word body with a header and
> signature. Does it really need to be sent at 1.5Mbps or is it just fine
> having it sent a 5wpm by a novice CW operator in 15 minutes? That is what I
> am refering to when I say speed is not of major concern in Ham applications.

First, let's admit that the NTS is a freaking dinosaur that serves no real
purpose other than to entertain those who choose to participate.

With that out of the way, yes, it does matter, for the reasons I've outlined
above.

> >> I
> >> agree that at VHF, CW is probably inefficient, but there is still no
> >> comparison at HF when considering the above criteria.
> >
> >Why is there any difference in "efficiency" between VHF and HF???
>
> I am refering to the lack of noise on VHF. Here digital communications are
> much more reliable. Thus increasing the information/time ratio, thus
> increasing its overall efficency compared to HF. On HF , with static
crashes
> and QRM from near by operators, etc, etc, the information/time ratio
decreases
> due to lost packets, etc, thus the overall system efficiency drops. I am
not
> refering to information/bandwidth.

The point that you are missing here is that you are comparing a mode "standard
HF packet," a-la the TNC2 and clones, which I readily admit SUCKS BIG-TIME.
Anyone who claims differently clearly is not in touch with reality.

However, it is easy (and cheap) to implement FAR BETTER modes which can handle those static crashes, selective fading, and QRM. Clover and Pactor II are two modes which are available as "off-the-shelf, plug-and-play" hardware/software. More (and even better) modes will become available.

It's time to recognize that we simply can't afford the luxury of remaining nostalgically in the stone age "just for fun." Besides, many don't find OOK Morse "fun" anyway ... I personally find it boring as hell and haven't felt a single urge to use it in many years (I'm not sure WHY I would feel such an urge, either ... perhaps a masochistic moment???)

> >> pounding brass is the spirit of Amateur radio,
> >
> >That is little more than dogma.

> This is what seperates the Amateur Radio world from that on 11m.

NO, that would be the fact that Amateur Radio is *supposed* to be primarily a technical/experimental service with public service aspects. CBers aren't/weren't permitted to legally tinker or build their rigs, or even to adjust them, unless the CBer held a Commercial Radio Telephone license of 1st or 2nd class. It has always been the technical side of things that has separated hams from CBers. As a "lid filter," Morse has failed MISERABLY ... just listen to the horse's asses on 75m and 20m and you should be able to see that ... they are ALL code-tested.

> >> where a HAM is judged on how accurate and precise his fist is
> >
> >That is sad, but too often true ... technical knowledge and skill
> >should be the primary metric of accomplishment and "value" in a ham
> >because it's *supposed* to be a primarily technical/experimental service.
> >
> >
>
> I agree that this is primarily an experimental service, and it is the best
way
> to experiment with radio for anyone who has an interest. But there is a
> certain beauty in striving to improve a skill that pertains to our hobby. A
> good solid fist is the sign of many hours of dedication towards improving
ones
> own personal skill but also their overall effeectiveness to the service of
> others. That is admirable. Basically it is a sign of character, the type o
> character which is quickly diminishing from todays world.

Pardon me, but "character, my ass" ... As a "lid filter," Morse has failed and continues to fail MISERABLY ... just listen to the horse's asses on 75m and 20m and you should be able to see that ... they are ALL code-tested.

Besides, FCC licensing should NOT be intended as some sort of "personality filter" or even a "test of one's dedication to the protestant work-ethic." The spectrum belongs to ALL of the public and the FCC only administers it for the public good. While it is necessary to test for sufficient technical

knowledge and knowledge of rules and regulations to prevent safety hazards and to assure that the applicant at least knows the rules and limits (nothing can, a priori, guarantee compliance or "good behavior"), that is really the limit of what are justifiable barriers to entry and participation. Having skill in OOK Morse does not contribute 10-cent's worth of value to the process any more ... at one point, it was necessary, but today it has long since outlived any utility it used to have. (the testing, that is, you are certainly free to use the mode for recreational purposes, if you wish).

> >> rather than on how much
> >> money he can fork out into a super-modern, 15 Mode, techno wonder
> >> transceiver.
> >
> >I agree that there is no merit/accomplishment in being just a rice-box
> >operating appliance operator ... however being able to design and build
> >something modern, efficient, and technical should be the most highly-valued
> >skill a ham could possess.
> >
> >
>
> You are right on here! In addition to code, I think the other spirit of the
> hobby is RF Design and experimentation. This hobby provides a wonderful
> education, every time I start a new design or get on the air I learn
something
> new, and that is an invaluable aspect of this hobby.
>
> I think we agree on a lot of things, I just disagree with you when you state
> that Bringing amateur Radio into the twenty first century means getting rid
of
> CW.

That is NOT what I've said ... none of us (except the occasional pro-code radical who tosses out a red herring) is talking about "getting rid of Morse." None of us have proposed, in fact virtually everyone has said they would not support, any move to ban Morse usage or reduce the amount of spectrum available to Morse usage in any way ... in fact, many of us support the establishment of small (say 25 kHz) Morse ONLY sub-bands at the bottom of the HF bands, where none now exist (the only Morse ONLY sub-bands are at 6m and 2m, where Morse testing is not required, which shows how "important" Morse testing actually is (not))

> That is the foundation that this hoby was built on. It would be like
> living here in the U.S. and never taking time out to think of the
forefathers
> fighting the Revolutionary War to win our independece from England.

But nobody *forces* you to sit back and reflect on that on the 4th of July or any other day.

> A tree
> growing larger and larger, without holding on to your roots, more than often
> leads to a tree that is lying on the ground dead.

And if the tree doesn't branch out and spread its roots, it will also die.
Trees don't rely on a *single* root, they put out many.

> If we get rid of the code
> requirements in Amateur Radio, soon we will get rid of the licensing
> requirements, then what have you got?

That is absurd ... as pointed out above, there will ALWAYS be a requirement for testing on theory and rules/regs ... many of us feel that the theory tests could be improved a great deal. We are NOT "trying to turn ham radio into another CB" as many pro-code radicals keep insisting. That is just FUD (Fear, Uncertainty, and Doubt) tactics ... another red herring. Don't buy into that garbage, please.

> There was a time when people had to
> get a license to operate a CB radio.

Right, but all you had to do was fill in your name, address, etc. on the form, sign it, and mail it in. There NEVER was ANY sort of *test*.

> They threw that out and what happened to it?

The FCC lost control of 11m long before they discarded licensing for CB ... licensing never had a thing to do with it.

> Do you honestly want to see the Ham Bands turn into that

Of course not ... but I don't want to see ham radio die completely, either, and that WILL happen if we don't make big strides in catching up with the rest of the world ... we USED to lead in radio technology, now we're (over all) at least 20-30 years behind.

> (although
> listing to some of the conversations on 3950kHz, I sometimes wonder if it
> hasn't happened already). CW is one of the founding roots separating us from
> the CB world, lets keep it that way.

Read what you just said about the "decline" ... those are ALL code-tested operators. Code hasn't kept them out ... but it has discouraged many who could have contributed GREATLY ... I've worked with hundreds over the past 25 years in the RF industry who would have made great hams and could have done a lot for the service ... but found ham radio so backward and cranky that they decided to spend their time in other technical hobbies like computers,
radio-controlled planes, etc.

Please consider my points with an open mind ... I realize that the code is "tradition" ... but in this case a change is LONG overdue if we are to survive in the long-term.

73,

--
Carl - wa6vse
wa6vse@fast.net

NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 3882. Re: Heathkit Warrior Linear Schmatics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <3454b41d.8603931@news.gate.net>
Source record: 89712

On Mon, 06 Oct 1997 00:14:49 -0500, Scott <szastoup@prairie.nodak.edu>
wrote:

>Could someone point me the way to the schematics for the Heathkit
>Warrior HA-10 liner amplifier. The high voltage supply went out of the
>one our club has and looking at the possibility of modification. Thank
>and 73's for reading this
>
>Scott
>ARS KB�KFX
What kind of modification are looking into. The plate supply is
derived from a 3300 VAC CT secondary into a mercury vapor full wave
center tap rectifier. The choke is in the center tap lead to ground
to eliminate the need for high voltage insultaion of the core. The
choke should measure about 60 Ohms. If you need a new transformer,
Peter W Dahl makes a replacement for it.

regards
James
WA4BZJ

# 3883. Re: Looking For Good Schmatic For a CB linaer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <3451ada1.6943043@news.gate.net>
Source record: 89713

On Wed, 15 Oct 1997 13:09:22 -0700, Cecil Moore
<Cecil_A_Moore@ccm.intel.com> wrote:

>wdr@world.std.com wrote:
>> Why is everyone (well at least two on this thread) assuming the CB'er
>> looking for an illicit amp is going to use it with AM?
>
>What percentage of CBers use SSB? Just going by the odds.
>--
>73, Cecil, W6RCA, OOTC (not speaking for my employer)

Have ever listened to frequencies above channel 40 and below 28 MHz.
???????

alot more than you would think!

Regards
James

WA4BZJ

# 3884. Re: Analogue and RF design.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <3452afd1.7503409@news.gate.net>
Source record: 89714

On Fri, 17 Oct 1997 15:23:30 +0100, Atul <andrew@global.internet>
wrote:

>Is there a news group dedicated to analogue/RF design ?
>
>Has anyone come across any practical/reference material
>for designing RF amplifiers or analogue design in general.
>
>My background is primarily digital and would like to learn
>more about the analogue/RF side.
>
>Do people actually use the different y,z, scattering parameters
>for designing analogue amplifiers, oscillators, modulators etc ?
>
>Anyone know of any freeware smith charts for speedy calculations ?

From the Oak archives you can obtain MIMP. Motorola Impedance Match
program. It runs on DOS, but is a good tool to match transistors with
known impedances. Works very well and aloows many types of matching
components and arrangements. The third screen is a Smith Chart and
you can move the elements around onthe chart. I have used it and have
had good results.

>
>Anyone know of any good books for analogue/RF design - which are
>more practical based rather than theory ?
>
>Appreciate your help.
>
>atul.
Regards
James

WA4BZJ

# 3885. Re: Heath IB-101 Freq Counter help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971023000740.9435A-100000@Ocean.CAM.ORG>
Source record: 89715

It's nice to see such detail when asking for a subsitute. If more people took the time to figure out some of the details, getting answers might be easier.

My first guess, automatically since it was common back then, was the 7475. But that can't be, because the pinouts are not right.

I did some looking, and that part number doesn't show up in an HEP replacement guide from about 1974. For what it's worth, it doesn't show up in a Radio Shack replacement guide, but I was't really expecting that.

I couldn't find other 4-bit latches besides 7475's and 74175's in the old data books that I have, though there is one or two that I can't get to easily.

I'm fairly certain it's a ttl part, and I'm quite certain it is not CMOS. It is too early (I have a review in front of me for it, in the April 1971 issue of Popular Electronics) for CMOS to be in common use.

The 74175 does seem like a good guess. From the GIICM, here's the pinout:

74175
4-bit D flip-flop with complementary outputs and reset.

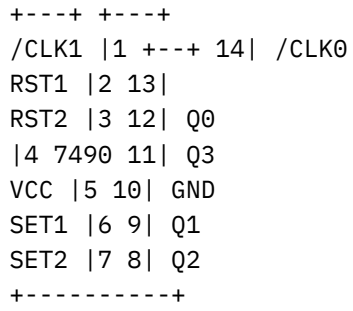
```
+---+ +---+ +----+---+---+---+---+
/RST |1 +--+ 16| VCC |/RST|CLK| D I Q |/Q |
Q1 |2 15| Q4 +====+===+===+===+===+
/Q1 |3 14| /Q4 | 0 | X | X I 0 | 1 |
D1 |4 74 13| D4 | 1 | / | 0 I 0 | 1 |
D2 |5 175 12| D3 | 1 | / | 1 I 1 | 0 |
/Q2 |6 11| /Q3 | 1 |!/ | X I - | - |
Q2 |7 10| Q3 +----+---+---+---+---+
GND |8 9| CLK
+----------+
```

What doesn't seem to fit is your comments about pins 1 and 9. Is that information from the "How it works" section, which perhaps is in error, or the schematic itself?

I would guess that the digit counters were 7490's (though nothing I can put my hands on gives such detail), because they were common. Looking at the picture in the review, it does look like the counter is a 14 pin device, like the 7490.

7490
4-bit asynchronous decade counter with /2 and /5 sections, set(9) and

reset.




That might help you see if the 74175 is a match, remembering that the bits from the 7490 might not go to the pins with the same label, since it doesn't matter and board layout might be a concern.

Michael VE2BVW

On Wed, 22 Oct 1997, Nicholas Thomas wrote:

> My HEATH IB-101 Freq Counter (built in 1970) has 3 of 5 buffer-storage
> ICs
> that are fried. The other 2 work fine and output good signals to the
> readout
> when interchanged with the fried ICs. I'm unable to locate a source for
> replacement parts and would very much appreciate any suggestions. (I
> know,
> the trash bin is an option but, please, last resort only!)
>
> Heath part number is 443-29. No help, not listed in NTE or SK catalogs.
> IC
> was made for Heath by Fairchild Semiconductor. Think both are out of
> this
> business now. Generic or Manufacturer's part number off parts list in
> manual
> is CuL995979. Also not listed in NTE or SK catalogs. Also not listed in
> Fairchild section of Gerber Elect Catalog dated 1987. Only markings on
> IC are
> "F" Fairchild logo, Heath p/n 443-29 and date code 7036.
>
> IC is 16 pin DIP. IC contains 4 flip-flops and a gate. Pin 16 is Vcc, 15
> thru
> 10 are input/outputs, 9 = no connection, 8 = gnd, 7 thru 2 input/outputs
> and
> 1 is gate.
>
> Anyone know of possible parts sources? Or cross-reference to another
> part
> number (hopefully to something available now)?
>
> Anyone out there have a junk chassis with these ICs intact? The Heath
> IB-1100, IB-1101 and IB-1103 are bigger versions of this Frequency

> Counter
> family with more functions/options and would likely have the same
> buffer/storage ICs.
>
> Would love to get this baby running again. It is amazingly accurate in
> the
> audio and low frequency ranges.
>
> Again, thanks for the read & best wishes.
>
> Tom Doubek, AA1CA Packet: AA1CA @ WB1DSW.NH.USA.NOAM
> PO Box 392
> Hampton NH 03843-0392 Phone: (603) 926-6256
>
> --
> **********
> Nicholas Thomas
>
> PixelTech
> PO Box 273
> Hampton Falls, NH 03844
> (800) 867-2732
>
> * Web site hosting, design and maintenance
> * Co-located Web servers
> * Dedicated Web servers
>
> http://www.pixeltech.com/
>
> **********
>
>
>
>

# 3886. Re: Tube substitution in Swan finals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <344fac28.6566171@news.gate.net>
Source record: 89716
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Sun, 05 Oct 1997 06:57:00 GMT, la8ak@online.nospam.no (J M Noeding)
wrote:

>On Tue, 30 Sep 1997 08:19:24 -0400, Steve Robertson
><stephen.h.robertson@cpmx.saic.com.xxx> wrote:
>
>>Ken McCoy wrote:
>>>
>>> Pardon the cross-posting. I am having some trouble while transmitting
>>> on my vintage Swan 400 (all tube). It seems to arc once the tubes in
>>> transmit circuit heat up; the lack of visual evidence around sockets
>>> and solid state components leads me to believe it is in a tube
>>> somewhere. I have tested and replaced all tubes except the finals,
>>> since the setting instructions are confusing to me, calling for an
>>> external ampmeter to further adjust the bias to 55 ma (even though the
>>> adjustment knob only goes to 50 ma)...
>>>
>>> Anyway, the real reason for my post is that the tubes currently in the
>>> final amplifier stage are 6146. The schematics and manual call for
>>> 6HF5. The compatibility of these separate types is unknown to me; the
>>> settings on my Heathkit TT1 tube tester differ greatly.
>>>
>>> Does anyone know whether these tube types are compatible, or should I
>>> consider trying to acquire the original tube type called for in the
>>> manual? I don't *think* there has been any modification to the
>>> circuitry.
>>>
>>> Please reply here or email me directly at kmccoy@stetson.edu
>>>
>>> Thanks much,
>>>
>>> Ken KF4BQF
>>
>>YIKES!! No wonder you are having problems! The 6146 is a "real"
>>tranmitting tube, while the 6HF5 is a color television sweep tube. The
>>6146 was made to go all day and night without complaining at medium
>>power (about 180 watts CW input for a pair). Sweep tubes, however, are
>>great for *INTERMITTANT* service at high power. Doing a replacement
>>without circuit changes is really asking for trouble. The power supply
>>for the Swan probably delivers voltage too high for the 6146 and that is
>>causing the problem.
>>
>>Get the tubes that are supposed to be in there. (I don't know offhand if

>>the tube pinouts are the same, so be real sure that no mods were made to
>>the set before replacing the tubes). BTW, they won't be cheap!
>>
>>73 de Steve, KE4OH
>>--
>>To get my real e-mail address, remove the characters ".xxx" at the end
>>of my address.
>
>another problem using 6146 type instead of sweeptubes is
>6146 type never live 18-20 years with heater voltage on. 6146 sicken
>and emission decreases when not operated, while the sweep tube does
>not have such problems. The 6146B may not last 5 years, while many
>sweep tubes may still work after 20 years.
>Jan-Martin N�ding,LA8AK@online.no
>Collecting WW2 comm.equipment, VHF/UHF/SHF operation/experiments
>
Most sweep tubes that I have always used in my Drake fail to last
more than 2 or three years. I converted the 6JB6's in my T4XB and
have had them in there for more than 2 years and no loss in power out.

Regards
James

WA4BZJ

# 3887. Re: SSB Demodulation - need theory info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <344EEE27.123A@crpl.cedar-rapids.lib.ia.us>
Source record: 89717

William E. Sabin wrote:
>
> MTNCLIMB wrote:
> >
> , and everyone I read or look at
> > says nothing about the fact that the carrier of the received signal is
> > surpressed, thus the L.O. and B.F.O. have no way to stay in phase with the
> > Side band of the transmitting signal.

>
> One of the neat things about SSB is that the receiver does not need to
> be phaselocked with the incoming signal. In fact the two can have a
> small frequency offset (0 to 50 Hz). For speech this is acceptable. For
> music it is not very good, which is why SSB, without phaselock, is
> primarily a "speech" mode.
>
> There are some systems that transmit a small pilot carrier that the
> receiver can phaselock to, which then makes SSB a good mode for music. A
> few shortwave broadcast stations and also some mobile speech-comm
> systems use this pilot carrier concept.
>
> Another mode is double-sideband-suppressed-carrier (DSBSC). This
> definitely requires phaselock to the missing (suppressed) carrier. A
> circuit called the "Costas loop" looks at the sidebands and reconstructs
> the missing carrier and phaselocks the signal to it. This mode requires
> not only phaselock, but close to zero phase difference. An integrating
> (Type II) PLL is needed for this.
>
> There are a large number of books that give a mathematical treatment of
> SSB and DSBSC.
>
> Bill W0IYH

# 3888. Re: specs used in ordering crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <3455b5d7.9045246@news.gate.net>
Source record: 89718

On Tue, 07 Oct 1997 17:35:21 GMT, la8ak@online.nospam.no (J M Noeding) wrote:

>On Mon, 06 Oct 1997 18:26:42 -0400,
>frederick.mckenzie-1@kmail.ksc.nasa.gov (Fred McKenzie) wrote:
>
>>In article <mugshot77-ya02408000R0510970656200001@snews.zippo.com>,
>>mugshot77@mail.geocities.com (I. I. "Crash" Knorr) wrote:
>>> I would like to order a crystal for use with one of those 1-watt
>>> CW QRP kits (which I also haven't ordered yet). Looking at the
>>> JAN Crystals catalog, I see that they require you to specify
>>> load capacitance and series or parallel resonance in your order.
>>> Is there a standard all-weather response to these two specifications?
>>
>>I. I.-
>>
>>If the crystal can be tuned across several KHz, it is probably operating
>>in parallel resonance mode. It might have a varicap diode
>>(voltage-variable capacitor) or a real variable capacitor, to effect its
>>frequency change.
>>
>>If this is the case, then exact frequency and load capacitance may not be
>>critical. In other words, you may be able to use the cheapest crystal
>>available. You might specify something like parallel resonance, 24pf load
>>capacitance, 0.01% tolerance.
>>
>>If this isn't the case, and the crystal operates on a single, precise
>>frequency, then all bets are off.
>>
>>I think you can get what you want if you talk to someone at the crystal
>>factory. In years past, I've ordered from Sentry and International, and
>>the people taking the orders knew what I wanted better than I did! They
>>may already be familiar with that specific QRP Kit's requirements.
>>
>>73, Fred, K4DII
> For most amateur constructed circuits an xtal below 20MHz is paralell
>mode, and above 20MHz is overtone mode (series resonnance).
>Parallell mode xtals will tune the correct frequency with a certain
>load capacitance, somebody claim that 30pF is normal, other believe
>25 pF to be normal. Old Kenwood sets (TR-2200) need 40pF xtal
>specifications to operate on correct frequency.
>Drake and Collins rigs and other uses fundamental series mode xtals on
>all HF ranges.
>Normal is a specification of zero pF, but again somebody mixes up the

>30pF loading capacitance to be valid for either series and parallell
>resonnance. This is a bad problem, I have seen many German circuits
>where the authors thinks it is normal to have 30pF loaded overtone
>xtal, in my opinion it is a strange practice. Commercial rigs has a
>rather varied practice, and the best idea is to send a copy of the
>circuit diagram to the xtal manufacturer when ordering xtals

Yes it is wise to send a copy of theschematic to the vendor. This
will tell him what kind of oscillator circuit is being used. If I
remember correctly a Pierce oscillator requires the crystal to be in
series resonance mode. All others require anti-resonce mode,
parallel, and require a load capacitance.
>72
>---
>remove the "spam" : Jan-Martin N&#65533;ding,LA8AK@online.no
>
>

A crystal operates between two frequencies. Series resonance and
parallel resonance or anti resonance. The frequency determined is
dependant on the load capacitance and cut of the blank istself. A
specified crystal may or may not need a load capacitance. That will
depend mostly on the type of oscillator being designed. The load
capacitance is the circuit capacitance at which the desired frequency
is obtained. Frequency pulling or warpping is done by deviating from
the desired load capacitance. This can be done by introducing a
reactance in series or parallel to the crystal to move it from a set
frequency. Fundamental crystals, ie operation on their fundamental
mode, are usally below 20 to 30 MHz. Overtone crystals wil operate
at odd multiples of the fundamental frequency, ie 3rd, 5th, 7th
overtones.

Regards
James
WA4BZJ

# 3889. Re: Good plans for antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcdfe0$dc140860$0a8a92d0@bitnet.bit-net.com>
Source record: 89719

Have you tried the ARRL Handbook, or ARRL Antenna Handbook?
Good stuff there. DavidC AA1FA

> Hello
> I am looking for anyone who can provide me with good plans for an
> antenna tuner. Any suggestions would be greatly appreceiated.
> Dan
> KC7YEE

## 3890. Formulas in BASIC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: Ted Kester <tk1932ga@atl.bellsouth.net>
Message-ID: <344F9EA1.79FF@atl.bellsouth.net>
Source record: 89720

In a past posting, reference was made to a group of formulae that was said to be an outstanding example of BASIC programming as well as useful programs. Can someone direct me to a site or provide a url for this set of programs.

Thanks

Ted in Atlanta

# 3891. Wanted TR7 6KHZ Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: Jeff James <jeffjames@carroll.com>
Message-ID: <EIIJDt.HAv@nonexistent.com>
Source record: 89721

Hello all,
Looking for an AM filter for a Drake TR7 model #7024, Drake part
#SL6000..Also interested in excellent cond. accessories for the TR7
line..
Thanks,
73
Jeff James KC2BGK

# 3892. TUBE BUYERS~~~~>BEWARE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: blues4uw76@aol.com
Message-ID: <19971023173801.NAA03400@ladder02.news.aol.com>
Source record: 89722

TUBE BUYERS BEWARE!
I bought tubes from Kevin Harlan at EMODUS (kevin@emodus.com), and three fourths of the tubes tested BAD when I received them. No offers were made by Kevin to correct this situation. Only send this place money if you want to be scammed and ripped off.

# 3893. Re: high voltage power transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <62o0p9$i3p@hpcvsnz.cv.hp.com>
Source record: 89723

Jim Potter (jnpotter@prodigy.net) wrote:
: wk@killspam.frc.niwa.cri.nz (Wilbert Knol) wrote:

: >On 15 Oct 1997 02:50:13 GMT, Norman Hockler <norsan@bright.net> wrote:
..
: >>So use a half wave rectifier........
: >
..
: >You still wind up with the peak value in your caps.
: >
: >And 50 Hz (60 Hz) hum.

: And dc current in your secondary, forwhich the transformer is not
: designed.

Yep, and specifically, that can cause the core to go into saturation.
Someone once tried to tell me that if the core on a transformer doesn't
saturate with no load on the secondary (power applied to primary),
putting a secondary load on it will only decrease the core flux and
take it further from saturation. I believe that is correct, but only
for loads which are balanced (no DC). I promptly did a test, and
sure enough, it was easy to saturate the core with a half-wave
rectifier load. Generally high on the list of bad things to do to
big power transformers. (Note: this can happen if one diode of your
full wave rectifier (either center-tapped or bridge) opens. It may
be fortunate that usually solid state diodes short and make the problem
obvious, though I have seen them open too.)

--
Cheers,
Tom
tomb@lsid.hp.com

# 3894. RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: Gabe Nemeth <gabe@nortel.ca>
Message-ID: <344F931A.23B8@nortel.ca>
Source record: 89724
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have seen lots of usefull atricles and circuits referencing
the Radio Society of Great Britian (RSGB) manual. I would
like to purchase one.

The catch is that I live in Toronto,Ontario,Canada. Does anyone
know of a local place ( <= 500 miles) that I can order one, or do
I have to order one from over the pond?

Cheers, Gabe. (hope it is lighter than the ARRL manual)
VE3SLJ.

# 3895. Re: specs used in ordering crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <344fb96c.2791233@news.online.no>
Source record: 89725

On Thu, 23 Oct 1997 02:43:58 GMT, jdaggett@gate.net wrote:

>On Tue, 07 Oct 1997 17:35:21 GMT, la8ak@online.nospam.no (J M Noeding)
>wrote:
>
>>On Mon, 06 Oct 1997 18:26:42 -0400,
>>frederick.mckenzie-1@kmail.ksc.nasa.gov (Fred McKenzie) wrote:
>>
>>>In article <mugshot77-ya02408000R0510970656200001@snews.zippo.com>,
>>>mugshot77@mail.geocities.com (I. I. "Crash" Knorr) wrote:
>>>> I would like to order a crystal for use with one of those 1-watt
>>>> CW QRP kits (which I also haven't ordered yet). Looking at the
>>>> JAN Crystals catalog, I see that they require you to specify
>>>> load capacitance and series or parallel resonance in your order.
>>>> Is there a standard all-weather response to these two specifications?
>>>
>>>I. I.-
>>>
>>>If the crystal can be tuned across several KHz, it is probably operating
>>>in parallel resonance mode. It might have a varicap diode
>>>(voltage-variable capacitor) or a real variable capacitor, to effect its
>>>frequency change.
>>>
>>>If this is the case, then exact frequency and load capacitance may not be
>>>critical. In other words, you may be able to use the cheapest crystal
>>>available. You might specify something like parallel resonance, 24pf load
>>>capacitance, 0.01% tolerance.
>>>
>>>If this isn't the case, and the crystal operates on a single, precise
>>>frequency, then all bets are off.
>>>
>>>I think you can get what you want if you talk to someone at the crystal
>>>factory. In years past, I've ordered from Sentry and International, and
>>>the people taking the orders knew what I wanted better than I did! They
>>>may already be familiar with that specific QRP Kit's requirements.
>>>
>>>73, Fred, K4DII
>> For most amateur constructed circuits an xtal below 20MHz is paralell
>>mode, and above 20MHz is overtone mode (series resonnance).
>>Parallell mode xtals will tune the correct frequency with a certain
>>load capacitance, somebody claim that 30pF is normal, other believe
>>25 pF to be normal. Old Kenwood sets (TR-2200) need 40pF xtal
>>specifications to operate on correct frequency.
>>Drake and Collins rigs and other uses fundamental series mode xtals on

>>all HF ranges.
>>Normal is a specification of zero pF, but again somebody mixes up the
>>30pF loading capacitance to be valid for either series and parallell
>>resonnance. This is a bad problem, I have seen many German circuits
>>where the authors thinks it is normal to have 30pF loaded overtone
>>xtal, in my opinion it is a strange practice. Commercial rigs has a
>>rather varied practice, and the best idea is to send a copy of the
>>circuit diagram to the xtal manufacturer when ordering xtals
>
>Yes it is wise to send a copy of theschematic to the vendor. This
>will tell him what kind of oscillator circuit is being used. If I
>remember correctly a Pierce oscillator requires the crystal to be in
>series resonance mode. All others require anti-resonce mode,
>parallel, and require a load capacitance.
>>72
Isn't the Pierce, the circuit having an xtal between screen and
control grid.....
it is 180 degree phase shift between the ends of xtal and it must be
parallell ressonnance. If a series res. xtals works better for
something nearer to the correct frequency it is perhaps because of
incorrect specified parallell loading capacity?
What is loading capacity for 27MHz xtals? I have used them on 5th
overtone (for 2m RX applications) and- even on 9th overtone on 81MHz

73 Jan-Martin

---
Email: LA8AK at online dot no

# 3896. Re: Wanted: High Current transformer for homebrew 12 volt supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: aor@gteais.com
Message-ID: <877640547.17133@dejanews.com>
Source record: 89726

Brigar Electronics 607-723-3111 has a power transformer which
delivers 16 volts at 25 amps. Part number DL-16-25 for $49.95.

Another transformer is 12volts at 24 amps. #DL-24-12 for $25.95.

The first transformer will be closer to your goal, although,
the unfiltered no-load voltage is higher. I am assuming
that you are building a linear power supply, classic textbook.

Be sure to provide enough power transistors (ie 3771, 3772),
heat sink, and a cooling fan.

73, and good luck.

Al, NW2M

In article <34497f10.216085136@netnews.worldnet.att.net>,
mfunaro@worldnet.att.net (Michael Funaro) wrote:
>
> Hello, I am building a 13.8 volt power supply at 30 amps. I am looking
> for a heavy transformer that puts out around 18volts. If you have
> anything laying around please email me.
> Thanks, Mike N0XD
> mfunaro@worldnet.att.net

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3897. Re: CATHODE DRIVEN RF AMP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: Roger Taylor <rhtaylor@uiuc.edu>
Message-ID: <344FDD8E.EF0D43EB@uiuc.edu>
Source record: 89727

Al Findlay wrote:

> I haven't seen any articles on G-G rf amps using the 811A elements.
> Does anyone have plans for building a grounded-grid rf amplifier using
>
> 811A tubes or where I can find more info on building
> one?
>
> Thanks in advance.

There are several projects in old issues of the radio amateurs
handbook and radio handbooks. Also the collins 30L1 manual.

# 3898. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: Steve <NOSPAMamradio@thebizlink.com>
Message-ID: <344FC28C.3C47@thebizlink.com>
Source record: 89728

I was asking Carl for his point. But thanks for reiterating anyway.

Dennis Erwin Thurlow wrote:
>
> Steve wrote:
> > And your point....
> > > > I don't know _what_ details (timber, pitch, envelope)represent voice
> > > > recognition, but I'm sure it's not trivial. My point is that a _very_ poor
> > > > narrow band analog FM signal will carry them.(snip) comment about SSB
>
> My point was that narrow bandwidth digital (low sample rate) does not
> carry these components well, though it does retain understandability.
> ----------
> geosynq@trader.com

# 3899. Re: Kanga Combo QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <62olh8$9p$1@news1.teleport.com>
Source record: 89729

In article <344f30b8.856728333@news.erols.com>,
wmeara@erols.com (Bill Meara ) wrote:
>I've put together a little transceiver for 30 meters using a Kanga Kit
>Sudden receiver (NE602 and LM386) together with one of those little
>Kanga Kit sidetone/code practice oscillator boards (RF acutated twin T
>circuit plus 386 amp). On the TX side I have HB 6 Watt VXO
>controlled rig (aka W1VD TX) from QRP classics. I run the sidetone
>circuit in the RF actuated mode and I'm running the LM386 amp on the
>sidetone board for some additional audio amplification. (I like
>speakers!)

>. . .

>One problem remains: The audio oscillator circuit still starts
>screaming when I turn the gain up. I have 100 mfd bypass caps on pin
>7 of both the 386 chips and I have bypass caps at the 9 volt power
>input terminals. Any hints on taming two somewhat feisty 386's?

>. . .

I don't know the particular layout of this rig, but I've found that a common problem in direct conversion receivers is AF feedback due to audio ground current from the 386 getting into the first audio stage. One thing that really helps is to take all mixer ground pins and connect them together and directly to the "ground" side of the audio amplifier input. Then connect the combination to ground (ground trace or ground plane) only at one point. The "ground" side of the audio amplifier input would be, for example, the ground side of the bypass capacitor for the second (non-driven) side of a differential audio amplifier. Or if the first audio amplifier is a common-emitter transistor amplifier, the correct point would be the ground side of the emitter bypass capacitor; if a common-base stage, the ground side of the base bypass capacitor.

Roy Lewallen, W7EL

# 3900. Re: specs used in ordering crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <344fb8f2.2669739@news.online.no>
Source record: 89730

On 23 Oct 1997 10:00:10 GMT, marc_k@walrus.com (marc_k) wrote:

>
>Gnerally, the more the circut "pulls" the xtal, the higher the shunt
>capacitance.
>For example, the AEA DX HANDY(the 10 meter model) uses a VXO..each xtal
>gives 50 KHZ of range(mostly down, if memory serves)..the xtals are 60 Pf
>shunt capacitance!
>Most xtals I'm familar with for 2-way gear use 32 pf(aproximately).
>
I believed 32pf (or 32uuf) was only commonly used for FT-243 xtals...
---
Email: LA8AK at online dot no

# 3901. NTS in the 21st century? Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-23 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIIG94.38@world.std.com>
Source record: 89731
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.policy

First off, we've strayed from CCW etc, so I'm re-directing any
follow-ups on this article to the r.r.a.POLICY group.
It would be nice if the other threads, as they diverge from
homebrew issues, could find their way there too.

In article <01bcdf57$2db337c0$0100005a@wa6vse>,
Carl R. Stevenson <wa6vse@fast.net> wrote:

> First, let's admit that the NTS is a freaking dinosaur that serves no real
> purpose other than to entertain those who choose to participate.

This no-code NTS member will readily admit that the NTS being
wedded to CW as the primary long-haul (non-voice) mode is an
embarassment, but it is not purposeless. The NTS's
continued primary use of CW the result of the typical CW/morse
bigotry alone, but has recent historical reasons and an
operational rationale (which I hope we can work through).

1. Continued Purpose

NTS is the best place for new RACES and ARES operators to get
real traffic handling experience. Handling one or two
messages a month on the the RACES drill net isn't the same as
handling a flood of welfare messages -- which is nicely
"simulated" by county-fair / Jamboree traffic, which latter
really is Welfare traffic even if we don't so label it, the
kid is away from home; prioritizing the THROUGH traffic first
so it makes it to the region net isn't covered in RACES
one-way traffic, etc. Contests are also good practice, I
suppose, especially Field Day since it's in the field, but
even the Sweeps and FD exchanges are pretty trivial traffic.

2. NTS history with HF Digital

Carl's right, the "standard" HF Packet has problems.
Packet being node-to-node has other problems for NTS,
too, whether HF or UHF/VHF.

That the CW-nuts that are NTS ringleaders got burned on both
HF packet being a dud and BBS pickup being unreliable
accounts for their being leary of newer digital modes,
and is a problem that must be addressed over time.
That the CW-nuts in charge still believe the myth that CW gets
through when other modes don't, thinking that *Tor and Clover
are no more resilient/sensitive than HF Packet, ie less
tolerant of QRN/QSB than SSB, doesn't help; this again must be

addressed by education.

(Explanation of BBS problem: The software on most BBS which is fine for broadcast messages and personal messages addressed to TNC-owners doesn't have double-lock protocol to prevent double-pick-up of NTS messages addressed to general public members nor any way to trace a message that was picked up and not delivered, or to route it back up the tree for re-routing if it sits around too long awaiting pickup; there's no automatic ACKnolwedgement of resonsibility -- a protocol problem; BBS's NTS implementations doesn't implement what our local nets and personal logs already do.)

Now that more of us have battery-operable computers so that digital modes are survivable for use with RACES/ARES comms, the operational objections should be disappearing. There is a digital backbone for NTS in parallel to the TCC CW net; check QST's box-scores and you'll see them listed, but you may have to read the PSCM to decode it. At least around here, they prefer to have traffic routed Voice or CW after it arrives on via HF Digital and takes one UHF/VHF packet hop to the clearing house, since otherwise it gets lost.

Upgrading all the BBSs to have automatic tracing of packet would be logistically hard (too many suppliers, not all nodes upgrade routinely, etc), so I can understand why no one has done it. But that is what it would take to make automated end-to-end digital NTS real. If I ever get a non-programming job, maybe I'll take on writing an NTS-only BBS or an NTS-add-on for a popular BBS -- but that's likely not this decade.

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials know you'll be voting in the next division and section elections.

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 3902. Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <344fe6fc.614171@news.zippo.com>
Source record: 89732
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 23 Oct 1997 14:10:34 -0400, Gabe Nemeth <gabe@nortel.ca>
wrote:

>I have seen lots of usefull atricles and circuits referencing
>the Radio Society of Great Britian (RSGB) manual. I would
>like to purchase one.
>
>The catch is that I live in Toronto,Ontario,Canada. Does anyone
>know of a local place ( <= 500 miles) that I can order one, or do
>I have to order one from over the pond?
>
>Cheers, Gabe. (hope it is lighter than the ARRL manual)
>VE3SLJ.

The RSGB manuals are very expensive, last check for the
microwave manuals at about $70.00 CDN. The ARRL
books are a far better value.

Steve Carlisle

# 3903. WTB: Dead anything with APC7 connectors, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: acj@ultranet.com
Message-ID: <acj-2310972137330001@d2.dial-9.wor.ma.ultra.net>
Source record: 89733
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.homebrew

Dead HP 8411As would do. Please let me know what you have and price. I'm also interested in APC7 air lines, and an APC7 percision short and termination.

Thanks!

Jon

# 3904. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3450A784.3058@crpl.cedar-rapids.lib.ia.us>
Source record: 89734

Paul Mateer wrote:
>
> I say that the code should STAY! Morse is the most basic of
> communication methods and is reliable. Sure there are all these new
> digital modes and that's fine but if all hell breaks loose here on
> Earth and my controller "blows-up" , I can comfort in the feeling that
> I know how to take 2-wires from my transmitter and communicate!

Not only that, you can communicate with the large number who do have TNCs for one reason or another.

It makes good common sense to me. The more advanced modes are worth exploring also and should be, at the discretion of each individual. There are plenty of opportunities and plenty of room for all points of view.

The things that makes no common sense at all are the big "pissing contest", the "do-it-my-way-or-you're-stupid" and the adolescent bullying that are going on.

And after giving it a lot of thought and reading I am sure that Morse code reception in a weak signal and interference environment can be, and should be, greatly improved without the more stringent Coherent CW (CCW), especially with the personal computing capabilities that are easy to own these days.

Bill W0IYH

# 3905. Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: rwa@cs.athabascau.ca
Message-ID: <62qjed$5o4$1@aurora.cs.athabascau.ca>
Source record: 89735
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

carlisle@capescott.net (Steve Carlisle) writes:

>On Thu, 23 Oct 1997 14:10:34 -0400, Gabe Nemeth <gabe@nortel.ca>
>wrote:

>>I have seen lots of usefull atricles and circuits referencing
>>the Radio Society of Great Britian (RSGB) manual. I would
>>like to purchase one.

>>[snip]

> The RSGB manuals are very expensive, last check for the
> microwave manuals at about $70.00 CDN. The ARRL
> books are a far better value.

I don't know about that; the RSGB books seem to be written for a more technical audience (certainly a more numerate audience) and often go into detail that the ARRL books omit. Now, I'm not dumping on the ARRL; their stuff is very practical and useful. But the GSGB puts more emphasis on theory, and there's a place for that too. I buy from both organizations and consider them complementary.

regards,
Ross ve6pdq

--
R x e v d - ( ) 5 1 - r c t a u read .sig text
o A a r e q - 4 1 - w s h s . top to bottom &
s l n , 6 0 6 6 a . a c c left to right,
s e d p 3 7 3 @ a b a a thanks.

# 3906. Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: K0HB@JUNO.COM
Message-ID: <877717539.13675@dejanews.com>
Source record: 89736
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Gabe Nemeth wrote:

> I have seen lots of usefull atricles and circuits referencing
> the Radio Society of Great Britian (RSGB) manual. I would
> like to purchase one.
>
> The catch is that I live in Toronto,Ontario,Canada. Does anyone
> know of a local place ( <= 500 miles) that I can order one, or do
> I have to order one from over the pond?

It's called the "RSGB Radio Communication Handbook".
ARRL stocks the 6th edition, ©1994, 760 pages, #5234
-- $38.

73, de Hans, K0HB


---

_____
/ \
| They called me mad, and I |
|\/\/\/| / called them mad, but damn \
| | | them, they outvoted me. |
| (o)(o) | |
c _) | K0HB@juno.com |
| '___| _ _____/
| / | /
/____\ <_/
/ \
http://ourworld.compuserve.com/homepages/k0hb/STARTUP.htm
---

----====


Posted via Deja News ====----
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3907. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971024140301.KAA21799@ladder01.news.aol.com>
Source record: 89737

>
>I say that the code should STAY! Morse is the most basic of
>communication methods and is reliable. Sure there are all these new
>digital modes and that's fine but if all hell breaks loose here on
>Earth and my controller "blows-up" , I can comfort in the feeling that
>I know how to take 2-wires from my transmitter and communicate!
>
>I say it should stay.....you still have to know your ABC's even though
>there are books on tape!
>
>

Or.............I had to do it, so you do too.

W4ZCB

# 3908. Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <62qne1$6ju@harpo.cs.ubc.ca>
Source record: 89738
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

carlisle@capescott.net (Steve Carlisle) writes:
> The RSGB manuals are very expensive, last check for the
> microwave manuals at about $70.00 CDN. The ARRL
> books are a far better value.

Depends on where you buy them. I bought the previous issue of the
VHF/UHF manual from a local ham store for about $70. But I think
Norham sells it for $40. That's in the same price range as the
ARRL publications.

Also, the RSGB books seem to include a lot more detail than the
ARRL ones, and they assume that the reader knows more.

I find that there is often a large gap between where the information
in the ARRL publications end and university-level textbooks begin.
The RSGB books fall nicely into that gap.

Dave

# 3909. HELP NEED SOME INFO ON SOME EQUIPMENT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: Bob <ninja750@pacbell.net>
Message-ID: <3450EA70.9426A7DA@pacbell.net>
Source record: 89739

I am not sure if this is the right place for this stuff? I would like to know if anyof these item's would be of use to anyone or what they might be worth?
#1 Dressen Barnes Corp., Regulated Supply model 62-114.
#2 Hewlett Packard, UHF Signal Generator model 614A.
#3 Sperry Gyroscope Co., Phasor Phase model 200A.
#4 Hewlett Packard, Power Supply, model 712B.
#5 RF Signal Generator SG-47/USM-16.
#6 Oscillator Radio Frequency, 0-471/U input 27 volts DC
AN/URQ-9 Frequency Standard Interference Free.

# 3910. Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIKqts.DGz@world.std.com>
Source record: 89740
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <62qjed$5o4$1@aurora.cs.athabascau.ca>,
Ross Alexander <rwa@cs.athabascau.ca> wrote:

> I don't know about that; the RSGB books seem to be written for a more
> technical audience (certainly a more numerate audience)

Good! Thanks.

> Now, I'm not dumping on the > ARRL;

I don't know, if you won't dump on the ARRL, are you allowed in R.R.A.* ?
:-) :-) [I'm a dues-paying griper.]

> But the GSGB puts
> more emphasis on theory, and there's a place for that too.

Yes, definitely.

> I buy from > both organizations and consider them complementary.

Since the ARRL sells books from both, I guess they consider them
complementary too.

> R x e v d - ( ) 5 1 - r c t a u read .sig text
> o A a r e q - 4 1 - w s h s . top to bottom &
> s l n , 6 0 6 6 a . a c c left to right,
> s e d p 3 7 3 @ a b a a thanks.

A WWI field cipher in a .signature file? History repeats its self.
I love it!

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 3911. RAC Books? Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIKrsH.4x4@world.std.com>
Source record: 89741
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <Pine.GSO.3.94.971024000758.3076A-100000@Ocean.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:
> They do have a list of amateur radio stores in Canada where you can get
> RAC publications. It's at:
> http://www.rac.ca/books.htm

Micheal and other VE-stations,

Are there RAC publications that you'd particularly recommend to
those of us down south in W-land?

73 de N1VUX Bill, grid FN42 (Boston)
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

## 3912. Kenwood TR7500 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: J&#65533;rg Hedtmann <GM4YRI@online.de>
Message-ID: <01bce060$9d906720$44a39ec1@Hedtmann>
Source record: 89742

Has anybody got any info on how to modify the above 2m TRX for 12.5 kHz channel spacing. Any hints appreciated.

J&#65533;rg
GM4YRI / DF3EI
gm4yri@online.de

# 3913. Re: Wanted: High Current transformer for homebrew 12 volt supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <3450768d.5086604@news.mnsinc.com>
Source record: 89743

Sources for surplus supplies are listed at:

http://www.mnsinc.com/bry/mega/partsupp.htm
http://www.mnsinc.com/bry/mega/boatanch.htm
http://www.mnsinc.com/bry/hamlynx/hamboata.htm
http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

Enjoy! - Bry, AF4K / G3XLQ

On Thu, 23 Oct 1997 19:56:17 -0400, Woody White <"eMail "@
my.www.page.Mailto> wrote:

>For reasons of economy, "surplus" is the way to go. Gather some
>catalogs if you have not already... Here is a real over-kill (and a bit
>pricy for surplus):
>GE #9T51B429 - input is 120/240 vac, output is 16 vac @ 46 amps or 32
>vac @ 23 amps. $100 Stock # TR9456 from C&H Sales 800 325-9465.
>_Woody_
>
>Michael Funaro wrote:
>>
>> Hello, I am building a 13.8 volt power supply at 30 amps. I am looking
>> for a heavy transformer that puts out around 18volts. If you have
>> anything laying around please email me.
>> Thanks, Mike N0XD
>> mfunaro@worldnet.att.net
>
>--
>de Woody, WB4QXE
>FOR REPLY: Remember to delete first W in address. STOP SPAM!
>Work: Electron Microscopist/Microanalysist
>Balance: Ham radio "homebrewer", shade tree mechanic,
>'90 Nissan 240SX, wish still had my Mcycle too!
>http://www.geocities.com/capecanaveral/3722
>.

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# 3914. Re: Help - Battery Charger Combo For Shack Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: 1dhellen@eurekanet.com
Message-ID: <345611bd.318067539@news.eurekanet.com>
Source record: 89744
Cross-posted to:
alt.home.repair,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sat, 18 Oct 1997 14:51:09 GMT, codeman@gj.net wrote:

> I
>would strongly suggest you get a on-off timer to be placed between
>electric wall outlet and the battery charger. I found an excellent
>one at Grangers ($25) that can be set in half hour increments for the
>full 24 hour day. The timer controls the battery charger so you do not
>overcharge or boil the batteries. Of course, you will have to
>experiment a little to find out how much time the charger should be on
>to maintain your batteries.

You could get around part of the timing issue by using an automatic shutoff charger. You could use the timer to turn it on when you're not using the system, thereby avoiding any RF interference. Or, you could just simply turn it on when you leave, off when you come back. A good automatic charger should shut off or go into a super low current trickle charge that can be left on indefinitely.

Donald Hellen
(Note: Anti-Spam Measure...remove the "1" in front of
my email address to respond by email.)

# 3915. Convert AL-811 to 6 m ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: Rudi <rudix@atlas.infopta.co.za>
Message-ID: <3450A717.D10A6A1E@atlas.infopta.co.za>
Source record: 89745

Hi everyone,

I would like to convert an Ameritron AL-811 amplifier for use on 6 m,
has anyone done this ?, any suggestions would be great !

Thanks,
73, Rudi de ZR6VE

# 3916. Re: SCR heat (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971024140801.KAA22384@ladder02.news.aol.com>
Source record: 89746

> Currently the setup works nicely with the 25W colored bulbs I am
>> using. However, for parties or large gatherings I would like to use 150W
>> colored floodlights. These draw about 1.25 amps, which is within the 4A
>> limit (106B SCR's). My question is that, since SCR's act as switches and
>> don't sink any power, is it neccesary to heat sink them? (ie, should
>> they produce any heat to speak of?) If they do, I would heatsink them
>> and provide adequate ventalation, but if not I was going to miniturize
>> the package as much as possible.
>>

If those lamps are incandescents, they pull a lot more than 1.25 amps when they first turn on...Like 10 or 20 amps till they get appreciably bright. Heat sink those little hummers and expect to replace the 4 amp SCR's on a regular basis.

W4ZCB

# 3917. Re: SCR heat (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: Rick Mainhart <mainhart@sprintmail.com>
Message-ID: <34509901.115F@sprintmail.com>
Source record: 89747

Jeff,

While SCRs are switches, they have resistance. Pass a current through a resistance and you get heat.

You should heatsink your SCRs, especially when running them near (or at) full rated current ... otherwise you'll be replacing them soon. If your SCRs have insulated cases (some of the TO-220 packages are isolated, some are not) you can use a common heatsink without worrying about insulators.

Good luck,

Rick

Rot Wieler wrote:
>
> Greetings all. I have a tech question, not radio related but I
> know there is alot of expertise here. I just completed a simple color
> organ that basically consists of an audio signal being sent to three
> different filters and their corresponding outputs triggering SCR's to
> turn on 120v AC lamps.
> Currently the setup works nicely with the 25W colored bulbs I am
> using. However, for parties or large gatherings I would like to use 150W
> colored floodlights. These draw about 1.25 amps, which is within the 4A
> limit (106B SCR's). My question is that, since SCR's act as switches and
> don't sink any power, is it neccesary to heat sink them? (ie, should
> they produce any heat to speak of?) If they do, I would heatsink them
> and provide adequate ventalation, but if not I was going to miniturize
> the package as much as possible.
>
> any help appreciated.
>
> jeff

--
It is not necessary to understand things in order to argue about them --
Beaumarchais

# 3918. FS - NOS TUBES & MISC.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971024215100.RAA24760@ladder02.news.aol.com>
Source record: 89748

FOR SALE: NOS Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco, and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1650 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #1010-T.

# 3919. Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971024000758.3076A-100000@Ocean.CAM.ORG>
Source record: 89749
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have the RGB VHF manual and "Amateur Radio Techniques" (do new editions of that ever come out?) from about twenty years ago. I've always enjoyed them, and still find them useful. They were different from the ARRL books, beyond the fact that they included tubes after the ARRL books used them only for transmitting. It is good to see things from a different slant.

I have a fifth edition of the RSGB manual. I think I got it less than a decade ago, though from the copyright page it came out in 1982 and would seem to be a more compact version of the issue that came out in two volumes around 1977. This one does have a reprint date of 1986.

It too gives things from a differnt view from the American ham magazines and the ARRL books, and it included tube projects. When someone here recently in rec.radio.amateur.homebrew mentioned G3PDM's advanced hybrid receiver, I was able to go to my RSGB manual and look it up. And yes, it is different from what was being described at the time in the American magazines, and probably some things can be learned from it today.

Whenever I got this RSGB Handbook, it carries a price sticker of $40.34. Expensive, but ARRL books have gotten expensive (especially by the time they land in Canada; I keep putting off buying Wes Hayward's book on RF design).

I got it at an electronic store here in Montreal, North American Electronics. Sadly, when I was past there a few months ago, I discovered that they had closed.

They carried ARRL publications, and I somehow thought they got the RSGB books along with ARRL books.

I don't know where you can get RSGB publications in Canada. There's a hamfest here on Saturday, and I'll keep an eye out. I do note that the RAC website makes no mention of RSGB books (or ARRL publications for that matter), so I guess they only distribute there own.

They do have a list of amateur radio stores in Canada where you can get RAC publications. It's at:
http://www.rac.ca/books.htm
Just scroll down and you'll find the list. Maybe going through the list, including quite a few in Toronto and Ottawa, you can find some store that sells the RSGB books. I couldn't think of any other list of Canadian ham equipment distrubutors, though there must be one somewhere.

Hope this helps.

MIchael VE2BVW

On Fri, 24 Oct 1997, Steve Carlisle wrote:

> On Thu, 23 Oct 1997 14:10:34 -0400, Gabe Nemeth <gabe@nortel.ca>
> wrote:
>
> >I have seen lots of usefull atricles and circuits referencing
> >the Radio Society of Great Britian (RSGB) manual. I would
> >like to purchase one.
> >
> >The catch is that I live in Toronto,Ontario,Canada. Does anyone
> >know of a local place ( <= 500 miles) that I can order one, or do
> >I have to order one from over the pond?
> >
> >Cheers, Gabe. (hope it is lighter than the ARRL manual)
> >VE3SLJ.
>
> The RSGB manuals are very expensive, last check for the
> microwave manuals at about $70.00 CDN. The ARRL
> books are a far better value.
>
> Steve Carlisle
>
>

# 3920. Re: Building a radio (transmitter side)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3450cdc4.273467661@news.atl.bellsouth.net>
Source record: 89750

On 22 Oct 1997 03:21:51 -0700, Tovar <kd6pag@nospam.mocha.ecofe.com> wrote:
> The MC2833 is designed for the 49 MHz cordless phone and baby monitor
> market. So you only need a single tripler to get up to 2m. Another tripler
> can then put you on 70cm. I wouldn't try to VXO this. Since the chip is FM,
> I'd just crystal it for a desired channel and call it a day. In fact that's what
> I did. If you want more channels, add more crystals and a rotary switch
> just like the old days. (Note, you can use this chip directly on 6m.)
>
>That's fine for you to say. I could probably deal with the digital aspects
>of making a synthesizer work with that, as the reference oscillator is slow
>enough that i probably wouldn't even need a pre-scaler, but the analog
>aspects are another matter entirely, and i'm rather in the dark in terms of
>the RF aspects. You can say "tripler to get up to 2m", and i understand
>conceptually what you mean by that. But i'm still clueless as to how to
>implement that.

A tripler is simply a class C stage with an output tuned circuit at 3 times
the input frequency. There can be an input tuned circuit, tuned to the
input frequency <duh>, if you need it for impedance matching purposes,
too. In this case you don't. Any decent RF transistor capable of a few
milliwatts at VHF will work here. Typical circuits are in the Handbook.
This *isn't hard*, in fact it is harder to try to *not* get third harmonic
output from an amp than it is to make a tripler work.

> The PA hybrid I used is the MHW607-2. This gives 7 watts out for 1 mW
> in on 2m. I use a Toko helical filter on the output, doubles as the receive
> front end filter for the MC13135 receiver chip too (that chip works directly
> up to 200 MHz). This combo makes a fine basic FM rig. It'll serve nicely
> for packet (1200 and 9600 baud), for example.
>
>Excellent, i'll have to pull the data sheet off the Motorola server. And
>i'm pleased to hear that the helical works at that output level, as that
>will certainly simplify things. That'll make the tripler easier to think
>about, at least knowing Toko'll clean it up for me.

The tuned circuit in the tripler collector circuit does the cleanup *before*
you hit the brick. You don't want to drive the brick with out of band
signals. Nasty.

> >The theoritical projects are fine for experienced people with decent
> >test equipment; i'm interested in something more along the lines of
> >reproducible project. And heck, i'd even settle for CW-only if it were
> >something a Technician could use. Even if they can't decode it by ear,
> >with a decent amount of hacking, their computer probably could. If one
> >can hand-send and only responds to CQs from stations that one's software

> >is currently able to decode, rather than issuing CQs, the other end may
> >not even know it's not being received by ear... And the technician has
> >gotten out of the FM rut.
> >
> >How about something real to build that isn't HF?
>
> I suggest you go ahead and build a R2 and T2. Get the Kanga kits if
> you don't feel up to scratch building them.
>
>That'll run me well over $300 by the time everything is paid for if it's
>all done via kits. I don't have that much right now, and if i did, i'd
>just get a MJF-9406X, have a fine time of it, and transvert to 2M and 70
>cm.when i can resume regular employment. That might be the best approach
>for a non-HF person who is less improverished (and for me, fortunately,
>that should be a temporary matter).

Well, you can certainly build them for less than what Kanga gets for the
kits. The only real advantage of buying the kits is that you have everything
in one bag and don't have to scrounge, or make your own PC board. But if
you want cheap, then you *can* scrounge. The most expensive parts are the
mixers, and you can get them for $4.95 each (maybe cheaper at a hamfest).
The rest of the parts are nickel and dime items. And you don't *have* to have
the PC board, you can build it dead bug style on a piece of plain copper clad.
I build a lot of prototype stuff this way, it is quick and cheap. Just follow
the QST (or Handbook) construction articles. You don't have to *design*
anything, just lay it out and wire it up.

> This gives you the heart of
> a SSB/CW rig with proven performance. You can use a simple
> crystal oscillator with this in the beginning. Later you can build a PLL
> or DDS for it. (I'd suggest a DDS with a very simple clean up PLL.)
>
>That's my long term plan (probably including said PLL).
>
> You can even use a VFO with it if you operate it on HF and use a
> transverter up to VHF+. Most transverters want to see the drive level
> the T2 provides. The Suffolk transverter (in the RSGB VHF DX Book)
> would be a good one for this, or a quick and dirty approach would be to
> use the Hamtronics XV2 kit. If you set the T2/R2 up for 20m, you can
> use the Ten-Tec transverter kit to 6m. (Of course remember that the T2/R2
> *will* work directly up to 500 MHz with the proper LO. It's your choice.)
>
> You can use the T2/R2 as a fixed IF with a crystal LO and make the
> transverter LO tunable. There can be some advantages to this approach,
> though it is more complex than using them directly on frequency. For
> example, you can have a number of switched transverter decks for
> multiband capability. Since the transverters will normally be using a
> LO with a high multiple, you can use a crystal VXO for this. That's
> simple, cheap, and nearly foolproof. (Remember that most of the
> cheap QRP HF rigs are crystal controlled too, and they won't have
> nearly the pulling range you can get with a high multiple for VHF

> or UHF.)
>
>The VCO and/or the LO is definitely the problem with the R2/T2 approach.
>And that's what makes it not a 'reproducible project' for me. These are
>all fine ideas, but that's the key point being missed here.

Use a crystal oscillator. It doesn't get simpler, or cleaner, than that. If you are afraid to tackle building a crystal oscillator from scratch, International Crystal has a little kit. But this really is a no-brainer. If you can't get a crystal oscillator to work, then you aren't up to building RF gear.

> The key thing is to keep everything modular so you can concentrate
> on one thing at a time while initially getting it going, and then improve
> one thing at a time later. This should keep you out of major trouble.
> Having accesss to a spectrum analyzer is nice (and downright essential
> if you use one of the crappy Hamtronics modules), but you can get away
> with just a tunable receiver as your test equipment if you stick to the plug
> and play hybrids.
>
>I may be able to have the final result subject to a spectrum analyzer,
>but i don't want to ask for the intermediate stages. Blocks are fine,
>and i just want to avoid building HF blocks which are otherwise almost
>useless to me. (Oh, alright, i suppose i could use a sensitive 10 meter
>receiver to receive RS-xx [xx seems be varying this year], but not
>without a non-FM 2 meter transmitter). Maybe a 6 meter SSB receiver is
>the place to start, but where's a reproducible project for that?

As I noted, just follow the Motorola appnote for the MC2833 except use a crystal for 50.xx instead of 49.xx and you *have* your low power 6m FM transmitter. Ditto with the MC13135 receiver chip. Add a power amp as desired. If you don't want FM, then the R2 and T2 are the best homebrew route for *any* of the HF/VHF bands (and 70cm too).

Of course you *do* have the alternative of converting a SSB CB to 6m. That's fairly easy to do with most of them since they use high side injection. Just prune the RF input and output tuned circuits. The hardest part of the conversion is futzing with the synthesizer to get it to tune where you want. That can be a pain, which is why I recomend crystal control (perhaps VXO) for your first attempt at homebrew.

Since you can often get a CB for free (or very cheap at a yard sale), these make fine *IF strips* for your projects, whatever the band they wind up on. Just toss the synthesizer and PA circuits and use the basic rig as a SSB/CW IF/AF strip for your project. This eliminates a lot of low level construction, and saves some bucks too. They all use a more or less standard filter SSB design. It will likely be as good as anything you can build from a kit (except the R2/T2) and should cost under $20.

Gary
Gary Coffman KE4ZV | You Make It | Email:

Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3921. HAMFEST- Lindenhurst, LI NY - Oct 26 '97

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: Tom KA2D <ka2d@li.net>
Message-ID: <62rp9h$q9g$1@news01.li.net>
Source record: 89751
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

GREAT SOUTH BAY AMATEUR RADIO CLUB

LONG ISLAND HAMFEST-COMPUTER SHOW - OCTOBER 26, 1997

LINDENHURST, LI - NY

On October 26, 1997 the Great South Bay Amateur Radio Club will again sponsor an indoor Hamfest-Computer Show. The location will be at the Knights of Columbus Hall located at 400 South Broadway, Lindenhurst, NY.

ARRL Approved.

There will be radio equipment, electronic componets, computers and access-ories, softeware, books, technical manulas, ARRL information, Amateur Radio License Exams and information. General admission is $ 6.00. $5.00 with coupon. (coupons available at the door)

For exam candidates please remember to bring your original FCC Amateur Radio license (if licensed), any C.S.C.E. forms that are pending, plus a photocopy of each, pens, calculator, formal form of ID (preferably photo ID), and the examination fee, to the exam seesion. 1996 ARRL/VEC fee is $ 6.25,
exact change is appreciated. Novice exams are free.

The VE team is from ISLIP ARES Group and GSBARC. Thanks guys.
For vendor and additional information pleas contact, Walter Wenzel KA2RGI at (516)957-0218, or Tom Carrubba KA2D at (516)422-9594 during EVENING HOURS ONLY (7PM-10PM). NO TABLES WILL BE RESERVED WITHOUT PRIOR PAYMENT due to the limited space available. Tables are 2.5ft x 6ft.

Talk-in will be via GSBARC Repeaters on 146.685 4Z(136.5) PL and 223.86 OC. Food Service during the Hamfest will be provided by members of the Knights of Columbus Council.

Information is also available during the GSBARC 2 meter info net every Monday evening at 7:00 pm on the W2GSB repeater, 146.685 -600 4Z(136.5) PL required. You may also write to:
Great South Bay ARC
P.O. Box 1356
West Babylon, NY 11704

Visit GSBARC online at http://www.li.net/~tomcar/gsbarc.htm

73,
Tom Carrubba KA2D
President, GSBARC

ka2d@li.net

# 3922. Apple 1 motherboard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-24 00:00:00 UTC
From: RWood54741@worldnet.att.net
Message-ID: <62rthh$90h@bgtnsc02.worldnet.att.net>
Source record: 89752
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,

I collect early microcomputers. I would like to own an
Apple 1 motherboard. They are difficult to find and I am
willing to pay good for one. If you have one and might be willing
to sell it, please email me. I have a very
nice Altair 8800 that I can throw into the deal if you are interested
in getting one of those.

Thanks,

BOB

# 3923. China Ham News 10/25/97: China on EME!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: Xiaopeng Rick Niu <xn6@columbia.edu>
Message-ID: <62tn9q$hls$2@apakabar.cc.columbia.edu>
Source record: 89618
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,relcom.radio.ham

China Ham News 10/25/97
China on EME!

BY1QH, Beijing, confirmed three 2-meter QSOs on EME on Saturday, October 18, and Sunday October 19, 1997. The Tsinghua University Amateur Radio Club station ran 200 watts into a 4x9-element Yagi antenna.

In the first EME experiment, David, BZ1BM, and Lars, SM0KAK, had hoped to work VE7BQH and W5UN from BY1QH, but failed. They did work into Europe and QSOed with three SM stations. David and Lars also heard some DL, 9K and JA amateurs on EME, and are planning their second experiment shortly.

Please direct your interest in working with China on EME to David (bzibm@wg.chnmail.com), the student president of BY1QH.

Edited by:
Rick Niu, BD1QL
MBA '99, Columbia Business School, New York
xn6@columbia.edu

# 3924. Re: Motorola GP-300

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: interc@globalnet.co.uk
Message-ID: <34525ff3.822337@read.news.global.net.uk>
Source record: 89619
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amareur.misc,alt.ham-radio.marketplace,alt.radio.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Kenneth,

When on the page to programme frequencies, enter (say) 145.5000 Mhz
but use SHIFT KEY, do not use shift on the decimal place, and fill all
the unused remander with SHIFT zero.

The software will allow out of band freqs.

145.5000 mhz looks : !$%.%))))

Duncan.

# 3925. Re: Beginner's UHF OSC Circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3452743E.203C@pop.removethistomailme.net>
Source record: 89620

Thomas Mahanna wrote:
>
> I have never worked with UHF Oscillators (450 Mhz and above). What would
> would be a simple circuit to start my training with? I also need a
> homebrew method of measuring it's power output. Kits are OK. Thank you for
> any leads.
>
> -Tom
>
> --
> Warning : Unsolicited E-Mail [SPAM] is subject to a $500 proof-reading fee.
> Do NOT send unsolicited E-Mail. Do NOT add this E-Mail Address to
> your list. Remove any prior instances of this E-Mail address.

I'd recommend you take a look at the book "Oscillator Design and
Computer Simulation," by Randall Rhea. It focuses heavily on design and
analysis of relatively-simple UHF oscillator circuits.

I believe the ARRL Microwave Experimenter's Handbook has a basic
power-meter recipe. It's possible to find good power meters on the
surplus market at good prices, too.

Both of these ought to be available from www.amazon.com.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

## 3926. class E amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: Weidner <weidner@kwiknet.net>
Message-ID: <62u4l4$3v1@surf.kwiknet.net>
Source record: 89621

Has anyone tried the Class E Amp described in QST May and June 1997?

# 3927. What Used Knwd & Yaesu HF Rigs Are Similar to ICOM 735?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bce0f2$892f09c0$0b8a92d0@bitnet.bit-net.com>
Source record: 89753
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

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I need your collective "elmer" counsel as I am looking for a solid HF rig
in the process of rebuilding my shack.
The only semi-modern rig with which I am familiar with is the ICOM 735.
What other ICOM, Kenwood & Yaesu rigs are similar that are in the
same $500. and lower used price range?

Key issues:
1. 160-10
2. WARC Bands
3. Better than double conversion receive.
4. General coverage ok, but not necessary - I'll get a shortwave radio!
5. RIT, Notch, Passband helpful (Though I am getting a NIR-10 to 1help
kill QRM and QRN! I needed similar help with the 735.)
6. Quick tx/rx switching for digital modes, pactor, packet, etc.
7. External 12v power supply vs internal supply - preferred, but
not absolutely necessary (I'm planning to use a deep cycle or gel
with float charger - filtered to keep out noise)
8. SSB (usb & lsb), CW (AM or DSB for 75, and FM would be nice with a
transverter for 6, 2, etc. some day)
9. A few memories, nice, but not necessary (not operator memories,
frequency memories :-) Come to think of it ... never mind!)
10. Decent shape, but need not be museum quality.

Thanks for guidance, offers, etc.!

--
Who we are depends on Whose we are, DavidC
_·_· _ _·_ _ _· · ·_ ·_ ·_ _ _ _ ··_· ·_

# 3928. Re: Heath IB-101 Freq Counter help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: delords@ibm.net
Message-ID: <34514e9b.0@news1.ibm.net>
Source record: 89754

In <344E5F38.A0205F45@pixeltech.com>, Nicholas Thomas <njt@pixeltech.com> writes:
> My HEATH IB-101 Freq Counter (built in 1970) has 3 of 5 buffer-storage
>ICs
>that are fried. The other 2 work fine and output good signals to the
>readout
>
>Heath part number is 443-29. No help, not listed in NTE or SK catalogs.
>IC
>was made for Heath by Fairchild Semiconductor. Think both are out of
>this
>. Only markings on
>IC are
>"F" Fairchild logo, Heath p/n 443-29 and date code 7036.
>
>IC is 16 pin DIP. IC contains 4 flip-flops and a gate. Pin 16 is Vcc, 15
>thru
>10 are input/outputs, 9 = no connection, 8 = gnd, 7 thru 2 input/outputs
>and
>1 is gate.
>
>Anyone know of possible parts sources? Or cross-reference to another
>part
>number (hopefully to something available now)?
>
>
>Again, thanks for the read & best wishes.
>
>Tom Doubek, AA1CA Packet: AA1CA @ WB1DSW.NH.USA.NOAM
>PO Box 392
>Hampton NH 03843-0392 Phone: (603) 926-6256
>
>--
>**********************************************
>Nicholas Thomas
>
>PixelTech
>PO Box 273
>Hampton Falls, NH 03844
>(800) 867-2732
>
>* Web site hosting, design and maintenance
> * Co-located Web servers
> * Dedicated Web servers
>

>http://www.pixeltech.com/
>
>**********************************************
>
>

Could it be a 9314 quad latch?

-E 1 16 Vcc
-S0 2 15 Q0
D0 3 14 -S1
D1 4 13 Q1
-S2 5 12 Q2
D2 6 11 -S1
D3 7 10 Q3
GND 8 9 -MR

It could be used as a D latch with data on the D inputs with the -S inputs held low or as a R/S latch with both the D and S inputs used. E is an active low enable.

MR is an active low master reset (not a good idea to leave it open but an open TTL input acted as a hi most of the time).

## 3929. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: jtegart@picoweb.COM
Message-ID: <v03110702b0772050b209@[128.54.223.33]>
Source record: 89755

unsubscribe

## 3930. WTB signs with bubbling tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: RWood54741@worldnet.att.net
Message-ID: <34519F51.67C1@worldnet.att.net>
Source record: 89756
Cross-posted to:
rec.antiques.radio+phono,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I collect old radio (and any other) advertsing signs which incorporate bubbling glass tubes. If you have one and wish to sell, I will pay a very respectable price for it. Please email me.

Thanks,

BOB

## 3931. Beginner's UHF OSC Circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: tmahanna@nyx.net
Message-ID: <62sg3l$sf3$1@nyx10.nyx.net>
Source record: 89757

I have never worked with UHF Oscillators (450 Mhz and above). What would would be a simple circuit to start my training with? I also need a homebrew method of measuring it's power output. Kits are OK. Thank you for any leads.

-Tom

--
Warning : Unsolicited E-Mail [SPAM] is subject to a $500 proof-reading fee. Do NOT send unsolicited E-Mail. Do NOT add this E-Mail Address to your list. Remove any prior instances of this E-Mail address.

## 3932. Re: decal type transfer material?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: NORMANMO.nospam@miavx1.muohio.edu
Message-ID: <3451A637.3119@miavx1.muohio.edu>
Source record: 89758

I beleive the product you are reffering to is called Tek2000 dry transfer film. I have used it to transfer PC Bd patterns to FR4 and they calim it can be used to make decals for aluminum. Digikey and other vendors carry it.

# 3933. Re: Apple 1 motherboard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: cps@access.digex.net
Message-ID: <cps-ya02408000R2510971013540001@news.digex.net>
Source record: 89759
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,

In article <62rthh$90h@bgtnsc02.worldnet.att.net>,
RWood54741@worldnet.att.net wrote:

> I collect early microcomputers. I would like to own an
> Apple 1 motherboard. They are difficult to find and I am
> willing to pay good for one. If you have one and might be willing
> to sell it, please email me. I have a very
> nice Altair 8800 that I can throw into the deal if you are interested
> in getting one of those.

Are you willing to pay around $10K? As I recall, that's the going price.

Chris

--
Check out my web pages for radio (pirate, spy numbers) and Mac software.
http://www.access.digex.net/~cps

"One if by land, two if by sea" -- Paul Revere, encryption 1775

# 3934. Re: Cross reference 7036 vacuum tube?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: Jim Cross <vactubes@cinternet.net>
Message-ID: <3451DAB4.6533@cinternet.net>
Source record: 89760
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

bryan wrote:
>
>
> Does anyone have a cross reference number for a GE 7036
> vacuum tube? Would appreciate any info on this number.
>
> Bryan W5KFT

This is a sharp cut-off heptode designed for computers. It is the same
as a 5915A, but has a taller bulb. The 7036 was one of GE's 5-star line.

Jim Cross - Vacuum Tubes Unlimited
http://www.cinterent.net/~vactubes

## 3935. Request

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: greghome@fastlink.COM.AU
Message-ID: <199710251017.DAA08816@mailbox2.ucsd.edu>
Source record: 89761

Hello,
I am currently studying for my novice amateur licence ans I am a member of my local Amateur Radio Club, here in Australia.
I would like to be placed on your mailing list, so that I can find out about other people's activities with home brewing. I am very interested in that side of Amateur Radio.
Please let me know what I need to do to get on the list.
Regards,

Greg Arrell

# 3936. Re: What Used Knwd & Yaesu HF Rigs Are Similar to ICOM 735?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: areeves@goodnet.com
Message-ID: <34520f54.808735@news.goodnet.com>
Source record: 89762
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

Well the Yaesu FT747 is nice, so is the Kenwood ts440
The 440 is a better radio than the 747, but the 747 is a piece of cake
to use..

On 25 Oct 1997 00:01:47 GMT, "DavidC" <davidc@bit-net.com> wrote:

>_·_· _ _·_ _ _· · ·_ ·_ ·_ _ _ _ ··_· ·_
>
>I need your collective "elmer" counsel as I am looking for a solid HF rig
>in the process of rebuilding my shack.
>The only semi-modern rig with which I am familiar with is the ICOM 735.
>What other ICOM, Kenwood & Yaesu rigs are similar that are in the
>same $500. and lower used price range?
>
>Key issues:
>1. 160-10
>2. WARC Bands
>3. Better than double conversion receive.
>4. General coverage ok, but not necessary - I'll get a shortwave radio!
>5. RIT, Notch, Passband helpful (Though I am getting a NIR-10 to 1help
>kill QRM and QRN! I needed similar help with the 735.)
>6. Quick tx/rx switching for digital modes, pactor, packet, etc.
>7. External 12v power supply vs internal supply - preferred, but
> not absolutely necessary (I'm planning to use a deep cycle or gel
> with float charger - filtered to keep out noise)
>8. SSB (usb & lsb), CW (AM or DSB for 75, and FM would be nice with a
> transverter for 6, 2, etc. some day)
>9. A few memories, nice, but not necessary (not operator memories,
> frequency memories :-) Come to think of it ... never mind!)
>10. Decent shape, but need not be museum quality.
>
> Thanks for guidance, offers, etc.!
>
>--
>Who we are depends on Whose we are, DavidC
>_·_· _ _·_ _ _· · ·_ ·_ ·_ _ _ _ ··_· ·_

# 3937. Re: Request (Mail Lists)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3452153A.6235@ix.netcom.com>
Source record: 89763

greghome wrote:
>
> Hello,
> I am currently studying for my novice amateur licence ans I am a member of
> my local Amateur Radio Club, here in Australia.
> I would like to be placed on your mailing list, so that I can find out
> about other people's activities witth home brewing. I am very interested in
> that side of Amateur Radio.
> Please let me know what I need to do to get on the list.
> Regards,
>
> Greg Arrell
---
Hi Greg -- 100 plus Mailing List Links at URL:
http://pw2.netcom.com/~ac6v/pageae.html
includes several Homebrew reflectors.

Happy Homebrewing
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

## 3938. TUBE BUYERS----->Be Warned!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: blues4uw76@aol.com
Message-ID: <19971025174600.NAA10998@ladder01.news.aol.com>
Source record: 89764

I bought tubes from Kevin Harlan at EMODUS (kevin@emodus.com), and three fourths of the tubes tested BAD when I received them. No offers were made to replace the defective tubes. Do yourself a favor and buy from a reputable tube dealer, not this scammer.

## 3939. Re: TUBE BUYERS~~~~>BEWARE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-25 00:00:00 UTC
From: blues4uw76@aol.com
Message-ID: <19971025174400.NAA11025@ladder02.news.aol.com>
Source record: 89765

I tested them on a tube tester. They didnt even register.

# 3940. FS: Teflon Wire #20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <34529aca.0@207.168.31.4>
Source record: 89622
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,sci.electronics.repair

I have the following sizes and colors available:

Size Color Price/ft.

20 1,4,7 .10

22 0,2,3,4,6,7 .07

24 0,5,7 .07

26 2,6 .07

Limit is 100ft./size/color for each order. Shipping is $3.00 for any amount. This is Mil-Spec stranded tinned wire.

## 3941. NIDA MiniLab 400 -- Manuals/Courses wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: provero@connix.com
Message-ID: <62u93c$9sh@beast.connix.com>
Source record: 89623
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

This is a combo oscilloscope/DMM/function generator/triple DC pwr supply
variable AC supply plus metering and IO/breadboard area all in a
single cabinet.

Looking for any assembly or technical manuals, or any of the
old courses NIDA had for this unit.

P.J. "Josh" Rovero email: provero@connix.com
Oceanographer work: rovero@sonalysts.com
Meteorologist radio: KK1D
Curmudgeon at large web: http://www.connix.com/~provero/

## 3942. Kenwood HT's for sale!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: "John K." <johnk@cam.org>
Message-ID: <3452C3C4.A7DF4A55@cam.org>
Source record: 89624

(qty-2) Kenwood TH-27A 2M 144MHz HT's with CTCSS
Unit (model TSU-7), and PB-13 NiCd 700mAh
batteries.
(qty-2) Protective soft cases - model SC-30
(qty-2) Wall chargers - model BC-14
(qty-1) Filtered car lighter plug - model PG-3F
(qty-1) Remote control speaker/mic - model SMC-33
(qty-2) manuals and schematics.

Both have extended Tx/Rx mods.

Price for the lot is:
$500.00CDN or $360.00US or best offer + shipping.

Thanks,
John
73's
Please respond by e-mail.
johnk@cam.org

# 3943. >>> F R E E <<< V A C A T I O N S !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: "FREE free"@vacations-14.com
Message-ID: <261097010632@vacations-14.com>
Source record: 89625

==========
>>> F R E E V A C A T I O N S <<<
==========

*** FREE Akira 35mm Camera

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*** 3 DAY / 2 NIGHT STAY

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++++++++++
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++++++++++

<==<><<><><=>===>><><=

## 3944. Restoring license

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Bill <wgpeters@bellatlantic.net>
Message-ID: <34533DD2.3FA5@bellatlantic.net>
Source record: 89626

All,

Back in the 70s, I held a general class license, but left it expire while serving in the army. Does anyone know if it is possible to get my old license re-instated?

Thanks,

Bill
Used to be WA3EBI

## 3945. Thanks Newsgroup!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: David <freimark@mail.com>
Message-ID: <34534DC9.126F@mail.com>
Source record: 89627
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I wish to thank all readers for their input for solving my radio
troubles.

With info from this news group, I have successfully repaired...
my ICOM 751A, ICOM R-9000, ICOM U-16 and found the UHF radio needed.

I am not a dealer and all items are mine and not used for profit.

Dave w9vi@mail.com

# 3946. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: patrick.mccraughtch@juno.com
Message-ID: <344b0188.7565479@news.swbell.net>
Source record: 89628
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

On Sun, 12 Oct 1997 23:41:13 -0500, aczepczy@d.umn.edu wrote:

>I don't know about all of you, but I don't want anybody to listen to my
>conversations via my cellular phone.
>
>Besides what is the pleasure of listening to other people's
>conversatiosn. IT's NONE OF YOUR BUSINESS ANYWAY!!!

THEN DON'T USE A RADIO TRANSMITTER TO TALK ON!

# 3947. Re: WTB signs with bubbling tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Kevin@UPSCALEaudio.com
Message-ID: <62vjrt$478@nntp02.primenet.com>
Source record: 89629
Cross-posted to:
rec.antiques.radio+phono,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <34519F51.67C1@worldnet.att.net>,
RWood54741@worldnet.att.net wrote:
>I collect old radio (and any other) advertsing signs which
>incorporate bubbling glass tubes. If you have one and wish to
>sell, I will pay a very respectable price for it. Please email
>me.
>
>Thanks,
>
>BOB
>
>

Wow...I would love to see one of those...

What the hell is a bubbling tube? And who makes the signs you've seen thus
far?

Regards,

Kevin Deal Largest U.S. inventory of rare vintage audio tubes
Upscale Audio Authorized dealer for Sonic Frontiers, Anthem
1410 Lemonwood Dr West Audible Illusions, Presence, Margules/Magenta, B&K
Upland, CA 91786 PSB, Meadowlark, Energy, Sound Dynamics, Odyssey
Voice(909) 931-9686 Speakercraft, Nordost, Synergistic, Kimber Kable
Fax (909) 985-6968 Most upper quality Mid-Fi/Home Theater brands too

# 3948. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <34535630.58E@ix.netcom.com>
Source record: 89630
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,alt.radio.digital

Pat McCraughtch wrote:
>
> On Sun, 12 Oct 1997 23:41:13 -0500, aczepczy@d.umn.edu wrote:
>
> >I don't know about all of you, but I don't want anybody to listen to my
> >conversations via my cellular phone.
> >
> >Besides what is the pleasure of listening to other people's
> >conversatiosn. IT's NONE OF YOUR BUSINESS ANYWAY!!!
>
> THEN DON'T USE A RADIO TRANSMITTER TO TALK ON!
---
How about the Cell Phone folks use the latest technology and scramble
the signals -- then everybody is happy!!!

Rod in San Diego

# 3949. Re: FS-Service/Owners manuals for scanners and shortwave radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: bush143@postoffice.worldnet.att.net
Message-ID: <62voij$4em@bgtnsc01.worldnet.att.net>
Source record: 89631
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amatuer.misc,rec.radio.amateur.homebrew

On Sun, 26 Oct 1997 04:58:21 GMT, bush143@postoffice.worldnet.att.net
(Kin Ho) wrote:

>I have a bunch of excess radio manuals for sale. Some are originals
>and some are photocopies. All of the original manuals are in MINT
>condition. All photocopies were professionally made copies purchased
>from the manufacturer, and are either bound or in binders. ALL
>MANUALS INCLUDE SCHEMATICS AS INCLUDED FROM THE MANUFACTURER!
>
>These manuals are being sold to clear out my radio shelf. Shipping is
>extra. Some manuals are thick and some are thin, but it should not
>take more than a few bucks to ship any of these manuals to the lower
>48 States. Please e-mail if interested and I will provide an estimate
>on shipping. Thank You!!!!!
>
>SCHEMATICS & BOARD-PARTS LAYOUTS (originals):
> Icom R-70 $10
> Icom R-71/71A $10
>
>OPERATIONS/OWNERS MANUALS:
> AOR-3000A (original) $15
> J.I.L. SX-400 and J.I.L. RF-1030 rf up converter (copy)
>$15
> Kenwood R-1000 (copy) $10
> Radio Shack Pro-2004 (original)
>$10
> Sony 2010 (original) $10
> Sony Pro-80 (copy) $10
> Yaese FRG 8800 (original) $15
> Yaesu FRG 9600 (original0 $10
>
>SERVICE MANUALS:
> Radio Shack Pro-34 (original) $20
> Radio Shack Pro-2004 (original)
>$20
> Sony 2010 (copy) $10
> Sony SW-55 (original) $10
>
>RACAL TECHNICAL MANUAL: $25 (shipped)
> Covers model RA-6217A, 6217A-3, 6217E
> This thick manual includes parts list, circuit pictorials and
> alignment procedures. (copy)
>

>
>
>

## 3950. probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: kc4tzn@webtv.net
Message-ID: <62vskq$sm2$1@newsd-103.bryant.webtv.net>
Source record: 89632

Pehaps this is not the appropriate newsgroup, but i am trying to design a pen-like probe that can be used to detect AC current to an outlet without having to actually plug it in. These probes are available commercially and apparently detect the 60 Hz radiation. I want to build one myself to understand the theory
better.

73 es Tnx, kc4tzn

## 3951. 10Ghz link

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Mark Garrett <mgarrett@pdnt.com>
Message-ID: <63007j$jit$1@sol.pdnt.net>
Source record: 89633

Hi All:
I have recently picked up some intrusion detection units made by Omni
Spectra
that run on 10.525 Ghz and they look ideal for conversion for amateur radio
links.
They came mounted to a plate that looks like it was origionally mounted to a
wall
with a small parabolic reflector.
I was curious if anyone else has experimented with these units and was able
to
determine what kind of radiation pattern is developed by the antenna.

--
Mark Garrett
KA9SZX@N9LNQ.#ECIL.IL
mgarrett@pdnt.com

# 3952. Re: Restoring license

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: "M.Monninger" <markem@primenet.com>
Message-ID: <345392B7.76EEB08A@primenet.com>
Source record: 89634

You'll have to take the tests again...both CW and theory. Once you're licensed again you can apply for your old callsign via the vanity program.

73... Mark AA7TA

Bill wrote:
> 
> All,
> 
> Back in the 70s, I held a general class license, but left it expire
> while serving in the army. Does anyone know if it is possible to get my
> old license re-instated?
> 
> Thanks,
> 
> Bill
> Used to be WA3EBI

# 3953. Re: Belden Twinax

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: badger@telalink.net
Message-ID: <630eli$c1d@news2.tds.net>
Source record: 89635
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

>> On Sat, 18 Oct 1997 08:27:24 -0700, "Toolman" <poustie@concentric.net>
>> wrote:
>>
>> >I have obtained a quantity of coaxial cable and am trying to find a good use
>> >for it. It is Belden 9207 Twinax------100 ohms-----2 conductors-----.330

[ snippage ]

Actually it is the correct coax for use with the venerable R-390 and R-390A
HF receivers -- connect the radio directly to a dipole, no balun needed.
The connectors are still available too.

Not real useful for a scanner I wouldnt imagine though.

Tom Norris
Nashville TN USA

visit the Mil List http://www.telalink.net/~badger/millist/mi.html

## 3954. Cobra 148GTL on 10 Meters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Ken Collier <ko6ux@netsol.net>
Message-ID: <877902800.7653@dejanews.com>
Source record: 89636
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Does anyone have any experience modifying a Cobra 148 GTL CB radio for 10M ham use? I know it can be done, and I am looking for complete instructions, including parts needed and sources for the parts. Can anyone offer any help in this matter? Please e-mail <ko6ux@netsol.net>.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3955. Re: probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971026224401.RAA12521@ladder02.news.aol.com>
Source record: 89637

>
>Pehaps this is not the appropriate newsgroup, but i am trying to design
>a pen-like probe that can be used to detect AC current to an outlet
>without having to actually plug it in. These probes are available
>commercially and apparently detect the 60 Hz radiation. I want to build
>one myself to understand the theory
>better.
>
>

Do you by any chance mean the "voltage"? I used to manufacture for the Utility Industry, such a device. A proximity detector that would detect 120 volts from about an inch 240 volts at about 3 inches and 345 KV from 8 feet. (1/2 the phase to phase wire spacing distance on 3 phase of that voltage.)

You can do it with simply a high impedance FET amplifier, >10 megohms with a small antenna on the input lead. I got a bit more complex than that, with a one-shot self test circuit and some post amplification to ring piezo buzzer and the like.

W4ZCB

# 3956. Ham Radio Mag articles needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Larry Shorthill <kodiak@europa.com>
Message-ID: <3453E388.49E3@europa.com>
Source record: 89638

Could someone help me get copies of the following articles--my collection of Ham Radio Magazine does not include these:

"Recent developments in circuits and techniques for HF communications receivers" by Ulrich Rhode, Ham Radio, Apr 1980, pp 20-25.

"Optimum Design for High Frequency Communications Receivers", by Ulrich Rhode, Ham Radio, Oct. 1976, pp 10-25.

"Communications Receivers for the year 2000, by Ulrich Rhode, Part 1, Ham Radio, Nov 1981, pp 22-29, Part 2, Ham Radio, Dec 1981, pp 36-44.

"High Dynamic Range Active Double Balanced Mixer, by Ulrich Rhode, Nov 1977, pp 90-91.

All copying and postage costs will be paid for if you would be willing to copy them for me.

Thanks for the help.

Regards and 73's

Larry Shorthill, KC7ULI

# 3957. TenTec Titan on 160

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: George Worth <gworth@ibm.net>
Message-ID: <345436F5.C50@ibm.net>
Source record: 89639
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Gentlemen,
I have a question for someone who may know why I observe the following when I load up this amplifier on 160m. No matter how I load/tune this amp on 160, the grid current meter deflects negative (below zero). The amp is easy to drive and seems to have no problem with arcing, etc. Plate current acts normal. Is this phenonenon a metering problem? This makes no sense to me. Ten Tec service did not really have an answer for me. Any ideas would be appreciated.

Thanks,

George
N2YFY

gworth@ibm.net

# 3958. For Sale ARRL Antenna Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <34540292.4BE7@sympatico.ca>
Source record: 89640

1946 ARRL Antenna Handbook, 1st post war edition. Fair/Average condx, collectors item. $12.00US plus shipping.

Larry/VE3RF

# 3959. Re: Cobra 148GTL on 10 Meters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Michael Peters <peters.michael@usa.net>
Message-ID: <34543700.186B@usa.net>
Source record: 89641
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ken Collier wrote:
>
> Does anyone have any experience modifying a Cobra 148 GTL CB radio for
> 10M ham use? I know it can be done, and I am looking for complete
> instructions, including parts needed and sources for the parts. Can
> anyone offer any help in this matter? Please e-mail <ko6ux@netsol.net>.

One idea may be to change the 11.3258 mhz xtal used to produce
the 34 mhz mixer fo. In the 142gtl the same xtal is 11.1125 mhz
and the divider input codes are shifted. If you would compare the
N codes and the mixer frequencies you may be able to figure out
what the frequency of the new xtal should be.

Michael
KB2UMJ

## 3960. class e amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Weidner <weidner@kwiknet.net>
Message-ID: <6312e8$371@surf.kwiknet.net>
Source record: 89642

Has anyone had experience with the Class E amp described in May & June QST?

## 3961. Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mk9ezj0fx.fsf_-_@spinner.ecofe.com>
Source record: 89643

I think it is more a matter that the RSGB books assume the reader is
willing to expend the effort to *learn* more. Otherwise, there would
be no point in including that level of background detail.

The problem I see with ARRL publications is that they start out
very simplistically, jump over a huge area labeled "Here there be
magick", and then give us a construction project we aren't equipped
to understand on the detail level. The RSGB books seem to plod
along, connecting all the dots, so that we can actually understand
what they are telling us at every level.

Yes, indeed. That's what i'm really being frustrated with. I can even
get a decent *overview* of the theory, but there's not much help with the
practice or details of the theory.

For example, i'd like to experiment with helical resonators, but i just
can't figure out how to make one from the ARRL Handbook. Sure, i can
determine key dimensions and trade-offs, and maybe even figure out under
which circumstances i'd want to do things one way or another. But how to
get the signal in and out, what materials to use, and what factors are
critical or non-critical all seem to me to be glossed over at best.

I'm not surprised that amateurs raised on current ARRL publications
turn to being appliance operators. The important background details
are omitted which would permit them to proficiently employ electronics
in their own projects. If they don't care to slavishly duplicate one of the
construction projects, they aren't given sufficient background detail
to create their own. They are left to flounder around, trying to find
information at the appropriate level to aid them.

Yes, indeed. Most of what i've been successful with i knew before getting
my license. My copy of the ARRL Antenna Book has gotten rather dog-eared,
but i don't have much to show for it. Those things that i've gotten good
use out of have been projects described to me over the air or over coffee.
It's rather frustrating and not a very good use of time. So how does some-
one who is determined not to be an appliance operator get beyond buying
almost everything off the shelf??

Now, when i can draw on my pre-amateur experience, i'm fine. I've gotten
a copy of NEC2 in C, and written Perl front-ends and post processing for
it, and as well as some plotting software that generates WWW output. Now
i'm trying my experiments in software and finally feeling like i'm getting
somewhere with antennas. But i'm often still just trying to figure out if
my simulation is bad, if i've misunderstood what's in the Antenna Book, or
that things just don't quite work right but work well enough in practice
to make folks happy. So especially with the non-HF antennas, it seems like

you either have to slavishly duplicate or understand things pretty well to be successful.

So where are you expected to learn the 'background details'? From an elmer?? By going thru the CW hazing ritual, learning everything for HF, and finally graduating to VHF and above???

The RSGB books do have that level of detail in many cases. It is just a pity that most of the RSGB books lag communications technology by so much. Fundamentals never change, of course, but some of that same lovely attention to background detail which the RSGB books give us for older technologies would be most welcome with more modern technologies too.

So if i'm trying to take some of the new ICs and use them for amateur applications, it might not be that much help? Nor could it help me with modern construction techniques?? But i guess i can learn alot about other things like how passive components work and how to build things with older technology at least, which might be a major improvement over what i'm doing right now.

In summary, the RSGB books are well worth the money whether you are a neophyte or a practicing engineer. There is something of value for everyone in them. The editors of ARRL publications would do well to take a lesson from them.

Which one(s) should i look at if i'm interesting getting started in RF construction at 6 meters and above?

-- KD6PAG (Networking Old-Timer, RF newbie)

## 3962. Collins Filter Specs ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: Bill & Suzie Whatley <spud@verinet.com>
Message-ID: <34536877.32AF@verinet.com>
Source record: 89644

Looking for site that would list the specs
for most of the Collins Mechanical filters
commonly used in communications receivers.

Thanks for any assistance or info.

WA5VRL

# 3963. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-26 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <631en2$9e4@harpo.cs.ubc.ca>
Source record: 89645

John Mock <kd6pag@nospam.mocha.ecofe.com> writes:
>Which one(s) should i look at if i'm interesting getting started in RF
>construction at 6 meters and above?

Try the VHF/UHF Manual. The 4th edition has several different designs
for helical resonators, for example. However, that edition is about
15 years old now, and a new edition has just been published. I eagerly
await getting my hands on a copy. Don't know what's in it yet though.

Dave

# 3964. Re: Request

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <3453e18b.51647899@news.mnsinc.com>
Source record: 89646

On 25 Oct 97 10:17:47 GMT, greghome@fastlink.COM.AU (greghome) wrote:

>Hello,
>I am currently studying for my novice amateur licence ans I am a member of
>my local Amateur Radio Club, here in Australia.
>I would like to be placed on your mailing list, so that I can find out
>about other people's activities with home brewing. I am very interested in
>that side of Amateur Radio.
>Please let me know what I need to do to get on the list.
>Regards,
>
>Greg Arrell

Greg - for information about getting on the mailing lists, see:

http://www.mnsinc.com/bry/hamlynx/hamlists.htm

Play your didgerydoo, Blue!

# 3965. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <3453e124.51544695@news.mnsinc.com>
Source record: 89647

On 24 Oct 1997 14:03:56 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>Or.............I had to do it, so you do too.
>
>W4ZCB

No - he didn't say that - you are just flashing back to the, ahem,
"fussier" conversations some have generated about this in the past.
The present thread has been respectful and well thought-out.

# 3966. UTC CG-51

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971027014500Z-11071@whpost.wh.lucent.com>
Source record: 89648

Does anyone out there have any info on a UTC 51, 51A or 51AX (if there is any difference), especially the winding tap info? I believe it to be a class B driver transformer with a 2:1 or 3:1 ratio. I am not sure of its power handling ability. I need at least 7 watts.

Secondly, does anyone have one that they will part with for reasonable cost?

Seth T.
KC2WE

# 3967. Need help with Tektronix Scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199710271319.IAA06024@pop.uky.edu>
Source record: 89649

I have problems with 2 Tektronix scopes.
The first is a 7704A that has a parasitic oscillation in
the horizontal amplifier.
The second is a 7904 that has a weak power supply.
It will not come up with a 7L5 spectrum analyzer plugged into
it but it will operate normally most of the time with the
usual plug-ins.
If anyone has experienced these problems and found
a solution please let me know.

Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

# 3968. Schematics of Sony RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: maurizio.CHalp@ocwi.COM
Message-ID: <c=IT%a=master400%p=olivetti%l=OPCO01S01-971027155615Z-2054@opco01s01.ocwi.com>
Source record: 89650

I'am looking for the schematics of the receiver Sony ICF-SW 7600.

Thanks in advance

73 de IW1DZD

Maurizio Chalp

# 3969. Drake MN-75 tuner $150.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bce3b3$2da6f9a0$af9fd8cc@km3g.cts.com>
Source record: 89651
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

200 watt tuner. matches the 7-line. $150.00 shipped CONUS.

Lane
KM3G

# 3970. FS- Yaesu FRG-9600 Service/Owners manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: bush143@postoffice.worldnet.att.net
Message-ID: <632ecf$iae@bgtnsc02.worldnet.att.net>
Source record: 89652
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amatuer.misc,rec.radio.amateur.homebrew

>>>I have a bunch of excess radio manuals for sale. Some are originals
>>>and some are photocopies. All of the original manuals are in MINT
>>>condition. All photocopies were professionally made copies purchased
>>>from the manufacturer, and are either bound or in binders. ALL
>>>MANUALS INCLUDE SCHEMATICS AS INCLUDED FROM THE MANUFACTURER!
>>>
>>>These manuals are being sold to clear out my radio shelf. Shipping is
>>>extra. Some manuals are thick and some are thin, but it should not
>>>take more than a few bucks to ship any of these manuals to the lower
>>>48 States. Please e-mail if interested and I will provide an estimate
>>>on shipping. Thank You!!!!!
>>>
>>>SCHEMATICS & BOARD-PARTS LAYOUTS (originals):
>>> Icom R-70 $10
>>> Icom R-71/71A $10
>>>
>>>OPERATIONS/OWNERS MANUALS:
>>> AOR-3000A (original) $15
>>> J.I.L. SX-400 and J.I.L. RF-1030 rf up converter (copy) $15
>>> Kenwood R-1000 (copy) $10
>>> Radio Shack Pro-2004 (original) $10
> Sony CRF-V21 (copy-two volume set) $20
>>> Sony 2010 (original) $10
>>> Sony Pro-80 (copy) $10
>>> Yaese FRG 8800 (original) $15
>>> Yaesu FRG 9600 (original0 $10
>>>
>>>SERVICE MANUALS:
>>> Radio Shack Pro-34 (original) $20
>>> Radio Shack Pro-2004 (original) $20
>>> Sony 2010 (copy) $10
>>> Sony SW-55 (original) $10
> Yaesu FRG-9600 (copy) $25
>>>
>>>RACAL TECHNICAL MANUAL: $25 (shipped)
>>> Covers model RA-6217A, 6217A-3, 6217E
>>> This thick manual includes parts list, circuit pictorials and
>>> alignment procedures. (copy)
>>>
>>>
>>>
>>>
>>

>

# 3971. Re: Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <iskXWCAHYMV0EwHB@two-way.demon.co.uk>
Source record: 89653

Rick,
>I would like to hear from anyone with experience homebrewing
>a solid state HF power amplifier, especially at the legal limit
>level. I see a lot of postings about tube amplifiers, but
>no solid state. Outside of ham radio, I believe that no
>new designs are using tubes at the 1500 watt level. Am I
>unaware of some reason why tubes are great for ham amplifiers?
>Also, is anyone aware of a commercially available ham linear
>that runs 1500W PEP output using solid state devices? All
>the solid state ham linears I've seen are not legal limit.
>
>Rick Karlquist N6RK
>rick@area.com
You'll have a problem locating a true broadband (1.8-30MHz) HF solid state amp although you do have several options.
1) Ted Henry, henryradio@earthlink.net now offers a 28v 1200w output amp for 2150 USD.
2) Lee Martin at RF Electronics, rfelectron@aol.com offers either a ready built or kit form 1200w output unit that runs off 12v.

You did not state if you are actually after a mobile unit or base?

There are several other mobile solid state amp's such as Made From Junk, SGC, Tokyo HiPower, but these three are micky mouse QRP, around 500w out.

Lots of units that are available for the 11m band but which would require a fair amount of work to make true broadband, different grade ferite xfmr's, negative feedback loops to equalise gain, switchable low pass filters etc etc.
These units I have up to 96 x 2SC2879, around 12 to 15kw out if you can supply the current.
Tube mobiles are also available but output it relative to your bank ballance.

I currently have a Lee Martin homebrew but am working on a 5-6KW 50v FET mobile with 1.8-30MHz coverage.

Good luck, hope I've given you a few pointers.

Phil G4ZOW/M

# 3972. Re: Apple 1 motherboard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <3454F9F3.4D44@lakeweb.com>
Source record: 89654
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,

I have one listed at http://www.haggle.com

It is featured on the front page of the site.
Best, Dan.

Chris Smolinski wrote:
>
> In article <62rthh$90h@bgtnsc02.worldnet.att.net>,
> RWood54741@worldnet.att.net wrote:
>
> > I collect early microcomputers. I would like to own an
> > Apple 1 motherboard. They are difficult to find and I am
> > willing to pay good for one. If you have one and might be willing
> > to sell it, please email me. I have a very
> > nice Altair 8800 that I can throw into the deal if you are interested
> > in getting one of those.
>
> Are you willing to pay around $10K? As I recall, that's the going price.
>
> Chris
>
> --
> Check out my web pages for radio (pirate, spy numbers) and Mac software.
> http://www.access.digex.net/~cps
>
> "One if by land, two if by sea" -- Paul Revere, encryption 1775

# 3973. Re: 10Ghz link

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <3454F91C.50DF@lakeweb.com>
Source record: 89655

I also have an interest. On the receiver end, I have
purchased Grundig Ku dish with an LNB image that
puts 10.10.5 in the 750 to 1250 IF output.

I haven't started on the modifications but hope to
do so in the next month.

Mark Garrett wrote:
>
> Hi All:
> I have recently picked up some intrusion detection units made by Omni
> Spectra
> that run on 10.525 Ghz and they look ideal for conversion for amateur radio
> links.
> They came mounted to a plate that looks like it was origionally mounted to a
> wall
> with a small parabolic reflector.
> I was curious if anyone else has experimented with these units and was able
> to
> determine what kind of radiation pattern is developed by the antenna.
>
> --
> Mark Garrett
> KA9SZX@N9LNQ.#ECIL.IL
> mgarrett@pdnt.com

# 3974. Help with RF Splitter/Combiner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: aor@gteais.com
Message-ID: <878005542.32252@dejanews.com>
Source record: 89656
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I am building a 2 meter amplifier using a pair of MRF-151G VHF transistors (300 watts each).

How can I combine these two amplifiers using combiners/splitters which will cover 10-150MHz? I know how to do this for single band operation. My goal is to have 600 watts on 10 meters, 6 meters, and 2 meters thru this one amp. It will be mounted on the tower, so I will not have access to it once installed.

Any thoughts, suggestions, or articles would be a big help.

73, and thanks in advance.

Al, NW2M

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3975. need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: vorlin@mail.geocities.com
Message-ID: <vorlin-ya02408000R2710972236240001@news01.equinox.net>
Source record: 89657
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

Looking for an ultra-simple RF VFO for a flea-power xmtr project. I thought the oscillator (Q3) section of the circuit at ...

http://www.acs.ncsu.edu/HamRadio/HF/qrp/projects/160m-xmitr.html

... might be suitable, but altho I actually found a GE-2 in my parts box, I seem to have botched the attempt to build the oscillator as a stand-alone circuit. Anyone having a circuit like this that you know from experience will actually work, or some ideas on how to build the aforementioned oscillator section as a stand-alone, I would appreciate it if you'd type it in and post it. I realize this will require a bit of effort but you'll have the satisfaction of knowing that you helped not only me but also anyone who searches the archives in future for this tidbit of info. I've spent many many hours searching the web and have been unable to find anything along these lines.

# 3976. Opto 7000 Freq Counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-27 00:00:00 UTC
From: "Kenneth W. Schildt" <kschildt@bellsouth.net>
Message-ID: <kschildt-2710972237280001@d00172.mem.bellsouth.net>
Source record: 89658

Hello all,

Does anyone know the voltage requirments for the Optoelctronics 7000
frequency counter?

Thanks,

Ken
N4VSD

# 3977. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19971028145201.JAA17777@ladder01.news.aol.com>
Source record: 89569

In article <19971028125401.HAA11707@ladder02.news.aol.com>,
johnsonhe@aol.com (JohnsonHE) writes:

>
>> I've spent many many hours searching
>>the web and have been unable to find anything along these lines.
>
>

I would think a stable VFO should be the quest. Then simple.
The ARRL book 'Solid STate Design for the Radio Amateur'
deals with stable VFOs. There are practical circuits for small VFOs.

N9EFJ
Carl

# 3978. FS- Shortwave/Scanner owners/service manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: bush143@postoffice.worldnet.att.net
Message-ID: <634vol$iiv@bgtnsc01.worldnet.att.net>
Source record: 89570
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amatuer.misc,rec.radio.amateur.homebrew

>>>>I have a bunch of excess radio manuals for sale. Some are originals
>>>>and some are photocopies. All of the original manuals are in MINT
>>>>condition. All photocopies were professionally made copies purchased
>>>>from the manufacturer, and are either bound or in binders. ALL
>>>>MANUALS INCLUDE SCHEMATICS AS INCLUDED FROM THE MANUFACTURER!
>>>>
>>>>These manuals are being sold to clear out my radio shelf. Shipping is
>>>>extra. Some manuals are thick and some are thin, but it should not
>>>>take more than a few bucks to ship any of these manuals to the lower
>>>>48 States. Please e-mail if interested and I will provide an estimate
>>>>on shipping. Thank You!!!!!
>>>>
>>>>SCHEMATICS & BOARD-PARTS LAYOUTS (originals):
>>>> Icom R-70 $10
>>>> Icom R-71/71A $10
>>>>
>>>>OPERATIONS/OWNERS MANUALS:
>>>> AOR-3000A (original) $15
>>>> J.I.L. SX-400 and J.I.L. RF-1030 rf up converter (copy) $15
>>>> Kenwood R-1000 (copy) $10
>>>> Radio Shack Pro-2004 (original) $10
>> Sony CRF-V21 (copy-two volume set) $20
>>>> Sony 2010 (original) $10
>>>> Sony Pro-80 (copy) $10
>>>> Yaese FRG 8800 (original) $15
>>>> Yaesu FRG 9600 (original0 $10
>>>>
>>>>SERVICE MANUALS:
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>>>> Sony 2010 (copy) $10
>>>> Sony SW-55 (original) $10
>> Yaesu FRG-9600 (copy) $25
>>>>
>>>>RACAL TECHNICAL MANUAL: $25 (shipped)
>>>> Covers model RA-6217A, 6217A-3, 6217E
>>>> This thick manual includes parts list, circuit pictorials and
>>>> alignment procedures. (copy)
>>>>
>>>>
>>>>
>>>>
>>>

>>
>

## 3979. YIG microwave devices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: Allen Wallace <a_wallace@dtint.com>
Message-ID: <34560d85.0@news.itsnet.com>
Source record: 89571

I've just got a YIG filter and a YIG oscillator, but I lack any pinouts or hookup diagrams. I see that in "Microwave Update 1994" there are 3 YIG articals. The ARRL tells me that this particular year is out of print! Is there anyone out there who might sell me their copy, or photocopy the YIG articals?

Allen Wallace N7CGH

# 3980. Re: Help with RF Splitter/Combiner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: aor@gteais.com
Message-ID: <878056145.2638@dejanews.com>
Source record: 89572

Ben,

My experiences with Mini Products is that they sell low power
devices. I have seen splitters with a 1 watt capabilities.
I am transmitting 800 watts peak.

Is there a high power section to their catalog?

Thanks for the note/reply!

Al, NW2M

In article <01bce35c$a0ce43e0$3506a3cd@bwallace.cts.com>,
"Ben Wallace" <bwallace@sd.cts.com> wrote:
>
> Look in the Mini Circuits catalog ---- they have a number of splitters and
> combiners that will do the job.
>
> Ben
>
> aor@gteais.com wrote in article <878005542.32252@dejanews.com>...
> > I am building a 2 meter amplifier using a pair of MRF-151G VHF
> > transistors (300 watts each).
> >
> > How can I combine these two amplifiers using combiners/splitters which
> > will cover 10-150MHz? I know how to do this for single band operation.
> > My goal is to have 600 watts on 10 meters, 6 meters, and 2 meters thru
> > this one amp. It will be mounted on the tower, so I will not have
> > access to it once installed.
> >
> > Any thoughts, suggestions, or articles would be a big help.
> >
> > 73, and thanks in advance.
> >
> > Al, NW2M
> >
> > ----------------------==== Posted via Deja News ====-----------------------
> > http://www.dejanews.com/ Search, Read, Post to Usenet
> >

----------------------==== Posted via Deja News ====-----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 3981. Re: YIG microwave devices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34561E29.1C27@pop.removethistomailme.net>
Source record: 89573

Allen Wallace wrote:
>
> I've just got a YIG filter and a YIG oscillator, but I lack any pinouts
> or hookup diagrams. I see that in "Microwave Update 1994" there are 3 YIG
> articals. The ARRL tells me that this particular year is out of print! Is
> there anyone out there who might sell me their copy, or photocopy the YIG
> articals?
>
> Allen Wallace N7CGH

What are the mfgrs and type #s? I've got an Avantek data book, if
that's the brand.

-- jm

de KE5FX

---
Note: My E-mail address has been altered to avoid spam
---

# 3982. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3456464E.1CC2@pop.removethistomailme.net>
Source record: 89574
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

R. K. Harrison wrote:
>
> Looking for an ultra-simple RF VFO for a flea-power xmtr project. I thought
> the oscillator (Q3) section of the circuit at ...
>
> http://www.acs.ncsu.edu/HamRadio/HF/qrp/projects/160m-xmitr.html
>
> ... might be suitable, but altho I actually found a GE-2 in my parts
> box, I seem to have botched the attempt to build the oscillator as a
> stand-alone circuit. Anyone having a circuit like this that you know
> from experience will actually work, or some ideas on how to build
> the aforementioned oscillator section as a stand-alone, I would
> appreciate it if you'd type it in and post it. I realize this will
> require a bit of effort but you'll have the satisfaction of knowing
> that you helped not only me but also anyone who searches the archives
> in future for this tidbit of info. I've spent many many hours searching
> the web and have been unable to find anything along these lines.

That is a pretty horrible circuit. It looks like someone took a $8
Radio Shack 49 MHz walkie-talkie and scaled it to 160 meters. :-)

Plus, any GE-2 germanium transistors you have in your junkbox stand a
good chance of being too leaky to be useful -- germanium semiconductors
(especially power ones) don't age all that well.

Check out a newer edition of the ARRL Handbook or "Solid State Design
for the Radio Amateur" for some more up-to-date approaches.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 3983. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIs4CJ.E0z@world.std.com>
Source record: 89575

In article <snUS0GAwZ8U0Ewvq@g3uda.demon.co.uk>,
Ken Linney <ken@g3uda.demon.co.uk> wrote:

> I fancy taking out a subscription to either QEX or QST. I am really
> interested more in the home construction with some theory but NOT
> interested in reviews / Contest News etc.

In which chase QEX is a better choice than QST. However, they are
in no way comparable.

Unless you're a library, QST is not a subscription, it's a
Membership. For tax purposes, they'll tell you how much of
your dues services your subscription, but you can't join as a member
and elect to not pay for QST, nor can a non-library subscribe.
It's thick, with lots of Ads and "member communications" columns and
supposedly general interest stuff (like how morse code won the war
for the good guys, and how VHF hams saved South Dakota more
recently), plus all those prospective/retrospective fillers on
contests, even though they have a separate magazine for contesters.

QEX is available for subscription to members and to non-members.
It's 32 pages of construction and how/to. Not sure about theory,
haven't seen enough issues -- but I'll be adding it to my membership
renewal invoice this year.
http://www.arrl.org/qexinfo.html

If there's nothing in QST for you, you may want to pay the higher
non-member rate for QEX; however, there is one very good reason to
subscribe to QST, even if you never read it -- you become a voting
member of the ARRL, and thus have the chance to affect what the FCC
will be told every ham wants. Since Ken'sISP is demon.co.uk,
this probably doesn't apply to him, but I recommend this to those
in W[01-9]-land. The ARRL will pay more attention to our opinions
when we vote.

Be warned non-member Airmail subscription is expensive!

> I fancy QEX but have never seen one other than some clips shown at
> ARRL's Web Site. Is it for HF only?

I've seen it intermitently at HRO and You-Do-It magazine racks, but you
probably won't see it in the tobaconnists racks even in London. It has
had microwaves and Phase-3-D "how they put it together" articles.

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials

know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 3984. Re: High-power 50 ohm resistor for large dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <635m67$hdr@hpcvsnz.cv.hp.com>
Source record: 89576
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap

Tom Rauch (W8JItom@worldnet.att.net) wrote:

: The calatlog says the rated dissipation (steady state) is about 11
: watts per cubic inch of resistor area.

Hmmm....Excuse me??

--
Cheers,
Tom
tomb@lsid.hp.com

# 3985. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: Vincent Biancomano <103520.355@CompuServe.COM>
Message-ID: <u8BWl7$48GA.123@nih2naab.prod2.compuserve.com>
Source record: 89577

In response to Paul Mateer,
Of course Morse should stay. Building QRP equipment, and
Morse, go hand in hand. Even with that, tho, the Morse issue
has never had anything to do with the usefulness of Morse as
a mode. This issue, has, will, and always have to do with
the issue of easing requirements, and making it easier for
equipment manufacturers to sell their HF lines of equipment
(see Westlink Report for 20 May 1994, p. 3).

Regards,
Vince, WB2EZG

## 3986. recommendations on good brewing in west end toront

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: scottc@hcol.humberc.on.ca
Message-ID: <tcpnntpd.17.10.28.20.16.8.2443217854.6710437@hcol.humberc.on.ca>
Source record: 89578

Hi, is there anyone out there that knows a good brewing area near the Missassuaga area?

# 3987. CHINA HAM NEWS 10/28/97: BY1QH Special

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: Xiaopeng Rick Niu <xn6@columbia.edu>
Message-ID: <636ekr$e3b$2@apakabar.cc.columbia.edu>
Source record: 89579
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,relcom.radio.ham

CHINA HAM NEWS 10/28/97
BY1QH Special

Contributed by Lars Melin, SM0KAK
Member, Tsinghua University Amateur Radio Club, Beijing, China

Edited by Rick Niu, BD1QL
MBA '99, Columbia Business School, New York, NY
xn6@columbia.edu

* VHF DX

BY1QH is presently looking for stations who want to try 144 MHz DX, and are located less than 2,000 km away from Beijing in such DXCCs as BY, BV, VS, HL, JT, UA, and, in particular, VK6 (less than 400km from Dampier). The Dampier area is the only location to which it would be possible to make QSOs on 144 MHz using Trans-Equatorial Propagation. Stations interested in working with BY1QH on 144 MHz need to have at least one Yagi (preferably horizontally or circularly polarized), the capability to work on SSB or CW, a good take-off (low horizon) in the direction of Beijing, and a minimum output power of 50 watts.

* EME Report

In the first leg of the ARRL EME Contest, BY1QH worked SM5FRH, SM5BSZ and SM2CEW. The QSO with SM5FRH was the first EME QSO ever from China! BY1QH also heard and identified 11 more stations during the contest. Last weekend, BY1QH worked KB8RQ (first BY to North America on EME!) and W5UN. Also heard was VE7BQH.

BY1QH will participate in the second leg of the ARRL EME Contest on November 15-16. Antenna improvement is becoming urgent as it is not yet wind-proof now. In addition, the club is requesting China Radio Sports Association (CRSA) to clear the much QRMed 144.000 MHz caused by local paging system.

* Contact BY1QH

Tsinghua University Amateur Radio Club is seeking any possible assistance from the international amateur radio community, such as on EME. Please feel free to write to: David Zhang, BZ1BM (bzibm@wg.chnmail.com) or Lars Melin, SM0KAK (lars.melin@era.ericsson.se).

CHINA HAM NEWS is available for unlimited, appropriate distribution.

# 3988. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.antispam>
Message-ID: <3456ECD6.7AB9@trader.antispam>
Source record: 89580

The2X4 wrote:
> johnsonhe@aol.com (JohnsonHE) writes:
> >> I've spent many many hours searching
> The ARRL book 'Solid STate Design for the Radio Amateur'
> deals with stable VFOs. There are practical circuits for small VFOs.

Are any of them for 2m or above? Simple?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 3989. New 10 Meter Beacon List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: Stanley <so@bigfoot.com>
Message-ID: <3456E45B.2E82@bigfoot.com>
Source record: 89581

I have just updated the KC4DPC 10 Meter Beacon List.
Check it out at http://localsonly.wilmington.net/~stanley/
--
Sincerely, Stanley
Website: http://localsonly.wilmington.net/~stanley/
Nature's Vineyard: http://www.freeyellow.com/members/dixie/index.html

Unsolicited commercial e-mail is deleted by SMartMail.

# 3990. Re: Your Rights Are About To Be Violated!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: dangello@hotmail.com
Message-ID: <dangello-2710972145340001@lisuser14.li.net>
Source record: 89659
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.amateur.misc,rec.amateur.equipment,rec.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,uk.radio.info,rec.radio.swap,alt.radio.scanner,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,re

I agree, their are over ten million scaners in use. That is in theory at
least 10 million people. The NRA has only 2 million but their organized
and very vocal. The scanning community must write letters to their
congressman
http://www.geocities.com/Paris/1787
In article <01bcdcdc$d0479800$8f3e8bcd@daleal>, "Dale Allen"
<daleal@cyberhighway.net> wrote:

> Well, sir,
> I for one have not seen this piece of legislation, but, unless it directly
> affects Amateur Radio then good luck trying to get the Amateur Radio
> "community" to listen to you and help out the people that want to continue
> to be able to listen to other services. The amateur "community" has nothing
> else but it's own interests at heart, this includes if it reduces other
> people's ability to hear EMERGRENCY communications which may directly
> affect the life (lives) or property of those who would be (illegally)
> listening to police, fire, paramedics, cellular, etc. If these people would
> get off their duffs and let their congressman (woman) know how they felt
> there would be no threat at all to either the rights of hams or others to
> listen to whatever they want to, whenever they like. By the way, the way
> around the "scanner ban" is to buy your equipment from dealers in
> Canada!!!!!
> --
> Dale Allen
> KB7TNR/NNN0ARM(T)
>
> Ray Pfaff <raypfaff@erols.com> wrote in article
> <343e46b2.3046140@news.erols.com>...
> > sco@sco-inc.com (SCO) wrote:
> >
> > >Erv <kb8tnq@voyager.net> wrote:
> > >
>
> >

# 3991. Re: Help with RF Splitter/Combiner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: Ben Wallace <bwallace@sd.cts.com>
Message-ID: <01bce35c$a0ce43e0$3506a3cd@bwallace.cts.com>
Source record: 89660
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Look in the Mini Circuits catalog ---- they have a number of splitters and combiners that will do the job.

Ben

aor@gteais.com wrote in article <878005542.32252@dejanews.com>...
> I am building a 2 meter amplifier using a pair of MRF-151G VHF
> transistors (300 watts each).
>
> How can I combine these two amplifiers using combiners/splitters which
> will cover 10-150MHz? I know how to do this for single band operation.
> My goal is to have 600 watts on 10 meters, 6 meters, and 2 meters thru
> this one amp. It will be mounted on the tower, so I will not have
> access to it once installed.
>
> Any thoughts, suggestions, or articles would be a big help.
>
> 73, and thanks in advance.
>
> Al, NW2M
>
> ----------------==== Posted via Deja News ====----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet
>

# 3992. Re: SCR heat (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3455e540.9078030@eskinews.eskimo.com>
Source record: 89661

johnsonhe@aol.com (JohnsonHE) wrote:
<snip>
>If those lamps are incandescents, they pull a lot more than 1.25 amps when they
> first turn on...Like 10 or 20 amps till they get appreciably bright. Heat sink
> those little hummers and expect to replace the 4 amp SCR's on a regular basis.
> ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

---
Maybe not. Do you have the data sheet for the SCRs? Many if not most
SCRs rated at 4 amps continuous will handle a much higher surge for a
brief period. 5-10 times higher is not uncommon.

73, Bill W7TI

# 3993. FORSALE: TEKTRONIX 555 DUAL-BEAM OSCILLOSCOPE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: YD3EBM <yd3ebm@rocketmail.com>
Message-ID: <634fdj$hs5@thorgal.et.tudelft.nl>
Source record: 89662
Cross-posted to: seattle.forsale.misc,uwash.forsale,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew,alt.comp.hardware.homebuilt

Oops, I forgot about my location. I live in Seattle, WA.

Rob
YD3EBM

# 3994. FORSALE: TEKTRONIX 555 DUAL-BEAM OSCILLOSCOPE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: YD3EBM <yd3ebm@rocketmail.com>
Message-ID: <634fch$hr8@thorgal.et.tudelft.nl>
Source record: 89663
Cross-posted to: rec.radio.amateur.homebrew,alt.comp.hardware.homebuilt

Forsale: Tektronix 555 Dual-Beam oscilloscope

LOCAL SALE ONLY (for obvious reason :-))

Description:
1. It's fully functional and complete (except for the main power cable,
which you can buy at any hardware stores for around $10-15).
2. The CRT works like new !!!!
3. Two time base plug-ins: 21A and 22A. They are accurate.
You can do delayed trigerring with these time bases.
4. Vertical plug-ins included:
a. 1A1 (2 channel amplifier)
b. L (high speed vertical amplifier, single channel)
c. D (High Gain Differential amplifier)
d. W (High Gain Differential comparator)
5. Cart included.
6. Price: $80 firm, where can you buy DUAL-BEAM scope at this price? In
DUAL-BEAM scope you can see two different signals at the same time
without chopping or alternating.
This scope is big and has separate power supply box.
The number of tubes in this monster is 150+.
Buyer picks up the scope.

thanks for reading,
Rob
YD3EBM

# 3995. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3455bb1c.195800106@news.atl.bellsouth.net>
Source record: 89664

On Fri, 24 Oct 1997 12:56:29 GMT, aa9gg@flash.net (Paul Mateer) wrote:
>I say that the code should STAY! Morse is the most basic of
>communication methods and is reliable. Sure there are all these new
>digital modes and that's fine but if all hell breaks loose here on
>Earth and my controller "blows-up" , I can comfort in the feeling that
>I know how to take 2-wires from my transmitter and communicate!

Paul, why do you think your "controller" will blow up and not your radio?
Unless you're using an old vacuum tube rig, they both are made out of the
same silicon, and the radio is hooked to an antenna which makes it much
more vulnerable.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 3996. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971028125401.HAA11707@ladder02.news.aol.com>
Source record: 89665

> I've spent many many hours searching
>the web and have been unable to find anything along these lines.

Obviously you're looking in the wrong place. You could try your local library, under the electronics section.

W4ZCB

# 3997. Re: SCR heat (?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971028125801.HAA11580@ladder01.news.aol.com>
Source record: 89666

>_______________________________
>Maybe not. Do you have the data sheet for the SCRs? Many if not most
>SCRs rated at 4 amps continuous will handle a much higher surge for a
>brief period. 5-10 times higher is not uncommon.

That's right, and if you keep exercising the one cycle surge rating, you're gonna be replacing them with "frequency".

Real SCR's are dirt cheap, no sense using them beyond their ratings. I can hear his "Lights" now. What with the switching noise they're going to generate. Thank god he's not my neighbor.

W4ZCB

# 3998. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971028130001.IAA11990@ladder02.news.aol.com>
Source record: 89667

> Sure there are all these new
>>digital modes and that's fine but if all hell breaks loose here on
>>Earth and my controller "blows-up" , I can comfort in the feeling that
>>I know how to take 2-wires from my transmitter and communicate!

Given that scenario, communicating would be one of the last things on my mind.
And, who with?

W4ZCB

# 3999. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <345695d5.2425652@news.zippo.com>
Source record: 89582

On 28 Oct 1997 12:54:39 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>> I've spent many many hours searching
>>the web and have been unable to find anything along these lines.
>
>Obviously you're looking in the wrong place. You could try your local library,
> under the electronics section.
>
>W4ZCB

Don't give up, try looking here,
http://www.intio.or.jp/jf10zl/

Steve Carlisle

# 4000. Re: WWVB to Logic RF Circuit / Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: thomas.g.booth@den.mmc.com
Message-ID: <thomas.g.booth-281097181716@ls-bootht-c.ast.lmco.com>
Source record: 89583

In article <62dfqi$4p5$1@gte2.gte.net>, "cs" <s@t.net> wrote:

> Rick Mainhart wrote in message <3449533A.3158@sprintmail.com>...
> >Brooke,

> Snip>>>>>

> >Another inexpensive option is to use the broadcast television time
> >interval signal reference transmitted on one of the blanked horizontal
> >sweep lines ... time code is imbedded, is traceable to NIST standards,
> >and was written up in one of the ham radio or general electronics
> >magazines several years ago.

> Snip>>>

> >73,

> >Rick, WB3EXR

> Rick:
> The TV Vertical interval time-code is not dependable, as many
> programs are delayed and may contain time code that is several
> weeks old and many hours off. Also during commercials the time code
> may or may not drop out.

> Another myth that the Color Burst Freq(3.579545mhz) is
> dependable. Since the advent of satellite program distribution all Color
> Burst signals come from the stations sync generator. In most operations this
> has not been adjusted since the generator was manufactuered. The tolerance is > +- 20 HZ,
so they aren't very close. Some stations have this freq monitered,
> most don't.

> There was a time when the networks used Cesium standards on the
> Color Burst for stablilty before the availability of good Frame Sync's. This
> was abandoned at least 15 years ago.

> Cliff, W7VVA

Umm, Cliff, the colorburst frequency tolerance is +/- 10 Hz; see
http://www.access.gpo.gov/nara/cfr/cfr-table-search.html and look in
Section 73.682 of FCC Part 73.

I'm not sure I'd entirely dismiss the use of colorburst signals. A couple
of stations in my area do a decent job of controlling their master
oscillators, and their colorburst signals are between 0.01 - 0.1 ppm; not
good enough to check a quartz frequency standard or counter w/ high
stability oscillator, but OK for at least a coarse adjustment or checking
an uncompensated crystal oscillator. In large markets the network owned &

operated stations may have invested in a Rb or Cs standard as their master oscillator. IMO it doesn't hurt to ask a given station's engineering department how they control their colorburst frequency tolerance.

And I do agree w/ you on the vertical interval time code...I watched a friend's VCR clock get mighty confused one night, trying to synchronize to an appearently wacky/inconsistent time code.

Just my $0.02...

TGB

\\ The opinions expressed herein are my own. //

# 4001. FT: UTC VM-4 300watt mod xformer.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19971029034100.WAA22917@ladder02.news.aol.com>
Source record: 89584

I have a UTC VM-4 300 watt modulation transformer. Will to trade. Any AMers interested?

Regards,
Bob, W4RLC

# 4002. Re: Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: rick@area.com
Message-ID: <636l3e$7sf$1@nixon.area.com>
Source record: 89585

In article <iskXWCAHYMV0EwHB@two-way.demon.co.uk>,
philip de cadenet <phil@two-way.demon.co.uk> wrote:

>You'll have a problem locating a true broadband (1.8-30MHz) HF solid
>state amp although you do have several options.
>1) Ted Henry, henryradio@earthlink.net now offers a 28v 1200w output amp
>for 2150 USD.
>2) Lee Martin at RF Electronics, rfelectron@aol.com offers either a
>ready built or kit form 1200w output unit that runs off 12v.
>
>You did not state if you are actually after a mobile unit or base?
>
>There are several other mobile solid state amp's such as Made From Junk,
>SGC, Tokyo HiPower, but these three are micky mouse QRP, around 500w
>out.
>
>Lots of units that are available for the 11m band but which would

You've described the problem in a nutshell. No one seems to make
a full legal limit (i.e. 1500W PEP output at reasonable IMD, continous
duty cycle) amplifier for 1.8 to 30 MHz. I'm looking for 50V unit,
since I'm not going to use it mobile.

>These units I have up to 96 x 2SC2879, around 12 to 15kw out if you can

Anyone know what 2SC2879's sell for, and where to buy?

Rick Karlquist N6RK
rick@area.com

# 4003. New! Novice Mac Ham Radio Test Simulator - Free

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2910970438360001@wd1v.mv.com>
Source record: 89586
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.marketplace,alt.ham-radio.packet

FREE - BRAND NEW Macintosh HAM TEST SIMULATORS

Upgrade Fast!

S I M U L A T E the test and get S T I M U L A T E D!

Studying for the ham tests and have access to an Mac? If it runs System 7.XX
and has 4 Meg or more of memory, you're in business with WD1V's Ham Test
Simulators, Morse Programs, Ham Radio.FAQ, and superb "how to study" material.

The newest Macintosh Ham Test Simulators are HERE (and THERE if you can FTP)!

http://www.mv.com/ipusers/wd1v/Page2.html

Or you may obtain the latest Ham Test Simulator by mailing me a *FORMATTED
disk HD disk (1.4 M) and include a Self Addressed and Stamped disk mailer for
the return. Specify the test you need.

Simulator Name Version Valid Until

Advanced Ham Test 6.0 June 30, 1998
Extra Ham Test 6.0 June 30, 2000
General Ham Test 6.0 June 30, 1998
Novice Ham Test 7.0 June 30, 2001
Technician Ham Test 6.0 June 30, 1997 (new version
in development)

Your comments and suggestions for future versions are always welcome.

ATTN: PC and other platform users:
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
My Home Page also links to sites that offer live ham test simulations right
over the net - plus links to Ham Radio.FAQ and VE session schedules.

Good luck with YOUR next test!

73,

John Seney
http://www.mv.com/ipusers/wd1v

# 4004. Re: 1759 meter band and "lowfers"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <345721A9.2A96@ix.netcom.com>
Source record: 89587

Chris Kelly wrote:
>
> I am an aspiring amateur radio operator and hopeful successful
> homebrewer. I noticed something about the 1750 m band and how this is a
> good CW band and that this does not require a license to transmit. Also
> the trasmitters can be only 1 W in power. Does anyone have any info on
> Homebrew transmitters which would be sufficient to get on the air? I
> will be attempting to construct the project which is noted in the book,
> but are there other transmitters which are just as useful?
>
> Also, are there clubs which cater to the 1750 M band or internet mailing
> lists?
>
> Thanks,
>
> Chris
>
> ckelly@oit.iusb.edu
---
Hi chris -- have you seen the Lowfers Page at URL:
http://members.aol.com/lwcanews/index.html

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
60 PAGES AND OVER 1277 LINKS TO DX AND HAM RADIO
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 4005. Old HP digital voltmeter with nixie-tube display (HP 3430A)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: nicholas charles caruso <nzc@mediaone.net>
Message-ID: <34572F4E.F87DB49D@mediaone.net>
Source record: 89588
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have an old HP DVM, model 3430A I think, which worked when I bought it many years ago but most recently displayed garbage when I turned it on.

I'm trying to decide if I should try to restore it or scrap it and re-use the enclosure for one of my projects. It's a really nice enclosure.

Any advice?

# 4006. WTB: Oil-filled Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: adkins@roseau.means.net
Message-ID: <adkins-2910970949330001@karlstad-61.dialup.means.net>
Source record: 89589

Need 20, 10uf/600v oil-filled caps like the Cornell-Dubilier 121J,
rectangular containers. Please e-mail with any info.
Thanks.

# 4007. Drake MN-75 $150.00 shipped

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bce544$fc62c700$6eddd8cc@km3g.cts.com>
Source record: 89590
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Looks about an 8. Works perfect. 200 watt tuner that matches the 7-line.
$150.00 shipped CONUS.

Lane
KM3G

# 4008. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <rpF6GFAPtzV0EwXw@pacsat.demon.co.uk>
Source record: 89591

In article <631en2$9e4@harpo.cs.ubc.ca>, Dave Martindale
<davem@cs.ubc.ca> writes
>
>Try the VHF/UHF Manual. The 4th edition has several different designs
>for helical resonators, for example. However, that edition is about
>15 years old now, and a new edition has just been published. I eagerly
>await getting my hands on a copy. Don't know what's in it yet though.
>
> Dave

Don't bother - its completely different from the originals and is more
like a beginners guide. Save your money! Most of the stuff in it has
been published before. Inc the design for the single 4XC250B which must
be 20 years old now! Nearly all the equipment designs have either been
published before either in the manual or radcom, or are from VHF comms
and are from that magazine and somewhat 'suspect' (like 3 stage MMIC
amps in the transverters being fed directly to the antenna without any
sign of filtering after them! Sorry but its an expensive flop (20 UKP
price tag!)

73 Simon GM4PLM
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 4009. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <345a5e87.2453392@news>
Source record: 89592

On 28 Oct 1997 13:00:41 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>> Sure there are all these new
>>>digital modes and that's fine but if all hell breaks loose here on
>>>Earth and my controller "blows-up" , I can comfort in the feeling that
>>>I know how to take 2-wires from my transmitter and communicate!
>
>Given that scenario, communicating would be one of the last things on my mind.
> And, who with?
>
>W4ZCB

Exactly. I love these "Stranded on a desert island with only a CW
transciever" types. They think every man, woman, and child in the
world should be a morse code expert for the one in a million chance
that they'll need it to save their lives. Just another desparate
justification to keep an outdated hazing ritual which is rapidly
killing Amateur Radio (with help from the ARRL.)

Demonstrating to the government that you Know the Holy Code allows
one to enter the Temple of the Holy HF, the Lower Bands Lodge Hall
where only the Good and True amateurs reside.

quote from Len Anderson

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

# 4010. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Timothy_Shearer@mk.com
Message-ID: <345775DE.5A19@mk.com>
Source record: 89593

Ken Linney wrote:
>
> I fancy taking out a subscription to either QEX or QST. I am really
> interested more in the home construction with some theory but NOT
> interested in reviews / Contest News etc.
> I fancy QEX but have never seen one other than some clips shown at
> ARRL's Web Site. Is it for HF only?
> 73es Ken
>

QEX is a smallish journal (20 pages more or less) which is cover to cover articles with a few advertisments for parts suppliers, ARRL software etc. Its content covers all amateur spectrum allocations. It covers electronics for sure but recently has covered digital signal processing in much detail (lots of math). It also covers mechanical subjects such as antenna rotor stress dynamics etc.

There are usually 3 to 5 articles an issue.

Articles written by various contributing authors are of various reading levels. Many articles are written at the doctorate college level (very intense and I'm sure not comprehesible to many). Other articles are written at a reasonable technical level which is generally above that found in QST. All article usually come with some graphics which appear to have been drawn by the author (not much editing or retouching apparently).

I like this journal and usually read each article. These articles can take an hour to several hours to read and comprehend. However, these article are not as dry as reading an IEEE proceedings journal. The articles are by hams and I think this makes them somewhat more readable.

Goodluck
Tim

# 4011. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34579277.0@newshost.pcug.org.au>
Source record: 89594

carlisle@capescott.net (Steve Carlisle) wrote:

> Don't give up, try looking here,
>http://www.intio.or.jp/jf10zl/
>

Also have a look at the links section of the Australian QRP Home Page
(URL below).

73,
--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home
Page and the STWG Web Site.
_____

# 4012. Re: Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Rick Mainhart <mainhart@sprintmail.com>
Message-ID: <34579264.53E1@sprintmail.com>
Source record: 89595

Try Harris Corporation, Sunair Corporation, Rockwell Collins, Motorola among others that build big solid state amplifiers that cover 1.6-30 MHz.

You might wish to check "Janes Military Communications Handbook", a companion to "Janes Aircraft" and "Janes Fighting Ships" at a larger library. The list of HF manufacturers is a bit longer than what I provided, I'm going from memory (about 3 years and two jobs ago).

73,

Rick, WB3EXR

philip de cadenet wrote:
>
> Rich
> >>You'll have a problem locating a true broadband (1.8-30MHz) HF solid
> >>state amp although you do have several options.

--
It is not necessary to understand things in order to argue about them --
Beaumarchais

# 4013. Re: Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <d4aYzpA9t4V0EwgY@two-way.demon.co.uk>
Source record: 89596

Rich
>>You'll have a problem locating a true broadband (1.8-30MHz) HF solid
>>state amp although you do have several options.
>>1) Ted Henry, henryradio@earthlink.net now offers a 28v 1200w output amp
>>for 2150 USD.
>>2) Lee Martin at RF Electronics, rfelectron@aol.com offers either a
>>ready built or kit form 1200w output unit that runs off 12v.
>>
>>You did not state if you are actually after a mobile unit or base?
>>
>>There are several other mobile solid state amp's such as Made From Junk,
>>SGC, Tokyo HiPower, but these three are micky mouse QRP, around 500w
>>out.
>>
>>Lots of units that are available for the 11m band but which would
>
>You've described the problem in a nutshell. No one seems to make
>a full legal limit (i.e. 1500W PEP output at reasonable IMD, continous
>duty cycle) amplifier for 1.8 to 30 MHz. I'm looking for 50V unit,
>since I'm not going to use it mobile.
>
>>These units I have up to 96 x 2SC2879, around 12 to 15kw out if you can
>
>Anyone know what 2SC2879's sell for, and where to buy?
>
>Rick Karlquist N6RK
>rick@area.com
You can try H & Y Electrical on 1-800-638-5451.
17.75 each in lots of 12 or more.
How's that?

Phil G4ZOW/M
Can't find a thing here in the UK.
Got to find me a wife and a visa, or should I learn espanol?

# 4014. Crystal Current Measurement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <638gg9$krq$1@ncar.ucar.edu>
Source record: 89597

I'm looking for a method to measure the crystal current in a vacuum tube crystal oscillator circuit. I'd like to measure the current to at least 10% accuracy or better. I'd rather not use the light bulb technique that was used years ago to get a relative indication of crystal current. The point of this measurement is to do a comparison of different oscillator circuits and on any one particular circuit to be able to measure and record the crystal current for various operating conditions.

Is there a means of doing this without resorting to the purchase of an RF ammeter that would read down to a few milliamp range? An RF milliammeter of this type would be pretty scarce these days.

The maximum or full-scale range I'm interested in measuring would be 100mA and probably minimum would be down around 5 to 10mA. The oscillator frequency to be measured would be the 1.8, 3.5, and 7MHz ham bands.

Does anyone have direct experience doing this type of measurement that could offer some practical advice?

Thanks! Chip Owens, NW0O, owens@stout.atd.ucar.edu
--
Chip Owens NW0O, (owens@stout.atd.ucar.edu)

## 4015. home brewing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: scottc@hcol.humberc.on.ca
Message-ID: <tcpnntpd.17.10.29.18.55.42.2443217854.6722904@hcol.humberc.on.ca>
Source record: 89598

Greetings, I have a good friend who is really into making both beer and wine as a hobby. What would you suggest as a Christmas present to complement this hobby? Many thanks

to: ** ALL **
cc: edymond

# 4016. Re: Solid state HF amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: badger@telalink.net
Message-ID: <638ifm$on9@news2.tds.net>
Source record: 89599

In article <34579264.53E1@sprintmail.com>, mainhart@sprintmail.com utters...
>
>Try Harris Corporation, Sunair Corporation, Rockwell Collins, Motorola
>among others that build big solid state amplifiers that cover 1.6-30
>MHz.

Yes, they are available from Harris and such. I was in Broadcast Engineering in the 80's
and installed many solid state 1 to 10 Kw AM units and a few FM transmitters as well.
Have wondered myself if the technology has been around why it isnt used as often as
it could be. Perhaps it is because most of the designs tend to use a higher voltage
( Harris for instance uses I think 48 volts in its "lower power" 1-5 Kw if I remember correctly, which I may not...) But this gear is made for continuous duty and the amps
( as well as the transmitters I fooled with ) will be priced accordingly.

Best bet is to look at the latest Handbook and such... Other than that? *shrug*

Good luck

Tom KA4RKT

--
SPAM bait: the current board of the Federal Communications Commission:
Chairman Reed Hundt: rhundt@fcc.gov Commissioner James Quello:
jquello@fcc.gov
Commissioner Susan Ness: sness@fcc.gov Commissioner Rachelle Chong:
rchong@fcc.gov
more spambait: abuse@localhost postmaster@localhost admin@localhost
customer@email.usps.go

# 4017. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3457bd4f.327454984@news.atl.bellsouth.net>
Source record: 89600

On Tue, 28 Oct 1997 23:59:18 -0800, Dennis Erwin Thurlow
<geosynq@trader.antispam> wrote:
>The2X4 wrote:
>> johnsonhe@aol.com (JohnsonHE) writes:
>> >> I've spent many many hours searching
>> The ARRL book 'Solid STate Design for the Radio Amateur'
>> deals with stable VFOs. There are practical circuits for small VFOs.
>
>Are any of them for 2m or above? Simple?

2m and above *stable* VFO. heh, heh, snicker, chortle.
Sorry, free running oscillators aren't what we normally
mean by stable above a few MHz. You can use a VXO,
or you can use a VCO stablized by a PLL or AFC, but
you're not going to get a stable LC VFO at VHF+.

Ok, maybe that isn't exactly true. It depends on what
you mean by stable. If you're doing WBFM, you can
get enough stability out of an LC VFO to be useful.
Figure about the best you can do with LC VFO technology
without going completely nuts is about 10 parts per million.
That's about 1.44 kHz at 2m, not very good. And getting
even that level of stability isn't simple.

A VXO *can* be simple, though. In fact it is almost
always simpler than a VFO. You can pretty easily
get a 200 kHz tuning range on 2m with a VXO,
and it will give you near crystal stability. That's
what you'll want to use until you're ready to tackle
a PLL controlled VCO.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4018. Re: WTB signs with bubbling tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Bill <w5ikb@livingston.com>
Message-ID: <3458029B.2AE5@livingston.com>
Source record: 89601
Cross-posted to:
rec.antiques.radio+phono,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Kevin Deal / Upscale Audio wrote:
>
> In article <34519F51.67C1@worldnet.att.net>,
> RWood54741@worldnet.att.net wrote:
> >I collect old radio (and any other) advertsing signs which
> >incorporate bubbling glass tubes. If you have one and wish to
> >sell, I will pay a very respectable price for it. Please email
> >me.
> >
> >Thanks,
> >
> >BOB
> >
> >
>
> Wow...I would love to see one of those...
>
> What the hell is a bubbling tube? And who makes the signs you've seen thus
> far?
>
> Regards,
>
> Kevin Deal Largest U.S. inventory of rare vintage audio tubes
> Upscale Audio Authorized dealer for Sonic Frontiers, Anthem
> 1410 Lemonwood Dr West Audible Illusions, Presence, Margules/Magenta, B&K
> Upland, CA 91786 PSB, Meadowlark, Energy, Sound Dynamics, Odyssey
> Voice(909) 931-9686 Speakercraft, Nordost, Synergistic, Kimber Kable
> Fax (909) 985-6968 Most upper quality Mid-Fi/Home Theater brands too

Hi Kevin,
Bob is talking about glass tubes like 3/8 to 1/2 inch diameter
that have a low boiling point liquid in them. They are made in
the form of letters in a sign that has a light in the bottom
for illumination and a heat source. The heat boils the liquid
and bubbles rise in the tubes.
If you see any bubbling radio tubes (valves) let me know.
Bill on Lake Livingston Texas For address..change com to net

# 4019. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3457CDC3.1B2F@pop.removethistomailme.net>
Source record: 89602

```
miker wrote:
>
> The2X4 wrote:
> >
> > In article <19971028125401.HAA11707@ladder02.news.aol.com>,
> > johnsonhe@aol.com (JohnsonHE) writes:
> >
> > >
> > > >> I've spent many many hours searching
> > > >>the web and have been unable to find anything along these lines.
> > > >
> > > >
> > >
> > > I would think a stable VFO should be the quest. Then simple.
> > > The ARRL book 'Solid STate Design for the Radio Amateur'
> > > deals with stable VFOs. There are practical circuits for small VFOs.
> > >
> > > N9EFJ
> > > Carl
>
> I suggest the world's simplest VFO is a tunnel diode hooked across
> a tuned circuit with two bias resistors. Can't get much simpler than
> that. Useless for typical applications, but it's simple.
> miker
> --
> Please remove & from return address before replying.

Sure you can... an NE-2 neon lamp, one capacitor, and a potentiometer!
3 components, beat THAT with your fancy tunnel diode gizmo.

-- jm :-)

-----------------------------------------------------
Note: My E-mail address has been altered to avoid spam
-----------------------------------------------------
```

# 4020. Re: Old HP digital voltmeter with nixie-tube display (HP 3430A)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: tosca@warwick.net
Message-ID: <345c02c1.19616488@news.warwick.net>
Source record: 89603

On Wed, 29 Oct 1997 07:42:55 -0500, nicholas charles caruso
<nzc@mediaone.net> was lurking in rec.radio.amateur.homebrew, and
composed the following about "Old HP digital voltmeter with
nixie-tube display (HP 3430A)":

> I have an old HP DVM, model 3430A I think, which worked when I bought it
> many years ago but most recently displayed garbage when I turned it on.
>
> I'm trying to decide if I should try to restore it or scrap it and
> re-use the enclosure for one of my projects. It's a really nice
> enclosure.
>
> Any advice?

Open it up and check the ripple off of the power supply caps.
They may have dried out, and aren't filtering well.

VT
--
�ase ELECTRONICA! �1976 TE Inc.
mailto:tosca@warwick.net

==PLEASE E-MAIL AS WELL AS POST;
ISP HAS BEEN PURGING QUICKLY! ==

# 4021. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <3456F54E.1A6A@isrc.net>
Source record: 89604

Ken Linney wrote:
>
> Hello All
>
> I fancy taking out a subscription to either QEX or QST. I am really
> interested more in the home construction with some theory but NOT
> interested in reviews / Contest News etc.
> I fancy QEX but have never seen one other than some clips shown at
> ARRL's Web Site. Is it for HF only?
>
> I miss the older American Ham Radio of around 10 years ago....

I've never seen an issue of _QEX_, although I've heard about it. _QST_ offers something for everyone, eventually.

I suggest getting as many back issues of _QST_ as you can. It's far cheaper that way. I can wait a year or two until I can buy years of them in batches with far less money. Most of the technical articles in there won't be out of date for quite some time. I'm not a contester, so I can wait. Any swap net or hamfest will have somebody dumping stacks of _QST_, _73_, and other ham mags.

Matt J. McCullar, KJ5BA
Arlington, TX

# 4022. Opinions about Palomar Eng. VLF-A Converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <3456F6DE.972@isrc.net>
Source record: 89605

I'd like to check out the RF spectrum below the AM broadcast band (primarily to listen to aviation beacons and whatnot) and what looks most promising to me so far is a VLF converter made by Palomar Engineers. It takes the VLF band and shifts it to the middle of the 80-meter band on your ham HF receiver. It costs about $80 U.S. Has anyone ever played with this? Good or bad data would be very welcome.

Thanks!

Matt J. McCullar, KJ5BA
Arlington, TX

# 4023. Re: probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <3456F410.1182@isrc.net>
Source record: 89606

mark saterfield wrote:
>
> Pehaps this is not the appropriate newsgroup, but i am trying to design
> a pen-like probe that can be used to detect AC current to an outlet
> without having to actually plug it in. These probes are available
> commercially and apparently detect the 60 Hz radiation. I want to build
> one myself to understand the theory
> better.
>
> 73 es Tnx, kc4tzn

I read a good article on non-contact AC voltage detectors in the May '97 issue of _CEE News_. According to the notes I took, they work like this.

Capacitive coupling is the key. If you connect an AC voltage across the two plates of a capacitor, an AC current wil flow as the electrons are alternately attracted or repelled by the voltage on the opposite plate. There's a complete AC circuit, even though there's no "hardwired" circuit connection. The electrical field inside the capacitor, between the two plates, is what completes the AC circuit.

When you hold the barrel of the voltage detector in your hand and place the tip near a live conductor, you are inserting the high-impedance sensing element into a capacitively coupled series circuit. Your hand and body form a relatively large capacitor coupled to the floor. The sensor tip is a small capacitor coupled to the live voltage. The sensing circuit detects the voltage and turns on a light or sounds the buzzer.

This type of sensor won't work if you're standing on a wooden ladder, and it won't read a live wire inside a grounded metal conduit. If in doubt, check with a voltmeter.

HTH,

Matt J. McCullar, KJ5BA
Arlington, TX

# 4024. Re: Listening to Cell phone on a scanner.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Daniel and Cheryl Warren <warrend@ridgecrest.ca.us>
Message-ID: <636g01$dac$1@ash.ridgecrest.ca.us>
Source record: 89607
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <3444E89C.60F4@flinet.com> John, johnr@flinet.com writes:
>Peter D. Richeson wrote:
>
>> Now here is the question: Is it possable to hear both sides of a cell
>> phone conversation on a single freq. I say no. Cell phones are full
>> duplex, one freq. goes from the radio to the tower and the other frome
>> the tower to the radio. Two of the people there said that in %90 of the
>> time they can here both sides of the conversation. What is going on.
>>
Yes, the cell phones are full duplex, but... you can generally pick up
both sides of the conversation by monitoring the base station (867-895
Mhz or so). The base is higher power and easier to hear than the remote
(which is somewhere in the 822-850 area). What you hear is the (landline
phone user) speaking quite clearly and the remote user a little fainter.
What's happening is the microphone in the landline user's phone is
actually picking up what the remote is saying via physical conduction in
the handset. This is then broadcast out from the base. Didn't realize
those mic's were that sensative!

Dan

# 4025. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <4GpikDATP7V0EwW3@g3uda.demon.co.uk>
Source record: 89608

In article <345775DE.5A19@mk.com>, Timothy_Shearer@mk.com writes
>Ken Linney wrote:
>>
>> I fancy taking out a subscription to either QEX or QST. I am really
>> interested more in the home construction with some theory but NOT
>> interested in reviews / Contest News etc.
>> I fancy QEX but have never seen one other than some clips shown at
>> ARRL's Web Site. Is it for HF only?
>> 73es Ken
>>
>
>QEX is a smallish journal (20 pages more or less) which is cover to cover
>articles with a few advertisments for parts suppliers, ARRL software etc.
>Its content covers all amateur spectrum allocations. It covers
>electronics for sure but recently has covered digital signal processing
>in much detail (lots of math). It also covers mechanical subjects such as
>antenna rotor stress dynamics etc.
>
>There are usually 3 to 5 articles an issue.
>
>Articles written by various contributing authors are of various reading
>levels. Many articles are written at the doctorate college level (very
>intense and I'm sure not comprehesible to many). Other articles are
>written at a reasonable technical level which is generally above that
>found in QST. All article usually come with some graphics which appear to
>have been drawn by the author (not much editing or retouching
>apparently).
>
>I like this journal and usually read each article. These articles can
>take an hour to several hours to read and comprehend. However, these
>article are not as dry as reading an IEEE proceedings journal. The
>articles are by hams and I think this makes them somewhat more readable.
>
>Goodluck
>Tim
Hi Folks
Many thanks for the comments. Its given me a flavour of what is
in it. Sounds to be the sort of level that will fit the bill nicely.

Thanks to all for the contributions... 73es
... Ken

# 4026. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: Giancarlo Sanna <gs.ce@iol.it>
Message-ID: <34574A60.77ABA4E@iol.it>
Source record: 89609
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Gary Coffman wrote:

> On Mon, 08 Sep 1997 16:11:04 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:
> >But the one I like best goes like this. This era was filled with pulp
> >magazines catering to the experimenter. (Everyone at the end of
> >the Victorian age apparently viewed himself as a closet inventor
> >or tinkerer.) One of these magazines was called Home Amateur
> >Mechanic, and it featured many simple radio sets a person could
> >build. It is likely that when asked what kind of radio an operator
> >was using, he might send back RIG HR ES HAM, meaning that
> >it was one of the circuits shown in Home Amateur Mechanic
> >magazine. Since telegraphers tend to abbreviate everything, due
> >to the low throughput of Morse, this is plausible, and Home
> >Amateur Mechanic magazine certainly did exist in the correct
> >era. So it was those HAM radios which started the use of ham
> >in amateur radio.
>
> Er, ah, the pseudo-CW as written makes no gramatical sense.
> Lets try RIG HR IS HAM or RIG HR DE HAM. The latter
> makes the most sense, IE it says the rig is *from* Home Amateur
> Mechanic magazine, but the former may have been the one used.
> Apparently, no one alive today knows.
>
> Gary
> Gary Coffman KE4ZV | You Make It | Email:
> Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
> 534 Shannon Way | Guaranteed | or
> Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4027. WWW.IW7CHV.ORG

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-29 00:00:00 UTC
From: iw7chv@linux.iw7chv.org
Message-ID: <34573b73.275394062@news.tin.it>
Source record: 89610

The site http://www.iw7chv.org has been modified. For who already knows
about it will find really interesting news, explained with a functional
graphics to quickly understand what are the services offered. I say
someone for who go to see it the first time:

- HamRadio Search Engine: with over 10000 entries is the most complete
HamRadio Search Engine. You can search/add/modify your URL. It's also
possible to put a banner the first page of the gate.

- Internet <-> Packet Link: You can send mail between Packet Radio
Network and Internet. The service is in testing way..test it.

- Internet Radio gateway: you can browse the gate reading the Packet
bulletins around the HamRadio World.

- TOP 10 HamRadio Site: TOP 10 permit you to vote your favorite Ham
Radio URL and suggest your one.

An more ... HamRadio news, POWWOW community, meteo page, etc. ...

For better information write to:

PacketAddress: IW7CHV@IW7CHV.IPUG.ITA.EU
E-mailAddress: iw7chv@linux.iw7chv.org
WWW: http://www.iw7chv.org
Greetings from Raffaello Di Martino

---
PacketAddress : IW7CHV@IW7CHV.IPUG.ITA.EU
FidoNET : 2:335/719.6
Radio E-mail : iw7chv@linux.iw7chv.org
Job E-mail : dimartino@webdes.com
HamRadio Site : http://www.iw7chv.org
My Job Site : http://www.webdes.com (WEB design s.r.l.)
Phone : Home:080-8775895 Job:080-5576911 Cell:0347-3604205
---

## 4028. VHF/UHF/Microwave magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@telis.org>
Message-ID: <34587EBC.6DC1@telis.org>
Source record: 89519

I've seen some commentary on this NG concerning suitable magazines.I suggest that anybody interested in VHF/UHF/Microwave amateur equipment consider The German magazine DUBUS or VHF Communications.They are only published 4 tiumes a year,but you will generally find more useful info in one issue than several years worth of other magazines.
73 Ken W6GHV

# 4029. Re: High-power 50 ohm resistor for large dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <63a003$ln7@bgtnsc02.worldnet.att.net>
Source record: 89520
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap

On 28 Oct 1997 21:41:27 GMT, tomb@lsid.hp.com (Tom Bruhns) wrote:

>Tom Rauch (W8JItom@worldnet.att.net) wrote:
>
>: The calatlog says the rated dissipation (steady state) is about 11
>: watts per cubic inch of resistor area.
>
>
>Hmmm....Excuse me??

Same thing I thought, but that's what it says. I would think it should
be a bit more complex than that, but maybe it's because they limit the
physical design to a given ratio of thickness vs surface area.

On Tue, 28 Oct 1997 11:01:40 -0600, aor@gteais.com wrote:

>Tom,
>Where did you see these resistors listed for such a price?
>I called every resistor mfgr to get a price. Most were
>$2-$3 dollars per watt, for non inductive ceramics.

And you have to be careful because a lot of those non-inductives are
not non-inductive at RF.

As to the price, from a BOM priced out in 1996 from Stackpole.....

90 watt oil 4.94 each
250 watt CCS non-oil 6.32 each
300 watt CCS oil type 10.56 each

>The replacement resistor for the Heathkit Cantenna was
>in the $30-40 range for single units. Most would not
>even talk about a single unit... at any price.

Like I said before, retail or street $30 seems fair in one piece.

>I have 8" and 12" resistors working thru 500 Mhz with
>a flat SWR. We placed a brass strip on each side to
>create a ground plane to make the resitor follow the
>Zo calculations for 50 ohms. The resistor is the center
>conductor of stripline design. (sort-of..)

That helps, but the best idea (as Tom B and myself posted) is to
surround the resistor on all sides and making the line impedance match
the ADJACENT resistance. One end of the resitor is at zero, and the
other at 50.

In other words, at the ground end the line should be zero ohms linearly increasing at the middle point of the resistor to 25 ohms, and continuing until the feed end reaches 50 ohms. Of course the most critical point is near the open end, so you really don't need to go to zero at the far end.

>We made dummy loads for our club where 16 resistors
>were soldered over a ground plane and the SWR never
>moved (1:1). I have no equipment over 450 MHz, so
>I have no idea where it becomes inductive. Bird watt
>meters were used. The 16 resistors, brass, and a
>quart paint can totaled less than $5 bucks per dummy
>load. Medical-grade mineral oil was used as the coolant.

Sounds like a great project. More people should use dummy loads.

You brought up another good point. The Bird 43 meter is rated at + or - 5% of the full scale reading anywhere on the scale. So if we use a 100 watt slug, a within tolerance meter can read 5 watts high or low anywhere on the entire scale.

In the reflected mode, with 100 watts forward on a 100 watt slug, the reflected power can be as high as 5 watts without showing anything, and the meter still be within rated tolerence. That means a 1.6:1 SWR could show up as 1:1, if the same slug set to full scale is used to read forward and reflected power.

Thank goodness for that, because most 50 ohm coaxial lines aren't even fifty ohms. ;-)

73 Tom

# 4030. Re: Old HP digital voltmeter with nixie-tube display (HP 3430A)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <63a424$jo6@sjx-ixn4.ix.netcom.com>
Source record: 89521

In <345c02c1.19616488@news.warwick.net> tosca@warwick.net (Vic Tosca)
writes:
>
>On Wed, 29 Oct 1997 07:42:55 -0500, nicholas charles caruso
><nzc@mediaone.net> was lurking in rec.radio.amateur.homebrew, and
>composed the following about "Old HP digital voltmeter with
>nixie-tube display (HP 3430A)":
>
>> I have an old HP DVM, model 3430A I think, which worked when I
bought it
>> many years ago but most recently displayed garbage when I turned it
on.
>>
>> I'm trying to decide if I should try to restore it or scrap it and
>> re-use the enclosure for one of my projects. It's a really nice
>> enclosure.
>>
>> Any advice?
>
>
>Open it up and check the ripple off of the power supply caps.
>They may have dried out, and aren't filtering well.
>
>VT

Excellent advice! I can't count the number of times I've found this to
be a problem in an old piece of HP test gear found at a swapmeet. It's
probably the number 1 failure.

Regards,

- Jeff, WA6AHL

(A casual collector of old HP test equipment)

# 4031. Re: QEX Mag or QST?? thoughts please?? // Comm.Q'ly

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIvK1v.LAw@world.std.com>
Source record: 89522

Carl wa6vse wrote:

[on construction article in the last iss. of QST]
> Hardly "state of the art" by any stretch ...
> Being so "wide open" ("DC to Daylight") can be a distinct
> disadvantage in many areas

Yup. Even though it doesn't get anywhere near daylight ...
and doesn't respond well to DC either. :-)

> I think it would be fairer and more accurate to say "QEX is as
> close to "rocket science" as the ARRL gets.

How about the ARRL UHF/Microwave Experimenter's book?
That seems to have retained a technical edge.

> > You should also consider a worthwhile CQ publication called
> > Communications Quarterly. It has interesting construction
> > and theoretical articles. I recently subscribed for one
> > year (4 issues) for $24. This was a discounted rate at a
> > recent hamfest.

> I would be interested in getting subscription information
> (an e-mail address would be nice) for Communications Quarterly.
> If someone can send me that information, I'd be appreciative.

Yup, good mag. I probably ought to sign up, Barnes and Noble hasn't
kept it in stock reliably of late. Not sure if they stopped ordering
it because I didn't get in for a while or if a couple someones else
bought both copies before I got there.

Comm.Q'ly seems to be the only CQComm magazine not to have its own
web homepage yet.

The CQ Magazine website's orders page
http://members.aol.com/cqmagazine/cqorder.htm
has prices for ALL CQComm. mags, from Pop.Comm through the three CQ
mags (CQ, CQ-contest, CQ-VHF) to CommQ; but it has the full $33 rate for
CommQ, not the hamfest $24 rate *sigh*. If they want to increase
circulation of Comm.Quarterly among hams, maybe they'd offer the
hamfest rate to folks in the reflector/newsgroup?

73 de N1VUX
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 4032. Re: home brewing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <63ab6j$8hc_001@leeds.ac.uk>
Source record: 89523

In article
<tcpnntpd.17.10.29.18.55.42.2443217854.6722904@hcol.humberc.on.ca>,
<scottc@hcol.humberc.on.ca> wrote:
>Greetings, I have a good friend who is really into making both beer and
>wine as a hobby. What would you suggest as a Christmas present to
>complement this hobby? Many thanks
>
>to: ** ALL **
>cc: edymond
>

Scott, much as I enjoy beer and wine (me and my flatmate made some nice
homebrew beer), this newsgroup is aimed primarily at amateur radio
enthusiasts (hence the newsgroup name :-) )
To us homebrew generally refers to the making of transmitters/receivers and
test equipment.
Good luck with finding a suitable Xmas present.

73 de Laurens M1CCO

## 4033. 15 meter trx - schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: jmh@titan.mpae.gwdg.de
Message-ID: <63abcp$jb8$1@gwdu19.gwdg.de>
Source record: 89524

Could anybody point me to books or articles where I could
find schematics and data for homebrewing a 15 meter telegraphy
trx (or tx and rx separately)?

vy 73 de DG0LFH (hoping to upgrade soon to DH...)
Jan-Martin

# 4034. Re: Hand held Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971030095136.13234F-100000@oso.slonet.org>
Source record: 89525

How do I get in contact with TechAmerica? Cliff K7RR

On Thu, 30 Oct 1997, Bill Turner wrote:

> "John R. Glazier" <glazier.john@mcleod.net> wrote:
>
> >I received an ad today from Tech America advertising two handhelds; one
> >for 2M and another for 440MHZ. These are Alinco radios that have a
> >high/low output of 340mw/50mw. Each are $88.00. I would like to buy
> >the 2M and use it for Packet. My only concern is the low power out.
> >Does anyone know of a kit or plans that could be used to increase the
> >power. I think this would be an excellent setup for a home 2M
> >station/packet radio. Any help or where to look appreciated. Thanks
> >for your time. 73's KB0YYZ
> _____________________________________________________________
> I'm interested in this HT also, but from the picture it looks like the
> antenna may not come off, so there may not be a way to connect it to
> an external amp. Does anyone know for sure?
>
> 73, Bill W7TI
>
>
>

# 4035. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3458CBC9.5566@crpl.cedar-rapids.lib.ia.us>
Source record: 89526

David Shalita wrote:

> Can I add resistors in series
> with each 3055 emitter to help current sharing? If so, what is the
> method to determine correct resistor value?

A 0.1 ohm, 5 watt resistor in each emitter is common practice. Each additional 1.0 ampere produces an additional 0.1 volt, which helps a lot to equalize emitter currents. The greater the current the greater the equalization. This seems a lot better than base resistor equalization.

Bill W0IYH

# 4036. Re: Hand held Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIvrzr.5p8@world.std.com>
Source record: 89527

Cliff K7RR wrote:
> How do I get in contact with TechAmerica?

http://www.techam.com/

or, from http://www.tandy.com , click on the RIGHT icon instead of
the LEFT icon which would take you to Radio Shack.

Tech America is Tandy's answer for everyone who said bring back
Allied Radio Shack and/or Lafayette. Unfortunately, only one store
(Denver) so far, but the catalog looks great.

They appear to have bought the ARRL's mailing list, or someone's,
since a lot of hams I know have received the catalog and all fliers
for months. (Yet another reason to join the ARRL that has nothing
to do with the quality of QST. :-)

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 4037. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3458E09E.14D0@pop.valley.net>
Source record: 89528

David Shalita wrote:
>
> Hi,
> I have a sick 13.8 v regulated No_Name 8 amp power supply that runs
> every thing in my QRP shop. PS ckt is roughly a 723 regulator IC,
> TIP41A predriver into two 2N3055 pass transistors.
> TIP41A is powered from a DC voltage more positive than collector
> voltage for 3055 pass transistors.
>
> I just discovered both 2N3055 transistors failed and both had open base
> emitter junctions. I opened one 3055 package and can clearly see the
> base lead wire from base header pin to die is burned open mid span. PS
> has
> been in service for 8 years very lightly load. Why this failure?
>
> I drew a schematic and discovered both 3055 bases are fed with 6.2 ohm
> individual
> base resistors. Both 3055 collectors are tied in parallel to raw 22 vdc
> in.
> Both emitters are tied in parallel without any current sharing
> resistors.
>
> I repaired by replacing both 3055's and then tested by lightly loading
> PS to 0.3 AMPS for 30 minutes. I then touched each 3055 heatsink. One
> 3055 was HOT as HECK. Other 3055 was stone cold. Not sharing current
> well I guess.
>
> I want to improve this PS reliability. Can I add resistors in series
> with each 3055 emitter to help current sharing? If so, what is the
> method to determine correct resistor value?
> Should be able to measure voltage drop across each emitter sharing
> resistor
> to confirm total current and how well sharing is occuring?
>
> Thanks for any suggestions.
> 73, W6MIK
>
Hello--
You're probably already aware of this, but not all "2N3055s" are created
equal. If I recall correctly, the original device used a
diffused-junction design, but certain manufacturers sometimes dumped
fallout from other TO-3 production runs into the stamper-- whatever
leftover production devices met the very basic 2N3055 specs.

Thus, you might find a "2N3055" with a much "hotter" (i.e., higher beta and/or higher Ft cutoff frequency) chip than the original device designers ever hoped to produce. So, use a pair from the same vendor if you can.

Re: emitter-balancing resistors-- if your design permits, spec the resistor to drop approximately 0.1 to 0.5 volts at full load. Emitter current produces a voltage drop that opposes the increase in Vbe at higher base-current drive levels.

73,
Brad AA1IP

# 4038. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@telis.org>
Message-ID: <3458FDFF.7672@telis.org>
Source record: 89529

Jon Bloom wrote:
>
> Carl R. Stevenson wrote:
> >
> > Joe Buch <nospam@nowhere.net> wrote in article <345769d0.0@news.dol.net>...
> > >
> > > An article in the November QST was entitled "A MMIC Preamp
> > > for 'DC to Daylight'". The amplifier is a module designed
> > > to work from DC to 2000 MHz mounted on a PC board with a few
> > > external gazinta and gazouta parts. Not exactly rocket
> > > science, but a useful state-of-the-art design with wide
> > > application..
> >
> > Hardly "state of the art" by any stretch ... those types
> > of broadband amp MMICs have been available for many years.
>
> Interesting. What technology has displaced the MMIC as a gain block?
>
> > (and building with them is a virtual "no-brainer" ... hardly
> > worth an article, since all you could possibly need to know
> > is in the data sheet from the manufacturer)
>
> True, *if* you are familiar with UHF design and construction techniques.
> Obviously, such people weren't the target audience of the article.
>
> Jon
> --
> Jon Bloom, KE3Z | jbloom@arrl.org
> American Radio Relay League | Amateur Radio info:
> 225 Main St., Newington CT 06111 | http://www.arrl.org/
After many years of subscribing to QST,I stopped because of my strong
interest in VHF/UHF/Microwaves and the failure since the retirement of
Ed Tilton,for the ARRL to be a leader in these fields. 73 Ken W6GHV

# 4039. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <63avi5$s9v@redgreen.cs.ubc.ca>
Source record: 89530

af389@lafn.org writes:
>I want to improve this PS reliability. Can I add resistors in series
>with each 3055 emitter to help current sharing? If so, what is the
>method to determine correct resistor value?
>Should be able to measure voltage drop across each emitter sharing
>resistor
>to confirm total current and how well sharing is occuring?

The method I've read about is to aim for about 0.5 V drop across the
emitter resistors at full load. This requires pretty small resistances
for high-current supplies.

In practice, 0.1 ohm is about the smallest standard resistor value
easily available, and it also works well. It results in a 0.5 V drop
at 5 A (per transistor). Although the 2N3055 is rated at 10 A, you
usually can't use it at that current anyway because you can't dissipate
the power. So for a 20 A supply, you need to use 3 or 4 pass transistors
for thermal reasons, giving about 7 or 5 A per transistor, so 0.1 ohm
is appropriate after all.

Dave

## 4040. $1000/wk Donating Sperm

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: mavin@homei.com
Message-ID: <301097161930@homei.com>
Source record: 89531

visit http://206.155.252.182/index.html for more detailed information on
how you can partake in the sperm donor program...

<=>><<=>=><><===>>>>

# 4041. Re: Ham Radio Mag articles needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <63b2hl$nto@nntp02.primenet.com>
Source record: 89532

Sid Boyce <szb50@amdahl.com> wrote:
>larryc@northwest.com wrote:
>> > Could someone help me get copies of the following articles--my
>> > collection of Ham Radio Magazine does not include these:
> Some years ago I needed some of these articles and got them from HR,
>they have a back copy service, back then it was $2.00 per article.

A few months after HR was bought by CQ magazine, CQ announced that it was going to destroy all back issues of HR. Anyone wanting them had a couple of months to place an order.

I don't know if CQ sells copies of HR articles. Somehow I doubt it.

# 4042. Re: Trying to find Signetics NE-602

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <63b4dk$omj@nntp02.primenet.com>
Source record: 89533

Dave Hills <dhills@onramp.net> wrote:
>Allied Electronics has them.

So does JDR Microdevices and they don't have a minimum order.

JDR lists the NE602AN for $1.95 each ($1.55 if you buy 50).

>paul wrote:

>> I would like to know some sources to obtain a NE-602 by Signetics. The IC
>> contains a double balanced mixer, an oscillator, and an internal voltage
>> regulator.
>> Thanks,
>>
>> Paul

>--
>Dave Hills
>DH Associates
>Power Supply Engineering, Design, & Consulting
>dhills@onramp.net

# 4043. Re: Hand held Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EIvKyH.Byx@world.std.com>
Source record: 89534

[John considered using the Alinco pocket radios for packet]
Bill replied:
> I'm interested in this HT also, but from the picture it looks like the
> antenna may not come off, so there may not be a way to connect it to
> an external amp. Does anyone know for sure?

Yes, the antenna does NOT come off the 440 or 2m pocket radios.
These are NOT transverter drivers or amp drivers, they're just
walkie talkies, line-of-site only. You can't even use a mag-mount.
The manufacturer's "Accesory" for using these with a mag-mount is
their dual-band-repeat capable mobile rig! (I don't know if their
mobile has auto-CW-id or not.)

350mW might be enough for a very local packet contact; the 2m radio has a
real metal whip you pull out from the rubber duck. However, you'll
have the altitude of the window you put it in, forget about
roof-mount antenna. Your packet gateway needs to be line-of-site to
the TNC, unless you want to build a very long TNC-to-radio cable
:-)

If you want radio for packet for under $100, you might be better off
buying a used IC-2AT: you get 2W instead of 350mW.

My detailed review of the 440 model at http://world.std.com/~wdr/alinco.html .

The manufacturer's site is http://www.alinco.com/
which includes announcement of their even _smaller_ 2m and 440
radios (for $200, credit-card sized; which is what pushed the price
of these down).

73
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 4044. Re: Help with RF Splitter/Combiner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: Jim Breeyear <jbreeyea@zoo.uvm.edu>
Message-ID: <345907B0.7647@zoo.uvm.edu>
Source record: 89535
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

aor@gteais.com wrote:
>
> I am building a 2 meter amplifier using a pair of MRF-151G VHF
> transistors (300 watts each).
>
> How can I combine these two amplifiers using combiners/splitters which
> will cover 10-150MHz? I know how to do this for single band operation.
> My goal is to have 600 watts on 10 meters, 6 meters, and 2 meters thru
> this one amp. It will be mounted on the tower, so I will not have
> access to it once installed.
>
> Any thoughts, suggestions, or articles would be a big help.
>
> 73, and thanks in advance.
>
> Al, NW2M
>
> ----------------====Posted via Deja News ====----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet

Hi,

I have a new ANZAC DS-808-4 , 20 to 2000 mhz 4 port to 1 port device. It
is either a splitter or a combiner, not sure. Not sure how much power it
will handle but it is rugged. I also have quite a few new mini-circuits
splitters zfsc-2-2b, zfsc-3-4b, and some others that I dontknow the
source of. Big junkbox here.
--
==========
Jim Breeyear Manager Inst. Lab.
Chemistry Dept Cook Building
Univ. of Vermont
Burlington, Vt. 05405
Tel:802-656-0196

## 4045. Can Motorola SMR radios be converted to 902-928 MHz???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: Ron Olexa <nospamolexa@reachsct.com>
Message-ID: <01bce564$010ab320$f674a8ce@olexa.reachsct.com>
Source record: 89536

I have the chance to acquire a Motorola SMR HT and mabile unit. They seem to require an external programmer to set their operating parameters. Is there a way to convert such equipment to the 900 MHz ham bands?

Any assistance would be appreciated.

Ron
KA3JIJ
rolexa@ix.netcom.com

# 4046. Re: Trying to find Signetics NE-602

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: lassie <arvid@plea.se>
Message-ID: <3458E84A.34C7@plea.se>
Source record: 89537

paul wrote:
>
> I would like to know some sources to obtain a NE-602 by Signetics. The IC
> contains a double balanced mixer, an oscillator, and an internal voltage
> regulator.
> Thanks,
>
> Paul

Try the NE/SA 602 by Philips, it's the same one, and much easier
to find (anyway in europe...)
// Lars [SM4RZW]

# 4047. Re: Trying to find Signetics NE-602

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <63arid$eek$1@rosenews.rose.hp.com>
Source record: 89538

Dave Hills (dhills@onramp.net) wrote:
: Allied Electronics has them.

: paul wrote:

: > I would like to know some sources to obtain a NE-602 by Signetics. The IC
: > contains a double balanced mixer, an oscillator, and an internal voltage
: > regulator.
: > Thanks,
: >
: > Paul

: --
: Dave Hills
: DH Associates
: Power Supply Engineering, Design, & Consulting
: dhills@onramp.net

You'll probably get a better deal from
Dan's Small Parts, he has a web page
catalog and I am very pleased with his
service.

If he doesnt have the NE602 in stock,
the NE612 will work, same pin-outs.

I dont have the URL handy, but someone
else here might post it for all the
others out there that need small rf
parts. I can get most everything I
need just from this one source!

I don't have anything to do with Dan's,
just a very thankful and satisfied customer.

Your pal, Tony

PS- I just finished a 31 metre wavelength
shortwave receiver using the NE612....very
nice little active mixer.

# 4048. Re: 15 meter trx - schematics?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <34591C35.2EB9@isrc.net>
Source record: 89539

Jan-Martin Hertzsch wrote:
>
> Could anybody point me to books or articles where I could
> find schematics and data for homebrewing a 15 meter telegraphy
> trx (or tx and rx separately)?
>
> vy 73 de DG0LFH (hoping to upgrade soon to DH...)
> Jan-Martin

I'm presently working on a 15-meter CW transmitter, low power. But still using my HF receiver. If this thing works I'll be glad to send you a copy of the schematic.

I've seen some good 15-meter schematics in back issues of _QST_ magazine, but they're still on my list of circuits to try out.

Matt J. McCullar, KJ5BA
Arlington, TX

# 4049. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bce4c7$8a96e160$0100005a@wa6vse>
Source record: 89611

Vincent Biancomano <103520.355@CompuServe.COM> wrote in article
<u8BWl7$48GA.123@nih2naab.prod2.compuserve.com>...
>
> Building QRP equipment, and Morse, go hand in hand.

I can build QRP equipment 7 days week without needing
to know squat about Morse code Vince. (Of course I know
Morse code, but I STILL wouldn't waste my time building
minimalist OOK Morse gear, QRP or not.)

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 4050. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bce4c9$76833140$0100005a@wa6vse>
Source record: 89612

Joe Buch <nospam@nowhere.net> wrote in article <345769d0.0@news.dol.net>...
>
> An article in the November QST was entitled "A MMIC Preamp
> for 'DC to Daylight'". The amplifier is a module designed
> to work from DC to 2000 MHz mounted on a PC board with a few
> external gazinta and gazouta parts. Not exactly rocket
> science, but a useful state-of-the-art design with wide
> application..

Hardly "state of the art" by any stretch ... those types
of broadband amp MMICs have been available for many years.
(and building with them is a virtual "no-brainer" ... hardly
worth an article, since all you could possibly need to know
is in the data sheet from the manufacturer)

Also the real utility of such an amp is a bit questionable.
(except in certain types of test setups)

Being so "wide open" ("DC to Daylight") can be a distinct
disadvantage in many areas ... the IP3 of those parts is
not really phenomenal, with the result that a "wide open"
amp is really not well-suited to application as a front-end
preamp ... it most likely would be VERY vulerable to lots of
intermod except in very quiet (RF-wise) locations.

> QEX for November in contrast contains three articles
> describing original experimental work. Described are a 5760
> MHz transverter, a software package for analyzing the
> quality of CLOVER ARQ signals,

The first two were interesting ...

> and a medium wave receiver using a 1.5 volt integrated circuit.

This third one made me laugh. The LO is *radiated* from one board
to another (hopefully only *inside* the case ...) rather than coupled
in a more conventional (and controllable) sense ...

> In addition a column
> presents a brief design of a stable local oscillator for a
> microwave transverter to work with the Phase 3D satellite.
> QEX is much closer to rocket science.

I think it would be fairer and more accurate to say "QEX is as
close to "rocket science" as the ARRL gets.

> You should also consider a worthwhile CQ publication called
> Communications Quarterly. It has interesting construction
> and theoretical articles. I recently subscribed for one
> year (4 issues) for $24. This was a discounted rate at a
> recent hamfest.

I would be interested in getting subscription information
(an e-mail address would be nice) for Communications Quarterly.
If someone can send me that information, I'd be appreciative.

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 4051. WTB: Right angle drive.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19971030020001.VAA11877@ladder02.news.aol.com>
Source record: 89613

I am looking for a right angle drive similiar to the Millen 10012. Single control shaft to a driven shaft the will control to items.

73's
Bob, W4RLC

# 4052. FS- More Shortwave/Scanner owners/service manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: bush143@postoffice.worldnet.att.net
Message-ID: <6392n7$ho@bgtnsc01.worldnet.att.net>
Source record: 89614
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amatuer.misc,rec.radio.amateur.homebrew

>>>>>I have a bunch of excess radio manuals for sale. Some are originals
>>>>>and some are photocopies. All of the original manuals are in MINT
>>>>>condition. All photocopies were professionally made copies purchased
>>>>>from the manufacturer, and are either bound or in binders. ALL
>>>>>MANUALS INCLUDE SCHEMATICS AS INCLUDED FROM THE MANUFACTURER!
>>>>>
>>>>>These manuals are being sold to clear out my radio shelf. Shipping is
>>>>>extra. Some manuals are thick and some are thin, but it should not
>>>>>take more than a few bucks to ship any of these manuals to the lower
>>>>>48 States. Please e-mail if interested and I will provide an estimate
>>>>>on shipping. Thank You!!!!!
>>>>>
>>>>>SCHEMATICS & BOARD-PARTS LAYOUTS (originals):
>>>>> Icom R-70 $10
>>>>> Icom R-71/71A $10
>>>>>
>>>>>OPERATIONS/OWNERS MANUALS:
AOR-3000 (not "A" model - copy) $10
>>>>> AOR-3000A (original) $15
Bearcat/uniden BC-760XLT (original) $10
Icom R-7000 (copy) $10
>>>>> J.I.L. SX-400 and J.I.L. RF-1030 rf up converter (copy) $15
Kenwood R-820 (copy) $10
>>>>> Kenwood R-1000 (copy) $10
>>>>> Radio Shack Pro-2004 (original) $10
>>> Sony CRF-V21 (copy-two volume set) $20
>>>>> Sony 2010 (copy) $10
>>>>> Sony Pro-80 (copy) $10
Standard CCR-708A receiver w/spectrum display (copy) $15
Yaesu FRG-7 (original) $15
>>>>> Yaese FRG 8800 (original) $15
>>>>> Yaesu FRG 9600 (original0 $10
>>>>>
>>>>>SERVICE MANUALS:
>>>>> Radio Shack Pro-34 (original) $20
>>>>> Radio Shack Pro-2004 (original) $20
>>>>> Sony 2010 (copy) $10
>>>>> Sony SW-55 (original) $10
>>> Yaesu FRG-9600 (copy) $25
>>>>>
>>>>>RACAL TECHNICAL MANUAL: $25 (shipped)
>>>>> Covers model RA-6217A, 6217A-3, 6217E
>>>>> This thick manual includes parts list, circuit pictorials and

>>>>> alignment procedures. (copy)
>>>>>
>>>>>
>>>>>
>>>>>
>>>>
>>>
>>
>

# 4053. Need Schematic for 2510

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: Lin Vaughan <kt4jt@firstsaga.com>
Message-ID: <01bce551$c69fbbc0$700960cf@kt4jt.firstsaga.com>
Source record: 89615

Need a GOOD schematic for a HR 2510. Will pay for copy and mailing. E-mail me at kt4jt@firstsaga.com

Tnx
Lin

# 4054. Re: LNA for 23cm/13cm ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@telis.org>
Message-ID: <34587C2B.4D0A@telis.org>
Source record: 89616

dl8ser wrote:
>
> Hello
> es thanks for reading this request..
>
> I'm looking for the design of a LNA covering
> the 1.2 and/or 2.4 GHz range.
>
> Especially one with a cavity as input transformer.
> I have some basic idea about cavities in the
> 70cm Range ... but not much about GaAs-FETs
> or HEMTs and their inputmatching.
>
> So .. is there anybody who can point me
> to some resources about this type of
> low noise amplifier .. ??
> Is there someone who has already built
> one ?? What do I have to take care of
> in order to get the minimum noisefiguer
> out of the semiconductor ??
>
> I'm especially keen on geting the
> EXACT numbers for the dimensions of
> the cavities ..
>
> tnx for your kind help ...
>
> 73s de ac5mv
If you have access to DUBUS magazine for 1/97 you will find an article
on a cavity preamp for 1.3Ghz. 73 Ken W6GHV

# 4055. LNA for 23cm/13cm ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-30 00:00:00 UTC
From: dl8ser <lrt20892@rpool19.rus.uni-stuttgart.de>
Message-ID: <Pine.A32.3.94.971030105352.22648C-100000@rpool19.rus.uni-stuttgart.de>
Source record: 89617

Hello
es thanks for reading this request..

I'm looking for the design of a LNA covering
the 1.2 and/or 2.4 GHz range.

Especially one with a cavity as input transformer.
I have some basic idea about cavities in the
70cm Range ... but not much about GaAs-FETs
or HEMTs and their inputmatching.

So .. is there anybody who can point me
to some resources about this type of
low noise amplifier .. ??
Is there someone who has already built
one ?? What do I have to take care of
in order to get the minimum noisefiguer
out of the semiconductor ??

I'm especially keen on geting the
EXACT numbers for the dimensions of
the cavities ..

tnx for your kind help ...

73s de ac5mv

# 4056. Re: Ham Radio Mag articles needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <63b7dv$5rc$1@news1.teleport.com>
Source record: 89540

In article <3458B53F.D0F57DBF@amdahl.com>,
Sid Boyce <szb50@amdahl.com> wrote:
>larryc@northwest.com wrote:

>> I should be able to dig these up from my archives. will know in a couple
>> of days.

>> LarryC
>> ================

>> Larry Shorthill wrote:

>> > Could someone help me get copies of the following articles--my
>> > collection of Ham Radio Magazine does not include these:

>> > "Recent developments in circuits and techniques for HF communications
>> > receivers" by Ulrich Rhode, Ham Radio, Apr 1980, pp 20-25.

>> > "Optimum Design for High Frequency Communications Receivers", by
Ulrich
>> > Rhode, Ham Radio, Oct. 1976, pp 10-25.

>> > "Communications Receivers for the year 2000, by Ulrich Rhode, Part 1,
>> > Ham Radio, Nov 1981, pp 22-29, Part 2, Ham Radio, Dec 1981, pp 36-44.

>> > "High Dynamic Range Active Double Balanced Mixer, by Ulrich Rhode, Nov
>> > 1977, pp 90-91.

>> > All copying and postage costs will be paid for if you would be willing
>> > to copy them for me.

>> > Thanks for the help.

>> > Regards and 73's

>> > Larry Shorthill, KC7ULI
> Some years ago I needed some of these articles and got them from
HR,
>they have a back copy service, back then it was $2.00 per article.
>--------73------G3VBV--------

I suspect that the content of these articles is included in _Communications
Receivers_ by Rohde, Whitaker, and Bucher. It's published by McGraw-Hill,
and the second edition recently became available. It's an excellent book --
you might consider getting a copy since you're interested in the topic.

Roy Lewallen, W7EL

# 4057. Re: High-power 50 ohm resistor for large dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19971031012201.UAA14481@ladder01.news.aol.com>
Source record: 89541

I have found that there are two good alternatives to a non-inductive dummy load. (1) just tune up into a resonent antenna, or non-resonent one with a tuner, on 40 meters any evening on top of a foregn broadcast station. (2) use an inductive resistor and merely use a tuner to compensate for the reactance, the linear will never know the difference. Best of luck to all.

Evan

# 4058. FS Jennings CVDG-1000 Vacuum Caps 10-1000PF@15KV Motorized!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: ke9pq@netnet.net
Message-ID: <63beiq$imp$1@news.inc.net>
Source record: 89542

This Jennings silver ceramic Vacuum variable capasitor is
10-1000PF@15KV It has a 28 volt DC motor drive on the bell
(It runs nice at 13.8voltDC)...it has limit switches, and a 10K ohm
positioning pot. It is about 4 inches in dia. and about 10 inches
long. Price is $189.00 each I have several

All prices are plus shipping

Mark Olson "KE9PQ" 1490 Norfield Rd.
Suamico,Wi. 54173
Call (920) 434-8097 after 6:00pm central time.
Email ke9pq@netnet.net Thanks and 73 Mark
NOTE: All items listed are guaranteed to be
as described or your money back.

# 4059. FS Eimac 8877 tubes pulled, tested, guaranteed. $250.00 Each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: ke9pq@netnet.net
Message-ID: <63bepn$imp$2@news.inc.net>
Source record: 89543

These tubes Have been tested and are full or close to full output
guaranteed.
Price is $250.00 each

All prices are plus shipping

Mark Olson "KE9PQ" 1490 Norfield Rd.
Suamico,Wi. 54173
Call (920) 434-8097 after 6:00pm central time.
Email ke9pq@netnet.net Thanks and 73 Mark
NOTE: All items listed are guaranteed to be
as described or your money back.

## 4060. $1000/wk Donating Sperm

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: james@suke.net
Message-ID: <311097013033@suke.net>
Source record: 89544

visit http://206.155.252.182/index.html for more detailed information on
how you can partake in the sperm donor program...

>====<<<<<>><=>><<<<

# 4061. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3459b5b2.5339643@news.online.no>
Source record: 89545

On Thu, 30 Oct 1997 12:02:49 -0600, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

>David Shalita wrote:
>
>> Can I add resistors in series
>> with each 3055 emitter to help current sharing? If so, what is the
>> method to determine correct resistor value?
>
>A 0.1 ohm, 5 watt resistor in each emitter is common practice. Each
>additional 1.0 ampere produces an additional 0.1 volt, which helps a lot
>to equalize emitter currents. The greater the current the greater the
>equalization. This seems a lot better than base resistor equalization.
>
>Bill W0IYH
0.1 ohm is often used because it is the lowest commonly available
resistor value. You may wind your own resistors and use lower value,
enamelled cu wire may not need to be drasticly long for 20milli ohm

---
Email: LA8AK at online dot no

# 4062. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3459b655.5502606@news.online.no>
Source record: 89546

On 30 Oct 1997 13:52:05 -0800, davem@cs.ubc.ca (Dave Martindale)
wrote:

>af389@lafn.org writes:
>>I want to improve this PS reliability. Can I add resistors in series
>>with each 3055 emitter to help current sharing? If so, what is the
>>method to determine correct resistor value?
>>Should be able to measure voltage drop across each emitter sharing
>>resistor
>>to confirm total current and how well sharing is occuring?
>
>The method I've read about is to aim for about 0.5 V drop across the
>emitter resistors at full load. This requires pretty small resistances
>for high-current supplies.
>
using a VOM it is often easily possible to measure the differences
between each transistor. Good operational practice for high gain and
easy heat conductance indicates that 5A max is a good choice for such
transistors

---
Email: LA8AK at online dot no

# 4063. Re: home brewing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <34596e91.63856037@news>
Source record: 89547

On Thu, 30 Oct 1997 16:04:39 +0000 (GMT), CBS5LD@leeds.ac.uk (L. DE BRUIJN) wrote:

>In article
><tcpnntpd.17.10.29.18.55.42.2443217854.6722904@hcol.humberc.on.ca>,
> <scottc@hcol.humberc.on.ca> wrote:
>>Greetings, I have a good friend who is really into making both beer and
>>wine as a hobby. What would you suggest as a Christmas present to
>>complement this hobby? Many thanks
>>
>>to: ** ALL **
>>cc: edymond
>>
>
>Scott, much as I enjoy beer and wine (me and my flatmate made some nice
>homebrew beer), this newsgroup is aimed primarily at amateur radio
>enthusiasts (hence the newsgroup name :-) )
>To us homebrew generally refers to the making of transmitters/receivers and
>test equipment.
>Good luck with finding a suitable Xmas present.
>
> 73 de Laurens M1CCO

Maybe if the home-building of radio and electronic equipment didn't have such a stupid and misleading nickname, it wouldn't be constantly confused with beer and wine making.

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

# 4064. Re: LNA for 23cm/13cm ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <3459EDB8.7B37@arrl.org>
Source record: 89548

The January 1995 QEX has a half wave cavity design for 23 cm,
though it uses the old ATF 10135 device. I haven't done any
work updating this 1992 design for newer devices.

The QEX issues are included in the 1995 ARRL Periodicals CD-ROM.

--Zack Lau W1VT

# 4065. Re: Help - Battery Charger Combo For Shack Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: verrochi@tiac.removethispartnet
Message-ID: <345bfa7c.5493447@news.tiac.net>
Source record: 89549
Cross-posted to:
alt.home.repair,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 17 Oct 1997 23:33:35 GMT, "DavidC" <davidc@bit-net.com> wrote:

>I'd like to use a 12v battery with a charger to power my rigs in my
>basement "Ham" shack.

A powersupply is cheaper than a good battery chager setup. Safer too.

>I need the setup to keep the battery safe, both preventing explosive fumes
>from building up, and to properly charge and monitor the battery.
>I'm thinking of putting the battery in either a plastic tool box that I can
>lock (I have a very curious and versatile 2 year old) or in a small pet
>carrier (I won't have to drill lots of holes for ventilation in the pet
>carrier as I would in the tool box).

For the money and security, spend $20 for the appropriate marien battery box
with the single hole for the vent, many have locks too. I could see a
potential accident with the 2 year old if s/he deceided to stick some wire or
other conductive device through the holes in the pet carrier. It's not the
12volts you nned to worry about, its the 150 amps behind it that could be a
problem.
>
>Questions:
>
>1. What car, marine, etc. heavy duty battery is best?
> Critical Specs
> or
> Specific Model

I cannot recommend specific models, but I do know a Marine battery is more
designed for this type of activity thatn a regular car battery. The marine
battery was meant to be "deep cycled" and have most of the power taken out of
the battery and then recharged. If you were to do this to regular car battery,
you'd destroy it about the fifth time you drained the battery. Regular (car)
batteries are meant to stay fully charged.

>2. What battery charger should I use to prevent damage to the battery and
to keep it
> properly and fully charged - without generating rf noise in the
>process (and to
> preferably have a reasonably accurate display of the battery
>condition).

There are chargers that are specifically for Marine Deep cycle batteries, as
they cannot be recharger *porpoerly* with a regualr charger, although it may

work. It won't promote longevity of the battery, which will likley cost in excess of $100. Marine batteries and regualr car batteries are entirely different batteries with entirely different charging requirements.

There are also devices that will charge a battery if the voltage drops below a certain level. This insures that your battery will stay topped off, but I am uncertain as to whether this type of charger, and "topping off" s a good practice for a marien battery.

If you're concerned about the noise from the charger, which you will likley get since the charger is not filtered, a few capacitors from radio shack will easily filter the noise or you can buy a regular car stereo noise filter fro radio shack.

> Critical Specs
> or
> Specific Model
>
> Thanks for any help! DavidC

Matt

VerrochiATtiacDOTnet

RC Cars, Parts and Equipment for sale at:
http://www.tiac.net/users/verrochi/RCSALE.htm

==========
Soon to come here: the address of every spammer who ever hit my name. Circular spamming.

(Very Soon)

# 4066. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: lkraft@rose.hp.com
Message-ID: <63bauh$ia3$1@rosenews.rose.hp.com>
Source record: 89550

DavidC (davidc@bit-net.com) wrote:
: You guys are hysterical! Next one will be a polecat with it's tounge in a
: light socket ... two components! Thanks for the humor and the science
: lesson! :-) DavidC AA1FA

: > > I suggest the world's simplest VFO is a tunnel diode hooked across
: > > a tuned circuit with two bias resistors. Can't get much simpler than
: > > that. Useless for typical applications, but it's simple.
: > > miker

Except that Heathkit (or maybe Knight) made a grid dip meter using
a tunnel diode oscillator many years ago. It cas called a "Tunnel
Dipper".

Wish I had one o' those.

73,
Lyle
AA6LK

# 4067. Eimac 4CX3000A/8169 for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: al.dolgosh@hamradio.org
Message-ID: <8E29271.002C00053C.uuout@hamradio.org>
Source record: 89551

A few years ago (when I was active on 2 meter EME), I planned to build a "conservative" kilowatt amplifier. I purchased a new Eimac 4CX3000A/8169 and SK-1406 chimney, and then I found a used SK-1400 breechlock socket at the Dayton Hamfest.

I really have no plans to use it in the future - maybe someone else would like to build an amp around this tube, which carries full ratings to 150 MHz. It is rated at maximum 5.3 KW out in AB1 linear mode and 11 KW in Class C service.

Filament transformers are available from Peter W. Dahl.

I will sell only as a package:
4CX3000A/8169 (new - unwrapped only for sizing purposes - filament never lit)
SK-1406 air system chimney (new)
SK-1400 breechlock air system socket (used but AOK)

I also have available my homebrew 2 meter KW amp (ran 4CX350's, but 250's just plug in). All it needs is HV, bias is internal and screen is dropped and regulated from HV. I used a 10-watt SSB exciter for 1 KW out. Rack mounted and metered - good looking - no tubes.

Make offer - you pay shipping and insurance from ZIP code 44134. Pickup available if you want to travel.

Reply to al.dolgosh@hamradio.org

Al Dolgosh - K8EUR

---
Cleveland Hamnet BBS | (440) 942-6382 uucp--> hamradio.org
Willoughby, Ohio USA | The World's Meeting Place since 1985
Dedicated to Amateur Radio and Electronic Subjects
---

# 4068. JPS ANC-4 or MFJ-1026 or???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: Gene Shablygin <gene@jetisi.com>
Message-ID: <345A1C6C.6366960E@jetisi.com>
Source record: 89552
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have s7 - s9 white noise on 20 almost all the time. I suppose that it is generated somewhere VERY locally. So I want to try to use noise canceling device. Does anybody have any experience with one of these?

As soon as my shack is full of computer noise, I will need a noise pickup antenna outdoors. I know that only MFJ has an external secondary antenna connector. But I am really concerned about poor MFJ quality.

Any experience appreciated.

Gene W3UA / RA3AA

# 4069. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <4oahPHANQhW0EwN4@ifwtech.demon.co.uk>
Source record: 89553

J M Noeding wrote:

>I find american amateur radio publication to be - often - just too
>conservative boreing, but the worst side is that they do not look much
>outside USA.
>[snip]
>I believe it would gain amateur radio and experiments (homebrewing) if
>we could possibly start communicating with each other, exchanging
>ideas between radio amateurs around the world -...and even use such
>ideas in QST/QEX - not only very seldom!
>

Historically, that has been very true: US magazines have tended to ignore anything that was "Not Invented Here". The Internet is making a real difference, but if you're an author, you still cannot expect editors to come knocking at your door. You have to take your ideas to them.

QEX is now accepting articles from all over the world, and it has never been easier. For my article in October, I first e-mailed an outline proposal to the Editor to ask if QEX would be interested = which they were. I then wrote the article and e-mailed the Word files directly to QEX.

It is always the author's responsibility to make sure that the article is relevant to the intended readers. For writers outside the USA, this goes double! You can make sure that the content and presentation is relevant to US readers by e-mailing your draft article to people in the USA whose judgement you can trust. My QEX article on tetrodes required major changes as a result of comments from the USA - not changes to the basic ideas, but changes in the way they were presented.

The easier you make it for the magazine, the more likely your article is to be published. If you make the magazine do all the work, your article will certainly take much longer to be published - and it may never happen at all.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 4070. Re: Cobra 148GTL on 10 Meters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: nadzam@garlic.com
Message-ID: <63dfe0$ir8$1@bulb.garlic.com>
Source record: 89554
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

All you need do is change the 11.3258 Mhz Mixer crystal to a higher freq.
For every 0.150 Mhz increase in freq of this Crystal you will get a
450Khz increase in operating freq.

Today this unit uses a MB8719 PLL. This PLL is running in the middle of
its operating range. Even with this crystal at 11.3258 Mhz the upper limit
of the operating area is 28.235Mhz and as low as 26.335 in 10 Khz steps.
To do this you would need to provide an external method of changing the control
lines to the PLL chip. Since the channel selector switch does not allow a
direct control over the PLL divider lines you can provide extrenal control
lines for the PLL that will allow you to get a larger range. Other factors
will get involved as well. Like the Last Xmitter mixer, and the VCO range,
but if you can live with a 450 Khz spread in the 10 meter band then just get
a crystal in the 11.5 ~ 12.0 Mhz range and retune the Mixer coil.

Ken Collier (ko6ux@netsol.net) wrote:
: Does anyone have any experience modifying a Cobra 148 GTL CB radio for
: 10M ham use? I know it can be done, and I am looking for complete
: instructions, including parts needed and sources for the parts. Can
: anyone offer any help in this matter? Please e-mail <ko6ux@netsol.net>.

: ----------------==== Posted via Deja News ====----------------------
: http://www.dejanews.com/ Search, Read, Post to Usenet

--
----------------------------------------
Name: Bill Nadzam "K8WN"
E-mail: Bill Nadzam <nadzam@bills2way.com>
http://www.bills2way.com
----------------------------------------

# 4071. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: miker <&mreiney@hevanet.com>
Message-ID: <345A3613.6792@hevanet.com>
Source record: 89555

alchazz*@ix.netcom.com wrote:
>
> Brad Thompson wrote:
> >
> > David Shalita wrote:
> > >
> > > Hi,
> > > I have a sick 13.8 v regulated No_Name 8 amp power supply that runs
> > > every thing in my QRP shop. PS ckt is roughly a 723 regulator IC,
> > > TIP41A predriver into two 2N3055 pass transistors.
> > > TIP41A is powered from a DC voltage more positive than collector
> > > voltage for 3055 pass transistors.
> > >
> > > I just discovered both 2N3055 transistors failed and both had open base
> > > emitter junctions. I opened one 3055 package and can clearly see the
> > > base lead wire from base header pin to die is burned open mid span. PS
> > > has
> > > been in service for 8 years very lightly load. Why this failure?
> > >
> > > I drew a schematic and discovered both 3055 bases are fed with 6.2 ohm
> > > individual
> > > base resistors. Both 3055 collectors are tied in parallel to raw 22 vdc
> > > in.
> > > Both emitters are tied in parallel without any current sharing
> > > resistors.
> > >
> > > I repaired by replacing both 3055's and then tested by lightly loading
> > > PS to 0.3 AMPS for 30 minutes. I then touched each 3055 heatsink. One
> > > 3055 was HOT as HECK. Other 3055 was stone cold. Not sharing current

Definitely use emitter resistors. Bigger is better. If I remember my
math, 60mv drop will cause 10:1 current change. For the same type
transistor from the same manufacturing process, 100mv should be
overkill.
For generic 3055's from different vendors, I'd go with half a volt
overkill.

There's another reason that base wires go. If the base drive is
stiff and you put a heavy transient load on the emitter, the transistor
takes some time to react. During that time, ALL the emitter current
tries to come out the base. Typical place this happens is in the
current limit transistor when people fail to put a base resistor in
the limit sense transistor. Sooner or later, the transistor will fail
with an open base.

Anyway, if your transistor's max base current spec exceeds the output voltage divided by the base resistance, you're probably OK.

miker

# 4072. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19971031222600.RAA08878@ladder02.news.aol.com>
Source record: 89556

Hi Ian--

>QEX is now accepting articles from all over the world, and it has never
>been easier.

Comm Quarterly has been accepting foreign articles and soliciting foreign reprints since inception, and the new editor of QEX--a former Comm Quarterly author--appears to be following that lead. I think we'll all benefit from this approach. I'm optimistic that Rudy will do a great job with QEX--and we'll all be the beneficiaries.

73

Rick K1BQT

# 4073. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bce652$28d844a0$0100005a@wa6vse>
Source record: 89557

Having not seen Jon's original response to my comments, I'll
reply here ...

K.R.Burtchaell <kburt@telis.org> wrote in article <3458FDFF.7672@telis.org>...
> Jon Bloom wrote:
> >
> > Carl R. Stevenson wrote:
> > >
> > > Joe Buch <nospam@nowhere.net> wrote in article
<345769d0.0@news.dol.net>...
> > > >
> > > > An article in the November QST was entitled "A MMIC Preamp
> > > > for 'DC to Daylight'". The amplifier is a module designed
> > > > to work from DC to 2000 MHz mounted on a PC board with a few
> > > > external gazinta and gazouta parts. Not exactly rocket
> > > > science, but a useful state-of-the-art design with wide
> > > > application..
> > >
> > > Hardly "state of the art" by any stretch ... those types
> > > of broadband amp MMICs have been available for many years.
> >
> > Interesting. What technology has displaced the MMIC as a gain block?

I said they have been available for many years ... MiniCircuits "MARs"
and Avantec/HP "INAs" etc. ... the point I was trying to make is that
they are NOT some new, "wiz-bang" development and that a "wide-open"
amp such as the article describes has some potentially serious draw-
backs, which the article seemed to ignore ...

> > > (and building with them is a virtual "no-brainer" ... hardly
> > > worth an article, since all you could possibly need to know
> > > is in the data sheet from the manufacturer)
> >
> > True, *if* you are familiar with UHF design and construction techniques.
> > Obviously, such people weren't the target audience of the article.

I repeat ... virtually everything that one could possibly need, including
explicit advice on grounding, bypassing, etc. are available in the mfgr's
literature ... check out a MiniCircuits catalog.

Obviously ANY criticism of ANYTHING that the ARRL does meets with quick
and certain spin-doctoring response from the loyal staff. Next, I
suppose, the league will have counsel petition the FCC to make it a
violation of Part 97 to utter any words criticizing the high and mighty
ARRL???

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 4074. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <63dsju$dbj@bgtnsc03.worldnet.att.net>
Source record: 89558

I second that .... Much better device. I also like the 2n5301 /02 /03
for linear ps pass transistors. My 80+amp (723 based) has been running
for >18 years with no serious problems. _Woody_

<snip> I have a 30 AMP 13.8V one here in use over the last 14
years. A friend
> has an 80 AMP supply, he says he hates 2N3055's and uses 2N3771's
> instead, but I've had zero problems with the 2N3055.
> --------73------G3VBV--------
> --
> ... Sid Boyce...Amdahl(UK)...44-121 422 0375
> ----------------------------------
> Any opinions expressed above are mine and do not necessarily represent
> the opinions or policies of Amdahl Corporation.

--
de Woody, WB4QXE
FOR REPLY: Remember to delete first W in address. STOP SPAM!
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

# 4075. Velvet Verniers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: dledoux@laci.net
Message-ID: <63e16k$kn5@news1-alterdial.UU.NET>
Source record: 89559

Well, every job has to have its fringe benefits. In my case, we are de-installing some fifties-vintage carrier receiver-transmitter units. These are tube technology, and each unit (I have access to two) has three "Velvet Vernier" drive units with approximately 6" diameter logging scales (stainless steel). Two of the drives are connected to large variable caps (probably up to 300pf and good for antenna tuners up to maybe 150 watts). the third drive on each unit is connected to a variometer inductor suitable for the frequency range of the units, which is in the 80-90khz range. An additional couple of capacitors have direct drives with beautiful 3" stainless logging scales.

Now, the nitty-gritty: I know that this stuff is BIG for a lot of the backpack up Mt. Whitney QRP crowd, but for us homebound ops, this is the makings of some fine equipment. Velvet Verniers used to be one of THE best-known reduction drives. I plan on keeping a couple and parting with the rest. What are such things worth?

Thanks
Dale
KD5QI

# 4076. WTB: Processor Technology SOL, SOL-10, SOL-20 Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: Alan <ChipsNDips@snet.net>
Message-ID: <345A92F9.672A@snet.net>
Source record: 89560
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,main.forsale

I'd like to add a Processor Technology SOL to my collection of computers, if anyone has one gathering dust.

Alan

# 4077. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <63dhap$iia$1@news1.teleport.com>
Source record: 89561

In article <3457CDC3.1B2F@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:

>Sure you can... an NE-2 neon lamp, one capacitor, and a potentiometer!
>3 components, beat THAT with your fancy tunnel diode gizmo.

But doesn't the power source count? I haven't checked lately, but would guess that 90-volt batteries are hard to come by these days. And most of us don't have bench supplies of that voltage lying around any more, either. .

Roy Lewallen, W7EL

# 4078. Re: WTB: Right angle drive.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: Rick Mainhart <mainhart@sprintmail.com>
Message-ID: <345A55AE.59DF@sprintmail.com>
Source record: 89562

Try Small Parts, Inc, at: http://www.smallparts.com/

Believe they may have what you need ... and they do have some
really neat stuff!

73,

Rick, WB3EXR

RobertC908 wrote:
>
> I am looking for a right angle drive similiar to the Millen 10012. Single
> control shaft to a driven shaft the will control to items.
>
> 73's
> Bob, W4RLC

--
It is not necessary to understand things in order to argue about them --
Beaumarchais

# 4079. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <345AC29F.359A5B16@crpl.cedar-rapids.lib.ia.us>
Source record: 89563

Ian White, G3SEK wrote:

> My QEX article on tetrodes required
> major changes as a result of comments from the USA - not changes to the
> basic ideas, but changes in the way they were presented.

This suggests that USA readers have different criteria than other readers. I don't believe that.

Bill W0IYH

# 4080. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-10-31 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <345A91BD.2E28@northwest.com>
Source record: 89564

J M Noeding wrote:
>
> On Wed, 29 Oct 1997 12:43:58 -0500, Timothy_Shearer@mk.com wrote:
>
> >Ken Linney wrote:
> >>
> >> I fancy taking out a subscription to either QEX or QST. I am really
> >> interested more in the home construction with some theory but NOT
> >> interested in reviews / Contest News etc.
> >> I fancy QEX but have never seen one other than some clips shown at
> >> ARRL's Web Site. Is it for HF only?
> >> 73es Ken
> >>
> >>
> >QEX is a smallish journal (20 pages more or less) which is cover to cover
> >articles with a few advertisments for parts suppliers, ARRL software etc.
> >Its content covers all amateur spectrum allocations. It covers
> >electronics for sure but recently has covered digital signal processing
> >in much detail (lots of math). It also covers mechanical subjects such as
> >antenna rotor stress dynamics etc.
> >
> >There are usually 3 to 5 articles an issue.
> >
> >Articles written by various contributing authors are of various reading
> >levels. Many articles are written at the doctorate college level (very
> >intense and I'm sure not comprehesible to many). Other articles are
> >written at a reasonable technical level which is generally above that
> >found in QST. All article usually come with some graphics which appear to
> >have been drawn by the author (not much editing or retouching
> >apparently).
> >
> >I like this journal and usually read each article. These articles can
> >take an hour to several hours to read and comprehend. However, these
> >article are not as dry as reading an IEEE proceedings journal. The
> >articles are by hams and I think this makes them somewhat more readable.
> >
> >Goodluck
> >Tim
>
> I was invited to write an article (translation) to QEX some years ago
> on CW meteorscatter technique. The editor was not interested to see
> any of the new techniques we have used in Europe for the last 20
> years, most of which I have designed**). I have been quite famous in
> Europe for this, and printed ccircuit boards have been sold to most

> European countries......
> I find american amateur radio publication to be - often - just too
> conservative boreing, but the worst side is that they do not look much
> outside USA. In contrast one sees rather interesting techniques
> applied by American manufacturers, but it does not exist any link
> here. Exception is of course W7ZOI. Other magazines, particularly
> Radcom and Electron (dutch) brings interesting information from all
> around the world, and the editors keep reading foreign magazines to
> look for interesting information, I have seen translations from many
> different languages, while QST/QEX editors seems only waiting for
> someone to send a article.
> I believe it would gain amateur radio and experiments (homebrewing) if
> we could possibly start communicating with each other, exchanging
> ideas between radio amateurs around the world -...and even use such
> ideas in QST/QEX - not only very seldom!
>
> 73
> Jan-Martin
>
> **) Up-converter for recording and special tone-keying circuits for
> transmit speeds up to 5000LPM (1000WPM) morse, recorder facilities...
> etc. Recently some Germans made some improvement over this.
>
> ---
> Email: LA8AK at online dot no====

Excellent message, Jan-Martin. I had a brief subscription to QEX back in the late 80,s and I let it expire. Just too darn boring. TOo much advertising for the articles...which were not very cutting edge. My own preference was HAm Radio, about a year prior to it's demise (and earlier). Kickin' articles, very little advertising. My subscription to VHF Communications (UKW Berichte for you Europeans) expired some time ago...mostly due to irregular and undependable AMerican distributors.

I had written to the QEX editor a number of times, offering copies of tech manuals to those asking of them. THe editor really did not want to be bothered, and it took several months for him to "connect" me and the askers. I'm not impressed with QEX. Period.

If a person wants to go homebrew, get as many European subscriptions as he/she can. Forget QST, unless you like 125 pages of advertising. A lot like reading the Sunday paper auto section.

LarryC N3CCW

# 4081. Dan's Small Parts and Kits Huge Year End Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: jparker@fix.net
Message-ID: <63elni$7mk$4@zinger.callamer.com>
Source record: 89469

Dan's Small Parts and Kits has done it again.

Once again this year Dan has placed a Huge Year End Sale insert in his
Catalog featuring Great Savings

Check it out at:

http://www.fix.net/dans.html

Enjoy,,,72,,,Jerry...WA6OWR...K

# 4082. HIGH POWER TRANSMITTING TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Norman Hockler <norsan@bright.net>
Message-ID: <63eks8$5ij$1@cletus.bright.net>
Source record: 89470

I have a number of Eimac YC156 tubes for sale. These are the medical version of the 3CX5000. The tube is guaranteed for full output to its to rating of 110 MC. This tube does not need a socket as it bolts to a clear hole in the chassis. I have all spec sheets and can provide fillament transformers at a reasonable price.

de Norman N8RGR

## 4083. BG1GS's Amateur radio home page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Alex/BG1GS <bg1gs@qsl.net>
Message-ID: <63epcv$cqu@info.bta.net.cn>
Source record: 89471

http://www.qsl.net/bg1gs

:-)

# 4084. Noisey Sudden DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <345b317a.4017928@news.erols.com>
Source record: 89472

With the help of the members of the Internet HB/QRP community, I'm gradually getting my little 30 meter transceiver in shape.

I took a Kanga Sudden RX and paired it up with a simple VXO controlled transmitter. I took the oscillator energy from the transmitter at the output of the buffer transistor and connected it via RG-174 and a coupling cap to the NE602.

The arrangement works, and I've been making QSOs, but the rig is plagued by annoying "pops and squeals" that occur when (on receive) I tune the main tuning cap. The noises come when the cap is a mid-range (its not just when the caps are fully unmeshed). For a moment I thought I might have been hitting a bit of dirt or dust on the plates, but they look clean and there is no indication that they are coming into contact with each other.

Any idea on this problem?

73 Bill N2CQR

# 4085. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <2X+SAOAecuW0Ew+C@ifwtech.demon.co.uk>
Source record: 89473

William E. Sabin wrote:

>Ian White, G3SEK wrote:
>
>> My QEX article on tetrodes required
>> major changes as a result of comments from the USA - not changes to the
>> basic ideas, but changes in the way they were presented.
>
>This suggests that USA readers have different criteria than other readers. I
>don't believe that.

The basic criteria are the same everywhere, of course, but readers in different countries will start from a different knowledge base. This is partly due to the selective coverage of magazines and books in each country, but also because amateur radio in each country has a unique national flavo(u)r. An article by a writer from another country has to take account of this, or else it is not meeting the local readers' needs.

Some of the presentational changes in my QEX article were inspired by your own comments, Bill - for which I remain very grateful.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 4086. Re: Gap antenna info please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: N4ST <jprice@crosslink.net>
Message-ID: <63fj2l$fdi$1@kronos.crosslink.net>
Source record: 89474

Have been using a GAP Titan for a while. It does work, with the primary advantage being single coax feed for 8 bands and theoretically, no tuner, instant band switching. Not a very effective radiator on 80M, obviously, but improving as you go higher. Usually, my 15/20/40 meter dipoles at 35 feet have a better signal, but not always. Sometimes on DX stations the GAP is better. Oddly, my GAP has a lower background noise than the dipoles, but then so does a 50 Ohm resistor! Since you really should keep this antenna 40-50 feet away from the house, wiring, metal structures, etc., its kind of hard to claim that this type of antenna require "less space" than a dipole. Mine requires a tuner to get to the CW portions of 10 and 15 meters, YMMV. I am deep in the woods and am never exposed to high wind. The Titan definitely should be guyed if you have any exposure to wind and/or icing.

GL & 73
Jim - N4ST

>On 26 Oct 1997 20:44:30 GMT, jkktl@aol.com (Jkktl) wrote:
>
>>Hi
>>I am thinking of replacing my R5 with one of the GAP antennas..any opinions out
>> there?
>>
>>Jim
>>K2TL

# 4087. FS - NOS tubes and more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971101163500.LAA18181@ladder02.news.aol.com>
Source record: 89475

FOR SALE: NOS Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco, and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1650 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #1010-T.

# 4088. Re: Hand held Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971101095556.24796D-100000@oso.slonet.org>
Source record: 89476

Does anyone have a phone number for Tech America? The email address:
http://www/techam.com does not work. Cliff K7RR

On Wed, 29 Oct 1997, John R. Glazier wrote:

> I received an ad today from Tech America advertising two handhelds; one
> for 2M and another for 440MHZ. These are Alinco radios that have a
> high/low output of 340mw/50mw. Each are $88.00. I would like to buy
> the 2M and use it for Packet. My only concern is the low power out.
> Does anyone know of a kit or plans that could be used to increase the
> power. I think this would be an excellent setup for a home 2M
> station/packet radio. Any help or where to look appreciated. Thanks
> for your time. 73's KB0YYZ
>
>

## 4089. Viking II face plate

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Lin Vaughan <kt4jt@firstsaga.com>
Message-ID: <01bce75d$938d0a40$970960cf@kt4jt.firstsaga.com>
Source record: 89477

Looking for a face plate for a Johnson Viking II, Does not need to be great but would like all the decals and markings. e-mail me at: kt4jt@firstsaga.com

73
Lin

# 4090. Re: Trying to find Signetics NE-602

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <345B6D6A.6D6E@popd.ix.netcom.com>
Source record: 89478

Get them while you can, it's an "obsolete" chip and signetics/phillips
aren't making any more. Allied had 16 in stock and I just bought 8!
73 Dan

# 4091. KT4JT Home page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Lin Vaughan <kt4jt@firstsaga.com>
Message-ID: <01bce75e$9dc66be0$970960cf@kt4jt.firstsaga.com>
Source record: 89479

Please visit my "coffee break" page at: www2.firstsaga.com/kt4jt/ If you would like your station presented under the "imiges" icon I would be glad to add it. I rotate these pictures regularly. The ones listed now are from local club members but I'm ready to expand to include EVERY ONE. Send picture of you at your station to: KT4JT, P.O. Box 51, Chester, Virginia 23875. Of course there is no charge.

Tnx es 73

Lin

# 4092. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <gK+I+DAtnwW0Ew9P@pacsat.demon.co.uk>
Source record: 89480

In article <345AC29F.359A5B16@crpl.cedar-rapids.lib.ia.us>, "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us> writes
>
>
>Ian White, G3SEK wrote:
>
>> My QEX article on tetrodes required
>> major changes as a result of comments from the USA - not changes to the
>> basic ideas, but changes in the way they were presented.
>
>This suggests that USA readers have different criteria than other readers. I
>don't believe that.
>
>Bill W0IYH
>

They do. And it can be seen from your handbooks to UK versions.

In the US versions you have a tendancy towards single board transverters and LO instead of the UK versions which sort of 'bolt together' using individual modules.

US amateurs do seem to like their articles different from their colonial cousins across the pond!

73 Simon GM4PLM

+-----------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+-----------------------------------------------------------------+

# 4093. Dan's Small Parts and Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: jparker@fix.net
Message-ID: <63g1k6$fl5$4@zinger.callamer.com>
Source record: 89481

Hey,

wouldnt you know it.

Posted Dan's, extensive, cost cutting/big savings

"End of the Year Sale" and announced it to the world.

The response must of been overwhelming for the

server immediately crashed.

Email works and I can bring up other pages on other

servers but no go on www.fix.net.

So, what to do.

Here you go.

I have posted Dan's Catalog on the following URL's also

and will leave it there in addition to its regular home.

So you can get a look.

http://www.concentric.net/~parker4/dans.htm

http://www.concentric.net/~parker4/dans.html

Enjoy, 72,,,Jerry...WA6OWR...K

# 4094. Re: Monitor repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971101132116.1182A-100000@Ocean.CAM.ORG>
Source record: 89482

Try sci.electronics.repair.

There's also a good website that some of the regulars have set up. Try
www.repairfaq.org. I think I got that right. If not, just look for a
post from Sam, and he'll have the proper url in his sig.

MIchael

On 1 Nov 1997, GEORGE R. COONEY wrote:

>
> Could someone please tell me where to post to get help fixing my
> monitor. I'm trained on TV repair (1950's) but am having trouble
> working on the horizontal sync circuit in the monitor. I have the
> schematic and some waveshapes and a scope but so far no cigar.
> It started out with no Horizontal sync. I tweaked the Hor. Hold
> control and it started to squeal and blew a fusible resistor in
> the 24 volts to the Vertical deflection circuit. Now I have a
> straight line with no horizontal sync. hi. Any ideas or help
> would be appreciated.
>
> George in Phoenix
>
> --
>
>

# 4095. Re: Gap antenna info please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: jimhar@hal-pc.org
Message-ID: <345c940b.12991068@news.hal-pc.org>
Source record: 89483

I'll second Jim's thoughts. However, you can put it closer to the house. Mine is about 3' f/the nearest rain gutter and 4' to a metallic storeage shed. Obvisiouly, I had to adjust most bands, except 80 M where it exceded specs w/ 230 KHZ bandwidth. Never tried 80 M DX, as I am not impressed w/the caliber of conversations. Have worked European DX f/ 40 to 15 M in the 4 weeks that I've owned it (100 watts). Most bands have under 1.6 SWR w/o tuner at radio.

On Sat, 1 Nov 1997 10:49:41 -0500, "N4ST" <jprice@crosslink.net> wrote:

>Have been using a GAP Titan for a while. It does work, with the primary
>advantage being single coax feed for 8 bands and theoretically, no
>tuner, instant band switching. Not a very effective radiator on 80M,
>obviously, but improving as you go higher. Usually, my 15/20/40 meter
>dipoles at 35 feet have a better signal, but not always. Sometimes on DX
>stations the GAP is better. Oddly, my GAP has a lower background noise
>than the dipoles, but then so does a 50 Ohm resistor! Since you really
>should keep this antenna 40-50 feet away from the house, wiring, metal
>structures, etc., its kind of hard to claim that this type of antenna
>require "less space" than a dipole. Mine requires a tuner to get to the
>CW portions of 10 and 15 meters, YMMV. I am deep in the woods and am
>never exposed to high wind. The Titan definitely should be guyed if you
>have any exposure to wind and/or icing.
>
>GL & 73
>Jim - N4ST
>
>
>
>>On 26 Oct 1997 20:44:30 GMT, jkktl@aol.com (Jkktl) wrote:
>>
>>>Hi
>>>I am thinking of replacing my R5 with one of the GAP antennas..any
>opinions out
>>> there?
>>>
>>>Jim
>>>K2TL
>
>

## 4096. Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: chrisl@netdoor.com
Message-ID: <63g70f$13r$1@axe.netdoor.com>
Source record: 89484

I'm sure this is an easy question for some of you, but the info is hard to find. Where can I find some info on grinding crystals for a radio?

# 4097. Re: JPS ANC-4 or MFJ-1026 or???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: dhall@jps.com
Message-ID: <345b769c.130045500@news.ipass.net>
Source record: 89565
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 31 Oct 1997 11:59:08 -0600, Gene Shablygin <gene@jetisi.com>
wrote:

>I have s7 - s9 white noise on 20 almost all the time. I suppose that
>it is generated somewhere VERY locally. So I want to try to use noise
>canceling device. Does anybody have any experience with one of these?
>
>As soon as my shack is full of computer noise, I will need a noise
>pickup antenna outdoors. I know that only MFJ has an external secondary
>antenna connector. But I am really concerned about poor MFJ quality.
>
>Any experience appreciated.
>
>Gene W3UA / RA3AA

Gene,

The JPS unit (ANC-4) also has an input for an external noise antenna.
It also has a money-back guarantee if you don't like it. Buy one, see
if it takes care of your noise problem, and if it doesn't, send it
back. All you're out is shipping.
73,
Doug, KF4KL

# 4098. AD607 SSB/CW Reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971101003901.TAA19695@ladder01.news.aol.com>
Source record: 89566

Howdy,

I am continuing on with a 20 meter RX design. I am considering using an AD607 as the meat and potatoes of my circuit. Has any one used this chip to to receive SSB and CW? The demodulator on it is a QAM demoudulator with in-phase and quadrature outputs. It is controled by a PLL VCO. The data sheet says that phase locking the VCO to an external BFO at the IF freq, will allow you to receive CW and SSB. The question I have is will m(t) (the message signal) be directly available at the I output to drive my AF chain, or do I need to sum the Quadrature and in-phase outputs together to obtain m(t)? If anyone has used QAM demodulators to demod SSB and CW, please let me know the best way to do this with respect to the I and Q outputs.

Thanks,

Kevin Ames (AA7YQ)
mtnclimb@aol.com
Bozeman, MT

# 4099. Re: SSB Demodulation - need theory info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <345a975a.2821807@news.gate.net>
Source record: 89567

On Fri, 17 Oct 1997 12:52:57 GMT, keinanen@sci.fi (Paul Keinanen)
wrote:

>On 17 Oct 1997 07:48:15 GMT, mtnclimb@aol.com (MTNCLIMB) wrote:
>
>>Howdy,
>>
>>I am designing a 20m Single conversion superhet. receiver. I have been going
>> through a lot of single conversions schemes, and everyone I read or look at
>> says nothing about the fact that the carrier of the received signal is
>> surpressed, thus the L.O. and B.F.O. have no way to stay in phase with the
>> Side band of the transmitting signal. Examining the flow of the signal from
>> the antenna to the speaker in a single conversion receiver mathematically, we
>> find that at the speaker, we do not get a perfect reproduction of the
>> modulating signal, rather a distortion that is a function of this phase error.
>> I know that these single coversion receivers work great for SSB, but why is
>> it that we still get the message signal at the speaker, when the L.O. and
>> B.F.O. are not in phase with each other nor the transmitting signal? Is this
>> distortion very minute at audio frequencies, thus making little difference in
>> the intelligibility of the message signal? Or is it the fact that the carrier
>> frequency is much much higher than the modulation frequencies, thus a phase
>> error of great magnitude, causes little distortion to the message signal? I
>> am stumped. If anyone can explain to me mathematically why this occurs, I
>> would greatly appreciate it. Thanks.
>
>I doubt that you will get an exact mathematical explanation, since it
>has to do with psyco-acoustics and as far as I know, there are no
>exact mathematical models for human hearing :-). As you correctly
>observed, there will be phase and frequency errors in the demodulated
>signal, but since the ear is very insensitive to phase errors and it
>is very debatable, if there even is any need to maintain absolute
>phase polarity in high quality sound reproduction (see any High-End
>HiFi newsgroup). An untrained ear can tolerate at least 10 Hz
>frequency error on speech without loosing intelligibility, while some
>hams can copy speech even with a 100 Hz frequency error.
>
>For (Western) music, which relies on exact harmonic relations between
>the tones and their harmonics, a very small frequency offset due to
>difference in the Tx LO and Rx BFO is experienced as a bad dissonance,
>since the tone and its harmonics are no longer in a harmonic
>relationship. Thus, SSB is a bad way to transmit music.
>
>However, if it is required to transfer the _shape_ of a complex
>waveform, such as video, it is very important that exact phase and

>frequency relationship is maintained, thus TV is transmitted with full
>carrier (and an attenuated vestigial sideband). The problem with NTSC
>(and to a minor degree in PAL) is that the chroma subcarrier is
>suppressed during the visible part line and only an ISB signal is
>transmitted. The carrier is regenerated from the color burst near the
>synch pulse. Any phase errors in the regenerated carrier will cause
>bad color errors, requiring the hue control in the NTSC receivers.
>
>Paul OH3LWR
>
A speaker can also be the final filter. Mosot speakers are a ggod low
pass filter with the knee at 15Hz to 20KHz. Thus some distortion is
never heard.

Regards
James WA4BZJ

# 4100. Re: Request

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <63e3pq$nob@news.Hawaii.Edu>
Source record: 89568

In article <3453e18b.51647899@news.mnsinc.com>,
Bry Carling <bry@NOSPAM.mnsinc.com> wrote:
>On 25 Oct 97 10:17:47 GMT, greghome@fastlink.COM.AU (greghome) wrote:

>>Hello,
>>I am currently studying for my novice amateur licence ans I am a member of
>>my local Amateur Radio Club, here in Australia.
>>I would like to be placed on your mailing list, so that I can find out
>>about other people's activities witth home brewing. I am very interested in
>>that side of Amateur Radio.
>>Please let me know what I need to do to get on the list.
>>Regards,
>>
>>Greg Arrell

>Greg - for information about getting on the mailing lists, see:
>http://www.mnsinc.com/bry/hamlynx/hamlists.htm

I don't think Greg saw your remark, Bry, since he's not subscribed
to the email list that carries this NG. By email, I'm sending him
the following:

Greg: If you'd like to receive the newsgroup rec.radio.amateur.homebrew
via email, send an email to: listserv@ucsd.edu and only write:
add ham-homebrew
and you'll be hooked up. MAKE SURE YOU SAVE THE "WELCOME" NOTE
SO YOU'LL KNOW HOW TO UNSUBSCRIBE!!!

7.3W,
Jeff KH2PZ

# 4101. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: yf17@octopus.cdit.EDU.CN
Message-ID: <345BD90A.654C@octopus.cdit.edu.cn>
Source record: 89485

```
add ham-homebrew
```

# 4102. Need help with switch ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Tom Lewis <ab5ck@flash.net>
Message-ID: <01bce748$30557620$810f1ed1@ab5ck>
Source record: 89486

Does anyone know a source that will help me understand current limits for mechanical switches? I often use switches designed for AC to operate my DC projects and I would like to know how much DC current an AC switch can handle? For example, how much DC current can the following switch accept at 14 VDC?

6 A 125-250VAC
1/4 HP 125VAC
1/2 HP 250VAC

Please e-mail me direct if you have any guidance.

Thanks
Tom Lewis
ab5ck@flash.net

# 4103. Re: Hand held Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: eugene.welcome@rook.wa.com
Message-ID: <903950806-971101214232@rook.wa.com>
Source record: 89487

Hi Cliff,

> Does anyone have a phone number for Tech America? The email
> address: http://www/techam.com does not work. Cliff K7RR
^
You inadvertently used the / instead of the . in the address.
Use this: http://www.techam.com

Another door to this company is through Tandy:
http://support.tandy.com
You can get FAX Back documents for Tech America products as well as Radio Shack and Computer City. Or click on the document number of the desired product and read it on the screen of your computer. I prefer this approach over Faxback. The Faxback number is 1-800-323-6586 You just follow the instructions given and you can enter the catalog number to get a document listing via FAX so that you can get the documents. It is faster via the web site. One hint if you make a Faxback search. If you are wanting a specifications doc for Radio Shack's speaker microphone on page 72 of the 1998 RS catalog part # 19-314. You have to change the prefix and suffix to fit the search parameters. The number has to be 3 by 4 or a total of 7 numbers such as 1900314. If you enter 19314 you may get a document for something else as the document # contains 5 numbers. You will be given a choice to enter the doc number or the catalog number. Depending on the number count, determines what is sent. When in the web site you can drop them a note for what ever you can't find. They monitor it well and they have an answer the next day via E-Mail. The DX-394 Communications Rcvr cat# 20-224, I tried to enter 20224 on the telephone and they sent me a list of documents for a AM/FM pocket radio via FAX. I got on the web site and I could not find anything referencing the receiver. I dropped a note and they sent me a dedicated web address that contained all that I needed to get the documents. By the way, FaxBack is a free service.
_ ,,/|
\'o 0'
73, Gene, K7"EEK" !! a =(_"_)= ?? He ate my Mouse !
U
eugene.welcome@rook.wa.com

# 4104. CARC website / Radio Swap Board

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: "Charles F. McManus Jr." <cmcmanus@twave.net>
Message-ID: <345CAD84.1AA6@twave.net>
Source record: 89488

Check out the Centralina Amatuer Radio Club Website. There has been added a Radio Swap Board. Use and Enjoy!

http://users.twave.net/carc

# 4105. Re: Noisey Sudden DC RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <345c87b8.45524276@news.atl.bellsouth.net>
Source record: 89489

On Sat, 01 Nov 1997 13:42:00 GMT, wmeara@erols.com (Bill Meara ) wrote:
>With the help of the members of the Internet HB/QRP community, I'm
>gradually getting my little 30 meter transceiver in shape.
>
>I took a Kanga Sudden RX and paired it up with a simple VXO controlled
>transmitter. I took the oscillator energy from the transmitter at the
>output of the buffer transistor and connected it via RG-174 and a
>coupling cap to the NE602.
>
>The arrangement works, and I've been making QSOs, but the rig is
>plagued by annoying "pops and squeals" that occur when (on receive) I
>tune the main tuning cap. The noises come when the cap is a mid-range
>(its not just when the caps are fully unmeshed). For a moment I
>thought I might have been hitting a bit of dirt or dust on the plates,
>but they look clean and there is no indication that they are coming
>into contact with each other.
>
>Any idea on this problem?

Bill, you have probably located the problem, but didn't look quite
hard enough. The problem is likely poor contact to the capacitor
rotor. This is a wiping contact, of course, since the rotor has to
turn. It could be oxidized or dirty. Or it could be somewhat loose.
Try a shot of tuner cleaner on the wiping contact and see if that
helps.

Gary

Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

## 4106. Re: (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Wilderose <wilderose@theriver.com>
Message-ID: <01bce80e$0da2f1e0$d37b1ace@wilderose>
Source record: 89490

Naw, then they'll just think pork flavored beer!

yaofeng <yf17@octopus.cdit.EDU.CN> wrote in article
<345BD90A.654C@octopus.cdit.edu.cn>...
> add ham-homebrew
>

# 4107. Need a Good Laugh?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19971102142500.JAA21880@ladder01.news.aol.com>
Source record: 89491

Need a Good Laugh?

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

# 4108. Re: 1759 meter band and "lowfers"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <345c849f.44731633@news.atl.bellsouth.net>
Source record: 89492

On Wed, 29 Oct 1997 13:12:42 -0800, jrau@cadence.com (John Rau) wrote:
>In article <345675BF.3148@iusb.edu>, Chris Kelly <ckelly@iusb.edu> wrote:
>
>> I am an aspiring amateur radio operator and hopeful successful
>> homebrewer. I noticed something about the 1750 m band and how this is a
>> good CW band and that this does not require a license to transmit.
>
>You should be aware that your practical range on the 1750 M band
>is extemely short. Some people do some interesting experimenting
>on this band, but if you want to engage in typical "ham" type CW
>communications, you'll be much happier getting a Novice license
>and using one of the HF bands.

That's true. However, you *can* achieve ranges in excess of
1000 km if you use coherent digital techniques. These are pretty
easy to implement directly in hardware due to the low frequency,
IE you can do it with garden variety CMOS.

Or you can use software on a PC to implement them in conjunction
with a more conventional radio. This band offers a great opportunity
to learn about these techniques at low cost. And these techniques
are your only practical choice if you want more than a few km
range on a regular and reliable basis.

Note that these same techniques can be of great benefit at HF too,
but the signal levels at HF are often high enough not to require
them. So you can frequently get by with ordinary RTTY/SSB/CW
if you don't mind having to use excessive power.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4109. WANTED:YAESU-ADMS-Software for ft-50r

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: FireFox <peterh@ms1.seeder.net>
Message-ID: <01bce754$e064c1e0$e21942d2@peterh>
Source record: 89493
Cross-posted to: aus.radio.amateur.misc,aus.radio.amateur.wicen,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

I will like to have YAESU ADMS-Software......(Advanced Data
Management System),You got one?Could you e-mail me?
thank you...

73 DE BM2AEJ

--

��ϑq�l/�u�{��
Peter Hsiao (HSIAO Cheng-Pei)
Peter Hsiao Workshop / KERA Electronics Co.
E-Mail Address: peterh@ms1.seeder.net

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R.O.C. Amateur radio : BM2AEJ
E-Mail Address: bm2aej@email.gcn.net.tw

# 4110. Re: Need help with switch ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <345c8f85.7856862@news.crosslink.net>
Source record: 89494

On 2 Nov 1997 04:34:40 GMT, "Tom Lewis" <ab5ck@flash.net> wrote:

>
>Does anyone know a source that will help me understand current limits for
>mechanical switches? I often use switches designed for AC to operate my DC
>projects and I would like to know how much DC current an AC switch can
>handle? For example, how much DC current can the following switch accept
>at 14 VDC?
>
> 6 A 125-250VAC
> 1/4 HP 125VAC
> 1/2 HP 250VAC

Beautiful Question - Tom. Most people just assume that it doesn't
matter whether it's an AC application or a DC application.

In general, a mechanical switch can handle a MUCH larger AC current
than DC.

Here's the explanation:

An AC current passes through zero twice every cycle. That means that
the arc that forms when you open the switch is SELF EXTINGUISHING.

In contrast, a DC current tries very hard to maintain the level of DC
current flowing when you open the switch. This attempt at maintaing
the current level is due to Lenz's law, E=L di/dt. The amount of
energy available to keep that arc alive is the amount of energy stored
in whatever inductance there is in the circuit (every circuit has some
inductance, however small). The stored energy is 1/2 x L x I^2.

Here's how that energy gets used, and this is the part the people have
a hard time understanding. Whatever arc current flows at a given
moment is in the process of decaying, but the reduction of current is
a di/dt or a "rate of change" of current. That di/dt or "rate of
change" produces a proportional voltage from Lenz's equation. This
voltage is enough to sustain the arc, but remember the energy stored
in the inductance is continuously being used up or dissipated in this
process.

So, eventually the arc extinguishes, but only after the enery is all
used up, which takes either a long time or very quickly, depending on
the amount of inductance. The total energy dissipated in the arc is
proportionate to the level of DC current that was flowing at the time
you opened the switch.

Since it's the arc that burns the contacts of the switch, the bigger the current and the bigger the inductance, the quicker the switch is burned out. As you can see, the switch's duty rating has to be specified in terms of how much DC current is can break. But the switch manufacturer DOESN'T KNOW how much inductance is in your circuit, he can't tell you how many times you can break that arc before it's burned out. Therefore, you won't see a DC current rating on most switches. On those switches for which you DO see a DC current rating, it's shocking how big the switch has to be for something as moderate as an amp or two. This is why most switches carry only an AC rating - they really don't even want to get into the realm of DC currents and their associated problems - they know you would be scared off by the teensy-weensy little DC current rating.

I wouldn't use your "6 amp" switch at anything higher than 1 amp DC and even then it won't last long.

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4111. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <63it6c$qes$2@news1.teleport.com>
Source record: 89495

In article <345A91BD.2E28@northwest.com>, larryc@northwest.com wrote:

>. . .

>. . . I had a brief subscription to QEX back in
>the late 80,s and I let it expire. Just too darn boring. TOo much
>advertising for the articles...which were not very cutting edge. My own
>preference was HAm Radio, about a year prior to it's demise (and
>earlier). Kickin' articles, very little advertising. . .

>. . .

Alas, I'm afraid there may be a connection between the lack of advertising and the magazine's demise. Looking for a magazine with great articles and very little advertising may be like looking for a place as green as western Oregon and where it seldom rains.

Roy Lewallen, W7EL

## 4112. Plans for 160m amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Glenn Schultz <glenn@spacestar.net>
Message-ID: <01bce7da$7a94f340$96c0bfce@larry.spacestar.net>
Source record: 89496

Has anyone got or seen any schematics for a 160m using either 3 811A's or 4
sweep tubes?
--
Glenn
N0VYK
10X #68391
n0vyk@spacestar.net
glenn@spacestar.net
Check out the N0VYK Antique and Amateur Radio Homepage:
http://www.spacestar.net/users/glenn/index.html

## 4113. **Guess the Mystery Xcvr!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19971102222800.RAA06342@ladder02.news.aol.com>
Source record: 89497

```
Try it AT:
http://members.aol.com/rlucch2098/index.html
73............Rich
```

# 4114. ECG Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <63j2mg$ci5@news.asu.edu>
Source record: 89498

Does anyone know if the ECG CAtalog is available on line? If not
that, any catalog for looking up semiconductor replacements.
I need to look up a TDA1670A 15 pin vertical sync chip for a monitor
I'm working on. Any help appreciated. Thanks

George in Phoenix.

--

# 4115. Re: ECG Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Dave Hills <dhills@onramp.net>
Message-ID: <345D26E8.C83834EC@onramp.net>
Source record: 89499

GEORGE R. COONEY wrote:

> Does anyone know if the ECG CAtalog is available on line? If not
> that, any catalog for looking up semiconductor replacements.
> I need to look up a TDA1670A 15 pin vertical sync chip for a monitor
> I'm working on. Any help appreciated. Thanks
>
> George in Phoenix.
>
> --

http://WWW.NTEINC.COM/

--
Dave Hills
DH Associates
Power Supply Engineering, Design, & Consulting
dhills@onramp.net

## 4116. FS: Jennings Vacuum Variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <345D6B78.DF27A24C@connect.net>
Source record: 89500

Jennings ceramic vacuum variables. One is 2300pf @ 15kv; the other is
1500pf @ 15kv.
$185.00 each; shipped to your CONUS door.

(((73)))
Phil, K5PC

# 4117. Re: Why the term ---HAM---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Pete McGreevy <PMCGREEV@MAIL.IDT.NET>
Message-ID: <345D4A1D.6E58@MAIL.IDT.NET>
Source record: 89501
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Giancarlo Sanna wrote:
>
> Gary Coffman wrote:
>
> > On Mon, 08 Sep 1997 16:11:04 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:
> > >But the one I like best goes like this. This era was filled with pulp
> > >magazines catering to the experimenter. (Everyone at the end of
> > >the Victorian age apparently viewed himself as a closet inventor
> > >or tinkerer.) One of these magazines was called Home Amateur
> > >Mechanic, and it featured many simple radio sets a person could
> > >build. It is likely that when asked what kind of radio an operator
> > >was using, he might send back RIG HR ES HAM, meaning that
> > >it was one of the circuits shown in Home Amateur Mechanic
> > >magazine. Since telegraphers tend to abbreviate everything, due
> > >to the low throughput of Morse, this is plausible, and Home
> > >Amateur Mechanic magazine certainly did exist in the correct
> > >era. So it was those HAM radios which started the use of ham
> > >in amateur radio.
> >
> > Er, ah, the pseudo-CW as written makes no gramatical sense.
> > Lets try RIG HR IS HAM or RIG HR DE HAM. The latter
> > makes the most sense, IE it says the rig is *from* Home Amateur
> > Mechanic magazine, but the former may have been the one used.
> > Apparently, no one alive today knows.
> >
> > Gary
> > Gary Coffman KE4ZV | You Make It | Email:
> > Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
> > 534 Shannon Way | Guaranteed | or
> > Lawrenceville, GA 30244 | | ke4zv@radio.org

Now, who knows where we can get PLANS for a H.A.M. Radio?!?!?!

73's de KA2YDY, Pete

# 4118. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Radio Randy <rjones@plix.com>
Message-ID: <345D6C8B.733D@plix.com>
Source record: 89502

Lightning is a common cause for that type of failure in a power supply.
Not a direct strike, just a nearby one.

I, personally, fear no name power supplies. My ham gear rates better than
that. Astron has been a VERY reliable unit in my business (commercial
2-way) and has excellent protective circuitry (for connected equipment).
I would question the quality of ANY equipment that didn't follow even the
most common practice as emitter resistors on parallel transistors.

Radio Randy

# 4119. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Radio Randy <rjones@plix.com>
Message-ID: <345D70F5.4F73@plix.com>
Source record: 89503

Ken,

Looks like good answers to your question.

If you would like electronics projects, other than ham radio related, look at an issue of Electronics Now. I take QST and Electronics Now for the technical articles. I stopped QEX but still get the ARRL Handbook every couple of years and the 1996 ARRL Periodicals CD which contains a years worth of QEX (just in case).

Locate Electronics Now via "http://www.gernsback.com/". Good luck.

Radio Randy

# 4120. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <2PvwuFACoMX0EwXQ@ddwyer.demon.co.uk>
Source record: 89504

In article <63g70f$13r$1@axe.netdoor.com>, Chris Lamousin
<chrisl@netdoor.com> writes
>I'm sure this is an easy question for some of you, but the info is
>hard to find. Where can I find some info on grinding crystals for a
>radio?
>
Possibly the ARRL handbook. However home crystal grinding was only
feasable for air gap crystals and they are seldom encountered these
days.
I have sucessfully moved the frequency of 1 to 5 MHz solder seal
crystals by using a soft pencil to transfer graphite onto the non
polished electrode surface, this can lower the frequency by up to
2000ppm always wash and dry the crystal after( try vodka! ) or other
residue free solvent.
When modern crystals are manufactured they are ground to about 5000ppm
above the required frequency. The electrode is evaporated on to reduce
the frequency to the exact value. You can also electro plate/deplate to
change the frequency.

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 4121. Re: Crystal Current Measurement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <+vvymBAAhMX0Ew0m@ddwyer.demon.co.uk>
Source record: 89505

In article <63aah7$pqt$1@nixon.area.com>, Richard Karlquist
<rick@area.com> writes
>In article <638gg9$krq$1@ncar.ucar.edu>,
>Chip Owens <owens@stout.atd.ucar.edu> wrote:
>>
>>I'm looking for a method to measure the crystal current in a vacuum
>>tube crystal oscillator circuit. I'd like to measure the current to
>>
>>Is there a means of doing this without resorting to the purchase of
>>an RF ammeter that would read down to a few milliamp range? An RF
>>milliammeter of this type would be pretty scarce these days.
>
>Use a 1 ohm resistor in series with the crystal and a T16-1
>transformer to step of the voltage by a factor of 4.
>
>>The maximum or full-scale range I'm interested in measuring would be
>>100mA and probably minimum would be down around 5 to 10mA. The
>>oscillator frequency to be measured would be the 1.8, 3.5, and 7MHz
>>ham bands.
>
>What kind of crystal can withstand 100 mA of current? That's
>brutal. I think you should be in the range of 1 to 10 mA at
>the most.
>
>Rick Karlquist, N6RK
>rick@area.com
I am afraid that with modern crystals which tend to be smaller in
diameter and with evaporated metal electrodes rather than air gap
holders 1mA should be regarded as an absolute maximum before the
parameters change permanently. Note good modern crystals drift less with
time if not driven over 100uA I know this makes a QRP rig more
difficult.
Note that current is not really the limiting factor, what damages
crystals is the real movement of the vibrating surface.
With a high Q crystal say 1000000 the surface will move further for the
same current than a 10000 Q crystal.
Clearly mA/area is involved ahd therefore a tiny crystal such as an XY
flexure watch crystal must be driven even less hard
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 4122. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <345C4D48.6747@isrc.net>
Source record: 89506

Chris Lamousin wrote:
>
> I'm sure this is an easy question for some of you, but the info is
> hard to find. Where can I find some info on grinding crystals for a
> radio?

Here it is... I keep a notebook with articles about crystals (a hobby within a hobby) and found an article called "Techniques for Grinding Crystals" by Michael Simmons, WB9CWE. It appeared in the July 1991 issue of _CQ_ magazine. It's only two pages long, but very readable. Unfortunately, I do not have access to a scanner. But I'd be happy to stuff a copy in an envelope and snail-mail it to you.

HTH

73 de KJ5BA
Matt J. McCullar
Arlington, TX

# 4123. Re: Plans for 160m amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-02 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <345C4FE0.4D91@isrc.net>
Source record: 89507

Glenn Schultz wrote:
>
> Has anyone got or seen any schematics for a 160m using either 3 811A's or 4
> sweep tubes?
> --
> Glenn
> N0VYK
> 10X #68391
> n0vyk@spacestar.net
> glenn@spacestar.net
> Check out the N0VYK Antique and Amateur Radio Homepage:
> http://www.spacestar.net/users/glenn/index.html

Closest thing I can find immediately is a 1500-watt amp for 160m using
an Eimac 3CX1500A7/8877 in grounded-grid configuration. This article is
in the 1991 _ARRL Handbook_, and I think it was in the 1988 version as
well.

Matt J. McCullar, KJ5BA
Arlington, TX

# 4124. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <345e3d4a.2865602@news.online.no>
Source record: 89419

On Sat, 1 Nov 1997 08:23:58 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

Hi!
>The basic criteria are the same everywhere, of course, but readers in
>different countries will start from a different knowledge base. This is
>partly due to the selective coverage of magazines and books in each
>country, but also because amateur radio in each country has a unique
>national flavo(u)r. An article by a writer from another country has to
>take account of this, or else it is not meeting the local readers'
>needs.
>
I have a feeling that this means: Keep-it-Simple-Stupid? While we are
more concerned about reliability in Europe.....adding some extra
components to improve the design.....
But such means bad economy when it is important that the circuit must
be inexpensive to make, not neccessarily last long......

73 JM

---
Email: LA8AK at online dot no

# 4125. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <345e401b.3586218@news.online.no>
Source record: 89420

I would suggest something is wrong with the thermal resistance. If one collector is cold and one is hot, why did not the hot transistor heat the cold one - at least to some degree? Did you remember thermal compound? Several manufacturers don't seem to understand this. We had some problem with some general fault for some equipment that the voltage regulators were rather hot while the cooling fins were cold.

my favourite type of simple +12V regulator type uses 2x2N3055 with collectors direct to chassis with 7912 regulator - with 15VAC transformer etc. I made one for 5A and one for 10A. Either uses 2x3055 - they are cheap and two transistors outside the die-cast box improves the heat problem

73 de J-M

---
Email: LA8AK at online dot no

## 4126. jmhoos@northernnet.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: Joann & Mark Hooser <jmhoos@northernnet.com>
Message-ID: <345E6554.8302FEBD@northernnet.com>
Source record: 89421

What are some of the good books for building antenna?

## 4127. Source for 40m xtals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: Brian Smithson <smithson@ma.ultranet.com>
Message-ID: <63lqel$pn6$1@decius.ultra.net>
Source record: 89422

Anyone know of a source for 40m xtals for homebrewing? I've been working on k4pc's '40m Fun Machine' and can't find a 40m xtal!

Tnx es 73!

-Brian n8wrl

# 4128. Re: TenTec Titan on 160

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: George Worth <gworth@ibm.net>
Message-ID: <345EBF2D.2A6C@ibm.net>
Source record: 89423
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Peter Mikalajunas wrote:
>
> On 2 Nov 1997 22:04:24 GMT, "rogerp" <auburn@northernnet.com> wrote:
>
> Also what are you using for an antenna? I have found shortened 160m antenna can
> often result in a standing wave on the feed line itself. Also check the tuner
> for arcing. 160m can be alot of fun, but also frustrating in getting everything
> working properly.
>
> >George:
> >Try loading up into a dummy load. If the grid meter doesn't act up, then it
> >is in your antenna system. If it still does, then I would open up the amp
> >and look for a poor solder connection somewhere in the 160 M circuitry.
> >
> >John
> >NI0K
> >
> >George Worth <gworth@ibm.net> wrote in article <345436F5.C50@ibm.net>...
> >> Gentlemen,
> >> I have a question for someone who may know why I observe the following
> >> when I load up this amplifier on 160m. No matter how I load/tune this
> >> amp on 160, the grid current meter deflects negative (below zero). The
> >> amp is easy to drive and seems to have no problem with arcing, etc.
> >> Plate current acts normal. Is this phenonenon a metering problem? This
> >> makes no sense to me. Ten Tec service did not really have an answer for
> >> me. Any ideas would be appreciated.
> >>
> >> Thanks,
> >>
> >> George
> >> N2YFY
> >>
> >> gworth@ibm.net
> >>
>
> Peter Mikalajunas
> kd9fb@xnet.com
> http://www.xnet.com/~kd9fb

Thanks Peter for the reply. I'm using a full wave horiz loop fed with
450 ohm ladder line through the balun in a Nye tuner. BTW, I was also
getting the same problem on 80m at one point, but it "went away" on 80m
(just a normal dipole with choke balun at feedpoint, 1:1 match). It does

sound suspiciously like RFI in metering circuitry, doesn't it. I have a few 8 ft rods in the earth a few feet outside the window connected to the shack with 1" braid. Still, there may be rf in the metering circuitry.
Don't know. Thanks for your ideas. Any more, let me know.
George

## 4129. Seeking non-appliance operator hams for small microwave/VHF group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <345EAB98.7541@northwest.com>
Source record: 89424

There it is... frustrated 40-something/Morse-code fanatic (with tubed Collins) seeks homebrew types with knowledge, experience, and know-how for fun, contesting, and gear building. I live near Portland, Oregon but I'm not a native (and **NOT** a Californian). Not interested in impressing others' with megabucks of appliances from Icom, etc. Cynical sense of humor required.

email replies to larryc@northwest.com

# 4130. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: "Matt J. McCullar" <saturn@isrc.net>
Message-ID: <345DA90A.1CBB@isrc.net>
Source record: 89425

The article I talked about here on crystal grinding uses Comet, a commercially available powder abrasive used for cleaning bathtubs and sinks. You sprinkle a bit onto a sheet of glass and add just enough water to form a smooth paste. Get those little pieces of grit out of it, though.

I haven't tried this myself, but I do know that you can remove scratches from compact discs with Brasso metal polish. Would it work on changing the frequency of a crystal? I ought to try this. I've got several crystal holders...

Here's a gag that wrote itself. For lack of anything better to keep all my crystals in, I use a glass coffee jar my folks gave me a while back. So I put a label on the jar: "Folger's Crystals."

The original _CQ_ article also recommends diamond rogue, if you can get it. This is the stuff that jewelers use.

But, hey -- if toothpaste can clean your fingernails, it ought to work on a crystal.

Matt J. McCullar, KJ5BA
Arlington, TX

# 4131. WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: email@tig.com.au
Message-ID: <63lnbe$a3b$3@toto.tig.com.au>
Source record: 89426

CPI 2000 BASE....
EMAIL ME IF U CAN HELP.

# 4132. Homebrew 4CX1500B Amp $500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: ae4cz@aol.com
Message-ID: <19971103022900.VAA01725@ladder02.news.aol.com>
Source record: 89508

I have a homebrew amplifier for sale. The bulk of it was purchased as military surplus. It consisted of two 4CX1500B tubes, sockets, and chimneys. It was designed to operate as a sonar amp on audio frequencies so it did not have an RF deck. I purchased all the parts needed to make it a ham amp and assembled it using only one of the tubes. The cabinet is on wheels and the thing weighs over 100 lbs (the transformer is huge). It is as wide as a rack mount (19 in), 2 feet tall, and 17 in deep. To make a long story short, the amplifier works and puts out 900 watts CW on 10 - 160 meters. I think I need a parasitic mod because I have trouble tuning it on 20 and above. 40-80-160 seem to work great.

I will try to sell this amplifier as is for a few weeks before parting it out. It consists of the following that I have purchased:

Military surplus amp-----------------------------------------------$250
2 @ 4CX1500B Pulls ($100 ea)
2 @ SK800B sockets ($30 ea w/chimney)
2 @ SK806 chimneys
3500 V transformer ($50)

Jennings UCSF-500 vacuum cap (12-500 @ 7.5 kV)--------$100

Jennings CVCC 2500 (25 - 2500 @ 6 kV)--------------------$100

2 @ Groth turns counters $35 ea--------------------------------$ 70

32 uF @ 4.5 kV power supply capacitor------------------------$ 36

B&W 852 tank coil w/ integral bandswitch---------------------$ 60

HC1 Kilovac SPDT vacuum relay (same as RJ1A)------------$ 40

Meters, relays, knobs, chokes, doorknob capacitors,
power resistors, hardware, etc.-----------------------------------$ ??

-----

TOTAL
-----------$656 +

PURCHASE PRICE FOR ALL PARTS AS IS:-------------$500 firm

My plan was to redo the amplifier and put the second tube and socket back in it to boost the power level but I do not have the time to work on it. All the parts are heavy enough to handle the load. I hate to part it out because the amp does work and it has many features of high quality commercial amps (voltage regulation, timer delays, vacuum relay, overload protection, vacuum capacitors, etc). I have drawn the schematics for all boards on the amplifier (most are original commercial but a few are homebrew).

I am certain I can get at least the $500 if I part out the amp. If you are interested, please call, email, or stop by my house to check it out. Unfortunately, as heavy as this amp is, I cannot ship it.

Norm Leonpacher
ae4cz@aol.com
Biloxi, MS
(228) 436-3568

## 4133. Kenwood & Icom 13.8VDC connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971103062401.BAA24014@ladder02.news.aol.com>
Source record: 89509

Does anyone know a source of the 6 connector rectangular plugs that is used on Knwd and Icom HF transceivers such as the TS-430, TS-50, IC-730? It is similar to a MOLEX plug but has the individual contacts surrounded in plastic. The brand name cables are pretty expensive.

# 4134. Re: ECG Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: Hugo@vncomm.com
Message-ID: <345d667a.3284422@news.vncomm.com>
Source record: 89510

georgie@aztec.asu.edu (GEORGE R. COONEY) wrote:

>
>Does anyone know if the ECG CAtalog is available on line? If not
>that, any catalog for looking up semiconductor replacements.
>I need to look up a TDA1670A 15 pin vertical sync chip for a monitor
>I'm working on. Any help appreciated. Thanks
>
>George in Phoenix.
>
>--

George,
NTE1862 :TV Vertical Deflection Linear IC

HC

# 4135. ECG Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: eugene.welcome@rook.wa.com
Message-ID: <912920423-971102211533@rook.wa.com>
Source record: 89511

> Does anyone know if the ECG CAtalog is available on line? If not
> that, any catalog for looking up semiconductor replacements.
> I need to look up a TDA1670A 15 pin vertical sync chip for a monitor
> I'm working on. Any help appreciated. Thanks

Hi George, here is what I use.

Linkname: Cross Reference Search
Filename: http://www.nteinc.com/cgi-bin/nte

NTE Electronics, Inc. Product Information
URL: http://www.nteinc.com/Web_pgs/Prodindex.html

Locate Nearest Distributor
http://www.nteinc.com/NET_St_lst/Disty.html

PHILIPS ECG PRODUCTS
http://www.epsilon-assoc.com/~starkel/ecg.htm

The Philips ECG uses the NTE site when you do a search from the Philips
web site, the last time I was on-line. I dropped a note to Philips and
asked if they had bought NTE. The answer was no and since the NTE is a
mirror of ECG they agreed to cooperate on the use of NTE's cross
reference site. Another electronic search site for electronic parts
manufacturers and vendors, use: http://www.electrobase.com/index.htm
manufacturer and venders search. This will give addresses and phone
numbers with 800/888 numbers when available.
_ ,,/|
\'o 0'
73, Gene, K7"EEK" !! a =(_"_)= ?? He ate my Mouse !
U
eugene.welcome@eagles.wa.com

# 4136. Re: Kenwood & Icom 13.8VDC connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: Meegan and Jim Wilson <wilson@afn.org>
Message-ID: <345DD34C.5D6E7AC2@afn.org>
Source record: 89512

You might try DejaNews.

There's one fella that sells a hacked up molex connector. The problem with the molex is that the D-shaped plastic keys face the wrong direction, and the inserts are ALMOST the right size. I got three of these connectors for $10, and I was able to make them work. You can probably shave one corner of the two offending Ds yourself and save a little money. You also have to build a "squeeze tool" to shrink the inserts a little bit. I drilled the center of two pieces of angle and put the resulting "squeezer" into a vice.

In response to an article/ad by this first guy, another responded that the connectors (without the cable/fuse) were themselves available from ICOM for about the same $. The advantage is that the "real" connector also has a locking mechanism that keeps 'em from falling off (really required for mobile operation, not so necessary for fixed).

Good luck,

Jim Wilson,
WA5BRB

# 4137. Re: Kenwood & Icom 13.8VDC connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: mstangelo@worldnet.att.net
Message-ID: <63l1eg$4k@bgtnsc03.worldnet.att.net>
Source record: 89513

I called up ICOM Tech Support with some technical questions about my IC706.
I asked them if I could purchase the connectors? They sent me
a connector body and pins - no charge.

Keep in mind that the pins carry a substantial current. The wire should be
properly crimped to the pins. The pins are similar to Molex pins so a Molex
Tool should work. If no tool is available the wire should be soldrered to
the
pin.

Mike N2MS

K5KNE <k5kne@aol.com> wrote in article
<19971103062401.BAA24014@ladder02.news.aol.com>...
> Does anyone know a source of the 6 connector rectangular plugs that is
used on
> Knwd and Icom HF transceivers such as the TS-430, TS-50, IC-730? It is
> similar to a MOLEX plug but has the individual contacts surrounded in
plastic.
> The brand name cables are pretty expensive.
>

# 4138. The WWVB Receiving Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <345E1A3A.5258@lakeweb.com>
Source record: 89514

I am not sure which newsgroup this was on so I'll post a couple.
This link is to a WWVB antenna construction page and I
hope informative.
Thanks, Dan.

The WWVB Receiving Antenna:
http://www.lakeweb.com/dbLabs/wwvb.html

# 4139. Alpha 76 QSK help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: Nicholas Thomas <njt@pixeltech.com>
Message-ID: <345E1896.7A36C368@pixeltech.com>
Source record: 89515

Does anyone know of a kit to add QSK to the Alpha amplifier 76 series? Brad at Alpha power mentioned someone who makes a pin diode kit. Does anyone have a number to reach this person at, or know of another solution.

Thank you very much

de AA1LN

--
**********
Nicholas Thomas

PixelTech
PO Box 273
Hampton Falls, NH 03844
(800) 867-2732

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* Dedicated Web servers

http://www.pixeltech.com/

**********

# 4140. Re: 2N3055 Current Share Resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <63la6v$509@hpcvsnz.cv.hp.com>
Source record: 89516

J M Noeding (la8ak@online.nospam.thanks) wrote:
: 0.1 ohm is often used because it is the lowest commonly available
: resistor value. You may wind your own resistors and use lower value,
: enamelled cu wire may not need to be drasticly long for 20milli ohm

One interesting thing about using copper wire in this application:
Normally, you'd want resistors which are temperature stable, and
copper has about 0.4% per degree C positive temperature coefficient
of resistance. So..normally, you would want to be careful about
using resistors wound from copper wire. But in this application,
as the side drawing more current heats its resistor more, it tends
to further balance the current between the two sides.

Another thing: The original poster noted that under 0.3A load
test, one transistor gets HOT. That's a really bad sign in a
power supply which is supposed to handle up to, um, what was it?
8 amps? Dave Martindale mentioned the possibility of just a poor
thermal contact of that transistor to its heatsink. Perhaps.
Or...could there be more going on here?? Could there somehow
be more load than you think? Seems unlikely if the two transistors
really do have paralleled collectors and emitters...but it seems
worth checking out further. Even if it's 0.3A into a short circuit,
with 22V to the collectors, that's only 6.6 watts, not so much for
a 2N3055 with adequate heat sink. If it's into a load at 12 volts,
then it should only be about 3 watts!

--
Cheers,
Tom
tomb@lsid.hp.com

## 4141. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mra8xskqu.fsf@spinner.ecofe.com>
Source record: 89517

In the US versions you have a tendancy towards single board transverters and LO instead of the UK versions which sort of 'bolt together' using individual modules.

That may reflect the views of the editors and not necessary those of many practitioners.

US amateurs do seem to like their articles different from their colonial cousins across the pond!

See also the thread concerning ARRL vs. RGSB publications.

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4142. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-03 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <345e3a9b.2178655@news.online.no>
Source record: 89518

On Sun, 02 Nov 97 22:03:06 GMT, w7el@teleport.com (Roy Lewallen)
wrote:

>In article <345A91BD.2E28@northwest.com>, larryc@northwest.com wrote:
>
>>. . .
>
>>. . . I had a brief subscription to QEX back in
>>the late 80,s and I let it expire. Just too darn boring. TOo much
>>advertising for the articles...which were not very cutting edge. My own
>>preference was HAm Radio, about a year prior to it's demise (and
>>earlier). Kickin' articles, very little advertising. . .
>
>>. . .
>
>Alas, I'm afraid there may be a connection between the lack of advertising
>and the magazine's demise. Looking for a magazine with great articles and
>very little advertising may be like looking for a place as green as western
>Oregon and where it seldom rains.
>
>Roy Lewallen, W7EL

you may choose DUBUS magazine, it appears quarterly with about 95-100
pages, 40 pages technical and the rest operational stuff - for
VHF/UHF+microwaves SSB/CW - it use to have maximum 2 advertisments.
It is bilingual (30% of text has German text as well as English),
subscription $25 (?), email: dubus01@ibm.net

73 de JM

---
Email: LA8AK at online dot no

## 4143. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: n1ddzrjc@aol.com
Message-ID: <19971104005401.TAA05591@ladder01.news.aol.com>
Source record: 89427

It's not the content that makes the RSGB books more expensive, it's the paper. ARRL uses,which is, unfortunately, a very cheap, acid paper that tends to turn brown and brittle. On the other hand, you may not happen to care if the book is around in 10 or 15 years. Sams publications also use a very inferior paper that will not last more than about 15 years.

Good books are made from good paper. I won't buy the ARRL books that use this "newsprint".

Bob Crowley>

# 4144. FS: Tubes O1A to 6550

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: vintel@aol.com
Message-ID: <19971104020400.VAA13618@ladder02.news.aol.com>
Source record: 89428

UNBOXED TUBES FOR SALE. Price col 1 = tube tested at least 105% of value
called for on mutual conductance type tester(Hickock 600A or TV2). Col 2 = tube
tested 85 to 104%. Col 3 = tube tested 40 to 84%. Col 4 = display tube(or,
maybe
it can be rejuvinated).
TUBE no. Style Price 1 Price 2 Price 3
Price 4
01A ST 9.80 8.00
4.00 1.50
01A Globe 17.00 14.00 7.00
3.00
24 ST 7.00 6.50
3.00 1.00
24 Globe 12.00 10.00 5.00
2.00
26 ST 10.50 9.00
4.50 1.00
26 Globe 16.50 14.00 7.00
2.00
27 ST 4.25 3.00
2.00 1.00
27 Globe 7.35 6.00
3.00 2.00
42 ST 12.00 10.00
5.00 1.00
42 Globe 19.00 16.00
8.00 2.00
45 ST 28.00 23.00
12.00 2.00
45 Globe 45.00 38.00
20.00 7.00
71/A ST 13.00 11.00
6.00 1.00
71/A Globe 20.00 17.00 8.00
4.00
80 ST 8.00 6.00
3.00 1.00
80 Globe 29.00 24.00
12.00 3.00
5881 Tung Sol 16.00 11.00 5.00
1.00

NEW OLD STOCK IN ORIGINAL BOXES
6550 ST Tung Sol,RCA, Raytheon 90.00

5AR4\GZ34 AMP (Japan), Sylvania (GR Britian) 40.00

Prices listed are U.S. Dollars. Shipping not included in listed prices
Inquiries to: vintel@aol.com

## 4145. Heathkit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: taspinw800@aol.com
Message-ID: <19971104033701.WAA24308@ladder02.news.aol.com>
Source record: 89429

Can anyone tell me what this Heathkit power amp Model HA- 202 A is? Any help is appreciated.

Terry

# 4146. wanted - kenwood mc50 switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: pberrett@tbsa.com.au
Message-ID: <345eaa4f.3152475@news.tbsa.com.au>
Source record: 89430

Hi all

I have an old kenwood desk mike (mc50) with a broken switch. Does anyone have an old switch mc50 that is broken and that they can let me have the switch for?

Hoping someone can help

cheers Peter vk3pz
pberrett@tbsa.com.au

# 4147. Trade 75A1/270G-1/312B-3/TS-930

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bce9ba$dadc70c0$829fd8cc@km3g.cts.com>
Source record: 89431
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I have a 75A1 with the 270G-1 speaker and a 312B-3 speaker. Cosmetically all are about a 7.5. I have the original (and very pristine) manual for the A1. Electrically the A1 currently is in need of some TLC. The audio gain pot is defective, the other pots and switches are very noisey, and most likely some of the tubes are soft. All units are restoreable to collector condx, but with patience and a loving heart.

I do NOT want to sell but would rather trade. I would throw in my TS-930SAT with this package and trade everything for either a Knwd TS-850SAT, Corsair II with accessories, or OMNI V.

thanks for the read

Lane
Kilo Mike Three Gulf
San Diego

# 4148. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <63n32m$8h8_001@leeds.ac.uk>
Source record: 89432

In article
<europa-ya023580000311971923550001@news.primenet.com>,
europa@primenet.com wrote:
>In article <345C4D48.6747@isrc.net>, saturn@isrc.net wrote:
>
>:Chris Lamousin wrote:
>:>
>:> I'm sure this is an easy question for some of you, but
the info is
>:> hard to find. Where can I find some info on grinding
crystals for a
>:> radio?
>:
>:Here it is... I keep a notebook with articles about
crystals (a hobby
>:within a hobby) and found an article called "Techniques for
Grinding
>:Crystals" by Michael Simmons, WB9CWE. It appeared in the
July 1991
>:issue of _CQ_ magazine. It's only two pages long, but very
readable.
>:Unfortunately, I do not have access to a scanner. But I'd
be happy to
>:stuff a copy in an envelope and snail-mail it to you.
>:
>:HTH
>:
>:73 de KJ5BA
>:Matt J. McCullar
>:Arlington, TX
>
>
>You can also etch crystals with hydroflouric acid, which
suprisingly is
>available here in the local supermarket at several molar
strength as "Whink
>Rust Stain Remover". It is also a component of alot of
mag-wheel cleaners
>for cars.
>
>Heat it up in a water bath in a small tupperware container,
and use plastic
>tweezers to hold the crystal blanks. Do some experimenting,
as the

>frequency always seems to change slowly, until you get close
to the freq
>you want, then zoom, you passed it and the crystal is
useless.
>
>Be careful not to get it on your hands. Use rubber gloves.
The vapors are
>harmful, but not as bad as some other mineral acids.
Strangly, its more
>dangerous on skin than in the lungs, unlike other acid
vapors. Use a fan
>or kitchen exhaust to get rid of the fumes. Happy etching.
>
>Rob.

I just read a chemistry book (I'm a student) which mentioned that the maximum constant exposure limit to HF is 2-3 ppm, for hydrogen cyanide it is 10 ppm; and as we all know cyanide is not particularly good for you... I would do the etching outside, wearing proper chemically resistant gloves, safety glasses and a lab coat or similar. Oh, and glass is etched by HF so you will have to use a propylene or steel (apparently steel is inert to HF) container. The QRP Circuit Book (unsure of the name) here in the UK has a page or two on xtal etching using toothpaste and carborundum powder, much safer.

73 & good luck,
Laurens M1CCO

## 4149. Source 1N1200

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <345F16CA.684B9816@erols.com>
Source record: 89433

Anyone know of a source for a single 1N1200 stud-mount diode?

# 4150. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971104122001.HAA22079@ladder01.news.aol.com>
Source record: 89434

>
>In response to Carl Stevenson,
>So you can build gear any time you want without knowing
>Morse. So what? So can I, I'm an engineer too. Big deal.
>Address the point, Carl: I said those who know Morse are
>more likely to build equipment. That means kids just
>breaking into the hobby. Ham radio is not the province
>of electrical engineers.
>
>Again, ask those in the QRP clubs. Why do you run from this
>task? ASK THOSE in the QRP clubs, and acquire a real
>understanding of the issue. Beyond the issue, of course, that
>has to do with the real core issue of Morse: easing of
>requirements, and making money.
>
>Regards,
>Vince, WB2EZG

Hang it up Vince. Your argument is the circular logic in your own mind.

W4ZCB

# 4151. 3SK51 Equiv ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: Rudi <rudix@atlas.infopta.co.za>
Message-ID: <345F3CEB.B414131A@atlas.infopta.co.za>
Source record: 89435

Hello everyone,

I have an Yaesu 6m transverter that was damaged becuase the FT-77 that I was using with it decided to output RF into the receiver !. I need to replace 2 x 3SK51 Fet's but I am having a problem getting them in this part of the world.

I would like to know what equivalents I can use that would not require a mod to the tranceiver (FTV 700). Any information would be of great help !

Thanks,

73, Rudi de ZR6VE

# 4152. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <9XE5lHAQ4yX0Ew2l@ddwyer.demon.co.uk>
Source record: 89436

In article <345DA90A.1CBB@isrc.net>, "Matt J. McCullar"
<saturn@isrc.net> writes
>The article I talked about here on crystal grinding uses Comet, a
>commercially available powder abrasive used for cleaning bathtubs and
>sinks. You sprinkle a bit onto a sheet of glass and add just enough
>water to form a smooth paste. Get those little pieces of grit out of
>it, though.
>
>I haven't tried this myself, but I do know that you can remove scratches
>from compact discs with Brasso metal polish. Would it work on changing
>the frequency of a crystal? I ought to try this. I've got several
>crystal holders...
>
>Here's a gag that wrote itself. For lack of anything better to keep all
>my crystals in, I use a glass coffee jar my folks gave me a while back.
>So I put a label on the jar: "Folger's Crystals."
>
>The original _CQ_ article also recommends diamond rogue, if you can get
>it. This is the stuff that jewelers use.
>
>But, hey -- if toothpaste can clean your fingernails, it ought to work
>on a crystal.
>
>Matt J. McCullar, KJ5BA
>Arlington, TX
If you grind the crystal the electrode comes off will you be operating
in an air gap holder?
Douglas Dwyer

# 4153. RE:CELL. MOD FOR ICOM-IC-T7A RECEIVER SCAN ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: revgbb1@aol.com
Message-ID: <19971104131401.IAA24227@ladder01.news.aol.com>
Source record: 89437

I NEED TO KNOW IF THERE IS A MOD TO SCAN THE CELL. PHONE
FREQS. ON THIS DUAL BANDER? HELP!!!

# 4154. Simulation & Synthesis on Every Desktop

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: "Kathryn J. Goerg" <kgoerg@webblabs.com>
Message-ID: <345F44DE.79DF@webblabs.com>
Source record: 89438

Site License puts Simulation & Synthesis on Every Desktop

For general analysis with noise capability, filter and structure
synthesis, and system and receiver engineering support, the
Webb Laboratories Professional Partnership Program is
unprecedented:

http://www.webblabs.com/pp.htm

The one-time $975 investment in the PP Program will drastically
reduce your annual software budget, freeing up dollars for
other needed equipment and analysis support tools. The
larger your company or organization, the lower the PP Program
cost on a per-user basis - the $975 licensing fee is for site-wide
use, and there are no annual fees! More information available
on request - free shipping worldwide!

Kathy Goerg
PP Program Coordinator

Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI 53005

TEL 414.367.6825 FAX 414.367.6824
http://www.webblabs.com

# 4155. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: ctyoung@mtu.edu
Message-ID: <63o165$4oo$1@strike.geo>
Source record: 89439

Ken Linney (ken@g3uda.demon.co.uk) wrote:
Ken:

If you REALLY want home construction, subscribe to 73 Amateur Radio today. Then you get Uncle Wayne's editorials too.

Chuck Young

# 4156. Re: FS: Jennings Vacuum Variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: jnpotter@prodigy.net
Message-ID: <345f836c.3085493@news.prodigy.net>
Source record: 89440

I'm definitely interested in both. Do they have drive sfafts?

73 dew K9GXC, Jim

Phil Clements <philk5pc@connect.net> wrote:

>Jennings ceramic vacuum variables. One is 2300pf @ 15kv; the other is
>1500pf @ 15kv.
>$185.00 each; shipped to your CONUS door.
>
>(((73)))
>Phil, K5PC

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

# 4157. Trade Bird 43 for Collins mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bcea3f$cbc5ac20$849ed8cc@km3g.cts.com>
Source record: 89441
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I have a very nice Bird 43 and about three vhf/uhf slugs that I would like to trade for a Collins SM-2 mic.

Thanks for the read.

Lane
KM3G

## 4158. Re: 1750 M and antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: Maurice Lewton <mplewton@ix.netcom.com>
Message-ID: <63ofke$t3e@sjx-ixn4.ix.netcom.com>
Source record: 89442

You must use a loading coil, you will have to wind it yourself, and a
adjustable tuning capacitor across coil. Connect your antenna, 50' (Max I
think - check rules) to the hi end of coil, and ground low end to your power
line ground. Wind a secondary winding approx.. 1/50 turns of the primary.
Use this winding for coupling to the transmitter.
You will have to determine the amount of windings needed to get it to
resonate at you transmitter frequency. Following is message I sent today to
another person.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

In the early 1980's I built a 1750M xmtr and rcvr. I hooked it to my OSI
computer,sending CW, and let it run day and night for about a month sending
a simple message. My name and address, xmtr output, antenna length, name
and address. The greatest range for a reply was approx... 60 air miles.
Got many replays up and down the coast within that range. Xmtr was running
about 1 watt to a 30 foot vertical, using PG&E for a ground. Still have the
transmitter and a mobile transmitter/receiver. They still work. Don't have
my antenna loading coil or the Vertical antenna.
Receiving at this frequency is very difficult due to the power line,
dimmers, etc... noise. When I would take my mobile receiver several miles
from power lines I could receive quite a few signals.

Maurice Lewton
WA6PHR
mplewton@ix.netcom.com

Mark Morgan wrote in message <345FD7BD.3E60@geocities.com>...
>How do you get an antennna for this type of rig? 825 M (~2475 ft) of
>wire laid out straigh? Or are there practical short anntennas?
>

# 4159. Need schematic for Navy TBX-6 Transceiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-04 00:00:00 UTC
From: Maurice Lewton <mplewton@ix.netcom.com>
Message-ID: <63og99$as@sjx-ixn4.ix.netcom.com>
Source record: 89443

This is going to be difficult to locate, but I need a schematic for a Navy Transceiver model TBX-6 (CG 43005C) (s/n 245). This unit is in mint condition, but I would like to be sure what the power requirements are prior to applying power. Uses 4 type 34 tubes, 1C6 and 837 transmitter tube. Covers 2.00 to 8.00 MHz AM and CW. Probably made before WW II.
If anyone has such an old schematic let me know.
Maurice Lewton WA6PHR
mplewton@ix.netcom.com

# 4160. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <345faa19.2301192@news.online.no>
Source record: 89444

On 4 Nov 1997 00:54:12 GMT, n1ddzrjc@aol.com (N1DDZ RJC) wrote:

>It's not the content that makes the RSGB books more expensive, it's the paper.
> ARRL uses,which is, unfortunately, a very cheap, acid paper that tends to turn
> brown and brittle. On the other hand, you may not happen to care if the book
> is around in 10 or 15 years. Sams publications also use a very inferior paper
> that will not last more than about 15 years.
>
>Good books are made from good paper. I won't buy the ARRL books that use this
> "newsprint".
>
>Bob Crowley>
>
>
....and old ARRL books have a special smell, too! I still find some
interest in keeping ARRL handbooks 1948 and 1949
73 de JM

---
Email: LA8AK at online dot no

# 4161. FS Eimac 8877 tubes pulled, tested, guaranteed. $250.00 Each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: ke9pq@netnet.net
Message-ID: <63omli$su9$3@news.inc.net>
Source record: 89445

These tubes Have been tested and are full or close to full output
guaranteed. Price is $250.00 each

All prices are plus shipping

Mark Olson "KE9PQ" 1490 Norfield Rd.
Suamico,Wi. 54173
Call (920) 434-8097 after 6:00pm central time.
Email ke9pq@netnet.net Thanks and 73 Mark
NOTE: All items listed are guaranteed to be
as described or your money back.

# 4162. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: kd9fb@xnet.com
Message-ID: <3463dd69.5628809@flood.xnet.com>
Source record: 89446

On Wed, 29 Oct 1997 13:48:04 -0800, miker <&mreiney@hevanet.com> wrote:

>I suggest the world's simplest VFO is a tunnel diode hooked across
>a tuned circuit with two bias resistors. Can't get much simpler than
>that. Useless for typical applications, but it's simple.
>miker

I think you're on the right track. Make it a gunn diode, pot and battery. As you vary the pot the freq changes. A total of 3 parts, with some wire.

Of course if you do it this way you get to cook yourself slowly at the same time. :-))

Peter Mikalajunas
kd9fb@xnet.com
http://www.xnet.com/~kd9fb

# 4163. FS: 19" Equipment Enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: "storm@webwide.net" <kstewart@webwide.net>
Message-ID: <01bce9a5$1449fc80$b05229d1@kstewart>
Source record: 89447

Standard Single-Bay 19" Cabinets
Specifications
FINISH : Textured baked enamel semi-gloss color Gray.
MATERIAL : 16 GA (.059),Welded Construction.
FEATURES :
Rear door: Removable, Studded for eight 4" cooling fans.
Front door: Removable, Vented full length for filter tray.
Front & Rear doors : Key lock, magnetic latching, foam gasketing.
Rear Connector Plate 2.75" X 4.6" with 2ea. 1" holes for electrical
cord.
4ea. Casters 3" diameter full swivel ( non-locking )
Anti-tip adjustable legs all metal base 1.5" length 3".
Adjustable Channel front to rear of cabinet Channel nuts included.
Top Panel 4ea. access panels 3" X 5" located at each corner.
Also includes 2 sets of mounting rails standard.
Hight 75" Width 23" Depth 25" Avail. Mounting Space 70"
APPROX. QTY. ON HAND 190
Call 972-727-4225 or 903-455-8136
Only $279.00ea.

# 4164. Re: FS: 19" Equipment Enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971105062901.BAA26992@ladder01.news.aol.com>
Source record: 89448

>Also includes 2 sets of mounting rails standard.
>Hight 75" Width 23" Depth 25" Avail. Mounting Space 70"

That's height. Sigh.

W4ZCB

# 4165. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34603A8F.FD8EE1AC@crpl.cedar-rapids.lib.ia.us>
Source record: 89449

J M Noeding wrote:

> On 4 Nov 1997 00:54:12 GMT, n1ddzrjc@aol.com (N1DDZ RJC) wrote:
>
> >It's not the content that makes the RSGB books more expensive, it's the paper.
> > ARRL uses,which is, unfortunately, a very cheap, acid paper that tends to turn
> > brown and brittle.

I have a 1938 edition of the ARRL Handbook that is in excellent condition, no smell, not brown, not brittle.

Bill W0IYH

# 4166. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <63pk11$8fk_001@leeds.ac.uk>
Source record: 89450

In article <RC+GfBAhSCY0EwL0@kay-dee.demon.co.uk>,
Don Ward <don@kay-dee.demon.co.uk> wrote:
>The latest VHF/UHF handbook is now available to non members for GBP
>18.80. There is also a VHF/UHF DX Book at GBP18.00.
>RSGB have a web site at RSGB.ORG
>Sorry if I am repeating info that may have gone before.

What's the Handbook like (I have an old 3rd edition)?

73 de Laurens M1CCO

# 4167. Plans for Log-P required

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: zs6hz@global.co.za
Message-ID: <34605925.13038786@news.global.co.za>
Source record: 89451

Hello all,

I am urgently looking for plans to build a 13 to 30 MHz (or similar)
Log-periodic antenna.

Do you have any details for this sort of antenna.

I'd far prefer a tried and trusted design that I can build and be
confident that it will work first time.

Any info will be much appreciated.

'73 de Marc ZS6HZ

# 4168. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971105114401.GAA08099@ladder01.news.aol.com>
Source record: 89452

>
>I have a 1938 edition of the ARRL Handbook that is in excellent condition, no
>smell,
>not brown, not brittle.
>
>

Hi Bill. I was thinking the same thing. I have QST's that go back to 1949, and handbooks that go back to 1955, and they are bright and "non-brittle". Makes me wonder about the atmosphere this guy lives in. Maybe he had his gall bladder out at an early age.

W4ZCB

# 4169. Re: RSGB manual for Canucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971105120501.HAA08800@ladder02.news.aol.com>
Source record: 89453

>Expensive, but ARRL books have gotten expensive (especially by the time
>they land in Canada; I keep putting off buying Wes Hayward's book on
>RF design).
>

Don't put it off a minute longer. I'm on my second copy. Loaned out my first one and didn't get it back, Couldn't live without it.

W4ZCB

# 4170. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <34606669.43F4B73E@crpl.cedar-rapids.lib.ia.us>
Source record: 89454

JohnsonHE wrote:

> >
> >I have a 1938 edition of the ARRL Handbook that is in excellent condition, no
> >smell,
> >not brown, not brittle.
> >
> >
>
> Hi Bill. I was thinking the same thing. I have QST's that go back to 1949, and
> handbooks that go back to 1955, and they are bright and "non-brittle". Makes
> me wonder about the atmosphere this guy lives in. Maybe he had his gall
> bladder out at an early age.
>

I have a 1971 Handbook also that is in pretty good shape, although the pages are a little brownish around the edges, but still in quite good condition. I also have QSTs s far back as 1924 that are in very good condition, paper-wise.

Bill W0IYH

# 4171. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: Nicholas R Kennedy <nkenned@entergy.com>
Message-ID: <34606D7B.4479@entergy.com>
Source record: 89455

J M Noeding wrote:
>
> On 4 Nov 1997 00:54:12 GMT, n1ddzrjc@aol.com (N1DDZ RJC) wrote:
>
> >It's not the content that makes the RSGB books more expensive, it's the paper.
> > ARRL uses,which is, unfortunately, a very cheap, acid paper that tends to turn
> > brown and brittle. On the other hand, you may not happen to care if the book
> > is around in 10 or 15 years. Sams publications also use a very inferior paper
> > that will not last more than about 15 years.
> >
> >Good books are made from good paper. I won't buy the ARRL books that use this
> > "newsprint".
> >
> >Bob Crowley>
> >
> >
> ....and old ARRL books have a special smell, too! I still find some
> interest in keeping ARRL handbooks 1948 and 1949
> 73 de JM
>
> ---
> Email: LA8AK at online dot no

I've noticed the same thing. My 1957 handbook looks like new, but my
1976 and 1979 handbooks are turning to dust!

Nick, WA5BDU

# 4172. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: Jeff Anderson <jeffa@ix.netcom.com>
Message-ID: <63ptv9$50f@dfw-ixnews5.ix.netcom.com>
Source record: 89456

In article <34606D7B.4479@entergy.com>,
Nicholas R Kennedy <nkenned@entergy.com> wrote:
>J M Noeding wrote:
>>
>> On 4 Nov 1997 00:54:12 GMT, n1ddzrjc@aol.com (N1DDZ RJC) wrote:
>>
>> >It's not the content that makes the RSGB books more expensive, it's the paper.
>> > ARRL uses,which is, unfortunately, a very cheap, acid paper that tends to turn
>> > brown and brittle. On the other hand, you may not happen to care if the book
>> > is around in 10 or 15 years. Sams publications also use a very inferior paper
>> > that will not last more than about 15 years.
>> >
>> >Good books are made from good paper. I won't buy the ARRL books that use this
>> > "newsprint".
>> >
>> >Bob Crowley>
>> >
>> >
>> ....and old ARRL books have a special smell, too! I still find some
>> interest in keeping ARRL handbooks 1948 and 1949
>> 73 de JM
>>
>> ---
>> Email: LA8AK at online dot no
>
>I've noticed the same thing. My 1957 handbook looks like new, but my
>1976 and 1979 handbooks are turning to dust!
>
>Nick, WA5BDU
>

There certainly seemed to be a change in paper stock during the 70's. My 68, 69, and 70 handbooks still look bright white, but from 71 through 77 (and perhaps later?) the paper has gone through various degrees of yellowing. Curiously, my 71 copy is yellowing *except* for pages 257 - 288: looks like a nice white racing stripe!

A 47 handbook in my bookshelf is also very yellowed, and just by feeling the paper you can tell it's cheap. Did the ARRL use more than one printer?

- Jeff, WA6AHL

## 4173. WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: Ted Kester <tk1932ga@atl.bellsouth.net>
Message-ID: <3460AF67.3478@atl.bellsouth.net>
Source record: 89457

I am considering construction of a 60khz WWBH receiver. Is signal
strength good enough here on the East Coast (Georgia) to make such a
project worthwhile. Would appreciate comments regarding signal
strength,
receiver circuits, antenna, etc and experiences... Thanks.

Ted in Atlanta

# 4174. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <3cmLHDAnzJY0Ewe4@ddwyer.demon.co.uk>
Source record: 89458

In article <19971104150101.KAA00409@ladder01.news.aol.com>, JohnsonHE
<johnsonhe@aol.com> writes
>>If you grind the crystal the electrode comes off will you be operating
>>in an air gap holder?
>>Douglas Dwyer
>
>Hi Doug. I think they are discussing the older FT-243 type crystal blanks that
> are unplated. Back in the 50's (EARLY 50's) I ground many 40 meter rocks.
> Surplus FT-243's were a nickel apiece and they were all on 7040. So was the
> rest of the world! I'd grind them by the hour, using variously, toothpaste,
> scouring powder and any other abrasive I could find. When you went too far,
> you brought it back rubbing a little solder into one face or the other.
> Remarkably forgiving of most anything except getting the faces out of
> parallel. You rubbed the blank in the abrasive using a figure 8 motion, with
> your finger variously pressing down each corner in sequence. If you were not
> in a hurry, and lost it completely, you could see activity going down as you
> lost parallelism, and bring it back experimentally by testing "corners".
>
>Probably not the finest in long term stability, but in those days, if you
> drifted anythinmg less than a KHz per transmission you stood out in the crowd.
>
>W4ZCB
Thanks Harold
I am pleased to see that there are still some air gap crystals in use.
Younger experimenters may never have seen them at all. I mentioned
solder seal as there is still a possibility to unsolder & change
frequency by 0.5% by non abrasive means.
My first crystal company used to buy old lowish frequency air gap
crystals because the material was natural (not regrown) therefore
usually high Q quartz (6000000). They took the quartz out diced and
made modern crystals with the material. If anyone has a significant
quantity they may still have some value for this purpose.
As I stated earlier the bigger the piece of quartz (for a given Q) the
more current it can take so they can be run much harder.

Douglas Dwyer

# 4175. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <63q8eg$d0d@redgreen.cs.ubc.ca>
Source record: 89459

sabinw@crpl.cedar-rapids.lib.ia.us writes:
>I have a 1938 edition of the ARRL Handbook that is in excellent condition, no smell,
>not brown, not brittle.

Perhaps the older books were better printed. I have a 1990 Handbook whose
pages are already quite noticeably brown. It has always been treated well.
It's not just brown at the edges either - the pages are turning colour
uniformly.

Dave

# 4176. Resistor's 300 ohm 10 Watt

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19971105181000.NAA00649@ladder02.news.aol.com>
Source record: 89460

I have four 1 pound coffee cans full of new 300 ohm 10 watt power resistors. They have wire leads. Well trade for other parts, I pay postage to you or you pay postage for amount you need.

73's
Bob, W4RLC

## 4177. Diagrams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: Roar Lorentzen <karsk@online.no>
Message-ID: <01bcea20$7df6a360$0c354382@karsk>
Source record: 89461

Hi, I was wondering if there are anybody out there who could get me a specific internet adress
where I can find some drawings, diagrams and building plans for making a home made amateur radio.

Many thanks from Roar Lorentzen

# 4178. Re: WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971105201301.PAA10050@ladder01.news.aol.com>
Source record: 89462

>
>I am considering construction of a 60khz WWBH receiver. Is signal
>strength good enough here on the East Coast (Georgia) to make such a
>project worthwhile. Would appreciate comments regarding signal
>strength,
>receiver circuits, antenna, etc and experiences... Thanks.
>
>
You'll have no problem as long as you have a good ground> Much more important
than a good antenna, which is impossible at this frequency. 30 foot voltage
fed vertical against good ground feeding "active antenna" type FET amplifer
sort of thing will do FB (Source follower with Hi-Z input)

W4ZCB, 3 hours East of you in NC.

# 4179. Re: Kenwood & Icom 13.8VDC connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: dew@gray.cb.att.com
Message-ID: <63qk9a$19r@nntpa.cb.lucent.com>
Source record: 89463

Here is something I saw a while back.
Cannot vouch for it since I never
ordered any of these.

Dave - K8RSP

==========

From n2cjj@ibm.net Mon Oct 27 15:59:00 EST 1997
Article: 136999 of rec.radio.swap
From: n2cjj@ibm.net (Robert Langston)
Newsgroups: rec.radio.swap
Subject: FS: DC Power Plugs
Date: Sat, 25 Oct 1997 01:24:55 GMT
X-Newsreader: Forte Free Agent 1.0.82
NNTP-Posting-Host: 129.37.122.83
Message-ID: <34514cd6.0@news1.ibm.net>
Lines: 36
Path: nntphub.cb.lucent.com!uunet!in4.uu.net!news.monmouth.com!news-pen-1.sprintlink.net!news-east.sprintlink.net!news-dc-26.sprintlink.net!news-peer.sprintlink.net!news.sprintlink.net!Sprint!newsm.ibm.net!ibm.net!news1.ibm.net!129.37.122.83
Xref: nntphub.cb.lucent.com rec.radio.swap:136999
Content-Length: 1228
X-Lines: 37
Status: RO

I have found a source for those DC power cord plugs. Very close to
factory, male plastic with 6 metal female (barbed) inserts.

The plug fits most 12VDC HF radios:
Icom 701, 720, 730, 735, 740, 745, 706, 756 ...and alike,
newer Yaesu and Alinco DX70.

Kenwood-TS120, 130, 140, 430, 440, 450, 850, 870....

Kenwood-TS50, 60, 660, 670, 680, 690...and more.

Make your own power cord yourself, YOUR WAY!
Crimp or solder, short or long, heavy gauge wire,
purple with pink polka-dots .... whatever!

Each DC Plug comes complete with 6 crimp/solder inserts
for $4 each, or the deal 3 for $10.

All prices include postage in the US and Canada.

To order, kindly send a check in US funds to:

Robert Langston
286 Hudson Street
Cornwall-on-Hudson, N.Y. 12520

You can also email me for info at: n2cjj@ibm.net

It's a great deal if you use one rig at home, in the car or at work
and are stuck re-connecting and dragging the power cord all over....

It sure beats paying $32 for a spare from your dealer.
If interested, I'm located about an hour north of New York City. I work in central New Jersey...So I could accomodate a wide range of 'meeting you somewhere'.

Home phone is 914-534-9925, or here at n2cjj@ibm.net

## 4180. Parts needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971105225722Z-6696@whpost.wh.lucent.com>
Source record: 89464

Looking for the following items for "project":

1 ea. 10 V 10A fil transformer
2 ea. 8 or 10 uF 2500 VDC Cap.
1 ea. 6 - 10 Hy 500ma choke (3000 VDC test)
1 ea. 5/25 Hy 500 ma swinging choke

Check those "junque" boxes"

Seth T KC2We

# 4181. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: Maurice Lewton <mplewton@ix.netcom.com>
Message-ID: <63rd7i$asl@dfw-ixnews8.ix.netcom.com>
Source record: 89465

I have ground many crystals, in the type FT 243 holder. 6.8+ MHz can be moved up into the 40 Meter band, 5+ MHz crystals will not make it with any activity left. You can only grind up in frequency. I used a glass plate with water, Bon Ami or Comet Cleanser as a grinding agent. You have to go slow, grind a little, clean, then assemble the x'tal and test it. If you overshoot a few kHz, you can put a pencil mark on the x'tal and it will bring it down slightly - also reduces the Q.
In fact when I noticed this post, I went out in my crystal box and lo and behold there were all my reground 40M and 2M crystals, they were ground in 1961 through 1964. Grinding 8 MHz crystals for use on 2 M was really difficult, but it works.
Maurice Lewton WA6PHR
mplewton@ix.netcom.com

Chris Lamousin wrote in message <63g70f$13r$1@axe.netdoor.com>...
>I'm sure this is an easy question for some of you, but the info is
>hard to find. Where can I find some info on grinding crystals for a
>radio?
>

# 4182. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mlnz2d1vc.fsf@spinner.ecofe.com>
Source record: 89466

If you REALLY want home construction, subscribe to 73 Amateur Radio today. Then you get Uncle Wayne's editorials too.

Other than the DDS articles and maybe a few others, i haven't seen that much that distinguishs its homebrew articles over those of QST. If anything, i'd be more cautious about issues like spectral quality when considering a '73' project. On the other hand, the "Above and Beyond" column has some helpful stuff in it and topics not often seen elsewhere. I wish there were an entire magazine (or mailing list) with that focus.

I keep files of interesting projects and construction oriented articles and i have alot more serious stuff from QST on file. But as Gary (KE4ZV) points out, the details necessary to do your own projects are largely lacking in both sets of publications.

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4183. Re: ECG Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-05 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEJ8HB1.H3C@netcom.com>
Source record: 89467

GEORGE R. COONEY <georgie@aztec.asu.edu> wrote:
>
>Does anyone know if the ECG CAtalog is available on line? If not
>that, any catalog for looking up semiconductor replacements.

http://www.ecgproducts.com/

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 4184. WTB: 6550 Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: wabate@erols.com
Message-ID: <3463521b.3823736@news.erols.com>
Source record: 89369

I need a pair of 6550's for spares for my Central Electronics transmitter. Prefer new in the box. Anyone have these tubes at a reasonable price?

I have components, parts to trade. Let me kow what you need.

Thanks,
Bill Abate, K3PGB
wabate@erols.com

# 4185. FS: H/P 427A meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: The Thomas Family <k6kc@lightspeed.net>
Message-ID: <34619AC6.760D@lightspeed.net>
Source record: 89370

For Sale: (1) Hewlett-Packard 427A analog multimeter. Includes AC or internal battery operation (option 001). New-old-stock unit, in FACTORY SEALED CARTON. I will include a NEW Ballantine R.F.detector probe set with purchase. $145.00 shipped double-boxed. 73, Lowell, K6KC

# 4186. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <+P65DEAX7aY0EwuU@ddwyer.demon.co.uk>
Source record: 89371

>
>Yea. Those crystal Q's make me drool! I have a few with Q's of 500K , wish I
> had a LOT! Most everything you can get these days is well below 100K. I've
> talked with engineering at more than one crystal company here in the states
> and they promise MAYBE 130K if they try hard...maybe not! Even ones I've
> purchased full pop from major manufacturers average more like 60-80K. Can do
> that well with off shore stuff and just occasionally find a batch of
> mouthwatering good ones. Which translates to anything over 200K where you can
> make a good narrow bandwidth filter without having insertion loss out the
> ears.
Standard small AT cut crystal designs are limited in Q by their
dimensions however low frequency overtones like 5 and 10MHz third
overtones can be achieve Qs of 3 to 6 millilon with low loss quartz.
Fast grown modern quartz often has a limiting Q of less than a million
and limits the Q available from better designs.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 4187. 73 Mag. Audio PTT article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <63sdmm$2iu@news.asu.edu>
Source record: 89372

I am trying to straighten out a circuit for an Old Timer friend. He built it over a year ago and hasn't been able to get it to work. It is an Audio to Push to Talk circuit that appeared in 73 Magazine in January of 95. There seems to be a problem with a change in the size of R5 and R8. There is an update in the May 95 issue but I don't have any issues past that and it doesn't mention those resistors. Has anyone successfully built that project? Any help appreciated.

73 George, KQ7C

--

# 4188. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971106125801.HAA22508@ladder02.news.aol.com>
Source record: 89373

>
>Other than the DDS articles and maybe a few others, i haven't seen that much
that distinguishs its homebrew articles over those of QST. If anything, i'd
be more cautious about issues like spectral quality when
>considering a '73' project.
>

SURE YOU WOULD! Like the "Ultimate" VFO article the ARRL plugged with a DDS and
no cleanup loop. Sure hope whoever builds that doesn't live in my
neighborhood.

W4ZCB

# 4189. Re: HIGH POWER TRANSMITTING TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: Jim Bieberich <jim@mall-usa.com>
Message-ID: <34615BE0.20C0@mall-usa.com>
Source record: 89374

Norman,

I'm in the design stages of a HP 6 meter and 2 meter amplifier and grounded grid operation operating conservatively at the full legal limit and good intermods are two important criteria. I don't know exactly what to offer because I'm not familiar with the YC156, but I'd like to offer $135.

Please let me know. Thanks very much.

Best Regards and 73s

Jim
WA6WJI
San Jose, CA

---

Norman Hockler wrote:
>
> I have a number of Eimac YC156 tubes for sale. These are the medical
> version of the 3CX5000. The tube is guaranteed for full output
> to its to rating of 110 MC. This tube does not need a socket
> as it bolts to a clear hole in the chassis. I have all spec
> sheets and can provide fillament transformers at a reasonable price.
>
> de Norman N8RGR
>
>

## 4190. Monitor tube 4B13 or equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: Preben Mikkelsen <oz1dx@mail.danbbs.dk>
Message-ID: <63sis7$pke$1@news.uni-c.dk>
Source record: 89375

I am in need for a replacement monitortube (japanesee) 4B13. However, I have not been able to locate a supplier. Neither have I been able to find an equivalent type.

Can somebody help with information?

Best regards,

Preben Mikkelsen, OZ1DX

oz1dx@danbbs.dk

# 4191. Trade Bird 43 & 8 slugs for Collins

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: "Lane C. Zeitler" <km3g@cts.com>
Message-ID: <01bceb84$68482420$1cddd8cc@km3g.cts.com>
Source record: 89376
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I have a very nice Bird 43 with eight vhf and uhf slugs that I would like to trade for Collins stuff. I am not picky just want a clean trade.

The slugs:

(2) 50A
(1) 5B
(2) 50C
(1) 25D
(1) 50D
(1) 100D

Lane
KM3G
San Diego

# 4192. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971106145501.JAA29363@ladder02.news.aol.com>
Source record: 89377

>Standard small AT cut crystal designs are limited in Q by their
>dimensions however low frequency overtones like 5 and 10MHz third
>overtones can be achieve Qs of 3 to 6 millilon with low loss quartz.
>Fast grown modern quartz often has a limiting Q of less than a million
>and limits the Q available from better designs.

Whoa1 You just piqued my interest. A blank with third overtone output at 10 MHz? Or 30 MHz? Perhaps I'm not asking the right questions of my suppliers.

W4ZCB

# 4193. Re: Trying to find Signetics NE-602

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: Ralph Reinhold <ralph.r.reinhold@boeing.com>
Message-ID: <3461EE60.1833@boeing.com>
Source record: 89378

MTNCLIMB wrote:
>
> Definately go with Dan's Small Parts, you can always trust folks in Montana for
> quick reliable service. He has just about any odd ball radio component you
> can't seem to find anywhere. Also he has the NE612, which is cheaper but
> exact same thing as the NE602, they even have the exact same data sheets.
>
>
The industrial temperature range '602, I think SA602 is available at the
NE602 price. As you would be using it at a more limited range, it would
effectively have a lower NF.

# 4194. Re: WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3461FA19.C0A@northwest.com>
Source record: 89379

a tuned loop will also work. i've used small loops 3' dia to a larger 9'
diameter tuned loop. great for nulling noise. i'm in portland, and a
buddy of mine in penna uses a small loop for his WWVB rx.
========

JohnsonHE wrote:
>
> >
> >I am considering construction of a 60khz WWBH receiver. Is signal
> >strength good enough here on the East Coast (Georgia) to make such a
> >project worthwhile. Would appreciate comments regarding signal
> >strength,
> >receiver circuits, antenna, etc and experiences... Thanks.
> >
> >
> You'll have no problem as long as you have a good ground> Much more important
> than a good antenna, which is impossible at this frequency. 30 foot voltage
> fed vertical against good ground feeding "active antenna" type FET amplifer
> sort of thing will do FB (Source follower with Hi-Z input)
>
> W4ZCB, 3 hours East of you in NC.

## 4195. Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: bobjr@rdgsons.com
Message-ID: <3462014c.172113289@news.seanet.com>
Source record: 89380

A friend of mine has designed a web site and is in
a contest to see how many hits he can get.

If you have the time, please see his site and follow
the directions to vote for it.

I've been trying to get him to get his ticket. I told
him that hams would rally to help him win...and then
he'd have to get his ticket...

http://home1.gte.net/jcbeam/vfw1040/

73's
KB7BBC
Bob
see my page too at,
http://www.seanet.com/~bobjr/ham.htm

# 4196. CAT Controll How??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: dave@omen.softnet.co.uk
Message-ID: <N.110697.181629.26@swhjz003>
Source record: 89381
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Thanks for reading this,
i am interested in building a cat controller for my ft890 yaesu
can anyone tell me if there is parts lists and diags available
on the net??
any help would be a great help

all the best 73s........
--
PLEASE REPLY TO E_MAIL DIRECT

iTS GOOD TO DRINK!!!

# 4197. Re: Parts needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3461FA74.61F8@northwest.com>
Source record: 89382

try fair radio sales for the swinging chokes and the filament xfmrs. they
hv a website but it's easier to call them in ohio and get a catalog.

=======

Seth Taylor wrote:
>
> Looking for the following items for "project":
>
> 1 ea. 10 V 10A fil transformer
> 2 ea. 8 or 10 uF 2500 VDC Cap.
> 1 ea. 6 - 10 Hy 500ma choke (3000 VDC test)
> 1 ea. 5/25 Hy 500 ma swinging choke
>
> Check those "junque" boxes"
>
> Seth T KC2We

# 4198. Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: bobjr@rdgsons.com
Message-ID: <34620d98.175261758@news.seanet.com>
Source record: 89383
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanch,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipmen,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,sci.astro.amateur,tnn.radio.amateur,uk.radio.amateur,uwarwick.societie.amateur-,de.comm.ham,fj.rec.ham,relcom.radio.ham,rpi.union.ham-radi,su.org.ham-radi,in.ham-radi.,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.scanner

A friend of mine has designed a web site and is in
a contest to see how many hits he can get.

If you have the time, please see his site and follow
the directions to vote for it.

I've been trying to get him to get his ticket. I told
him that ham's would rally to help him win...and then
he'd have to get his ticket...

http://home1.gte.net/jcbeam/vfw1040/

73's
KB7BBC
Bob
see my page too at,
http://www.seanet.com/~bobjr/ham.htm

# 4199. Re: Gap antenna info please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: ag501@freenet.buffalo.edu
Message-ID: <EJ8F2A.E8B@freenet.buffalo.edu>
Source record: 89384

My gap TITAN IS WORKING VERY WE
my Gap titan is working very well. 20 Meter QRP SSb into europe
and So. AM.
Contact me for any more questions.
--
q
###

# 4200. Re: need world's simplest VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: skipp@catbert.ucdavis.edu
Message-ID: <63tak1$h6q$1@mark.ucdavis.edu>
Source record: 89385

The world simplest VFO is a crystal with a method of variable pressure on
the quartz. An example is an older FT-243 case style with a threaded screw
hole in the center. A screw into the hole can be adjusted to vary the
pressure on the plate which is against the quartz. Some of the holder
internal spring tension is taken out also.
Those of you from the early HW-16 and other xtal xmiters might have also
used this method to move your tx freq around when that ever present rude
"big gun" parked righ along side your favorite rock frequency.
I even went one better and had a small knob that fit onto the screw for
ease of QSY. Carefull not to place to much pressure on the quartz.

You could also take the quartz out and sand it with some tooth paste,
comet cleanser or equiv to make big moves.

cheers
skip mays wv6f
replies only to: nospam4me@juno.com

Peter Mikalajunas (kd9fb@xnet.com) wrote:
: On Wed, 29 Oct 1997 13:48:04 -0800, miker <&mreiney@hevanet.com> wrote:
: >I suggest the world's simplest VFO is a tunnel diode hooked across
: >a tuned circuit with two bias resistors. Can't get much simpler than
: >that. Useless for typical applications, but it's simple.
: >miker
:
: I think you're on the right track. Make it a gunn diode, pot and battery. As
: you vary the pot the freq changes. A total of 3 parts, with some wire.
: Of course if you do it this way you get to cook yourself slowly at the same
: time. :-))
: Peter Mikalajunas
: kd9fb@xnet.com
: http://www.xnet.com/~kd9fb

# 4201. TRADE: My IC-R7000 for your HP8640B?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34622CCE.6460@pop.removethistomailme.net>
Source record: 89386

Kind of a long shot, but... anyone interested in swapping an HP8640B (civilian model with PLL stabilization) signal generator for an unblocked Icom IC-R7000 receiver?

The R7000 in question is in excellent condition, no scratches/smoke/problems, and tunes 25 MHz - 2 GHz with full 800 MHz coverage. It is complete with original box, manual, and RC-12 remote control option.

I recently picked up a new general-coverage receiver in another deal, and don't need the R7000 anymore. I do need to upgrade my old HP608D signal generator to something a little more modern, and would like to swap the R7000 for a clean, fully-functional 8640B, preferably (but not necessarily) one with the 002 frequency-doubler and/or 001 audio oscillator options. Really looking for civilian model 8640B only, not interested in 1/2-ton bright-yellow military model unless it is literally in brand new/unused condition.

Any takers?

-- jm (de KE5FX, Austin, TX)

---
Note: My E-mail address has been altered to avoid spam
---

## 4202. GLA-1000B Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: Charlie <constant@news.qnet.com>
Message-ID: <NEWTNews.878874923.23093.constant@lanc03-24.ca.qnet.com>
Source record: 89387

Anyone modify a Dentron GLA-1000B amp from Sweep tubes to RF tubes like 811's
or 6146 ??

# 4203. Re: 1750 M and antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3460bc00.3069703@news.online.no>
Source record: 89388

On Wed, 05 Nov 1997 09:53:26 -0600, Lyle Koehler <k0lr@emily.net>
wrote:

>
>Unlicensed operation is legal between 160 and 190 kHz but you are
>limited to 1 watt of DC input power to the final amplifier and an
>antenna length of 15 meters (including transmission line and ground
>lead). Distances of 100 miles are fairly easy to achieve, and LowFER CW
>beacons are sometimes copied at 1000 miles and beyond. The LowFER
>reflector (lowfer@qth.net) and the message board on the Longwave Home
>Page will keep you posted on current 1750-meter activities.
>
do you hear many european broadcast stations in this longwave band?
Droitwich on 199(?)kc/s - used to be strong here earlier, some french
(Alloui?) on 155kc/s also was strong and could be heard during
daytime.

---
Email: LA8AK at online dot no

# 4204. SWAP EIMAC 4CX1500b TUBES FOR 2M RIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: bbutler@nospam.awod.com
Message-ID: <3461acec.473137@news-2.awod.com>
Source record: 89389

Will swap 2 full-power Eimac 4CX1500b (8660) PA tubes for clean,
working 2M mobile rig similar to the HTX-242. These are military
"pulls" and have lots of life left in them.

73,

Butch
H.P."Butch" Butler KF4SAG
Mt. Pleasant, SC

**Please remove "nospam" from my email address to reply**
I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

## 4205. class E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: Weidner <weidner@kwiknet.net>
Message-ID: <63td70$681@surf.kwiknet.net>
Source record: 89390

has anyone built the Class E amp described in May/June 97 issue of QST?

# 4206. EMC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-06 00:00:00 UTC
From: rampelbergh.p@infoboard.be
Message-ID: <3464134c.6934775@news.ib.be>
Source record: 89468

Hello,

Who of you is performing EMC (Electro Magnetic Compliance)
pre-compliance testing in a non expensive manner?
What tools (test equipments) do you use?

Paul Rampelbergh (Belgium)
---

# 4207. Info on retrofit of (2) 3CX1200A7's into a Drake L4-B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: dcaudill@fuse.net
Message-ID: <34626c7b.11814825@nntp.fuse.net>
Source record: 89391

Hi All, I know some time ago there was an article in CQ from Pete Warren on how to put 2 of the 3CX1200A7's into the Drake L4-b amp. I have seen the transformer listings on P.W.Dahl's site, but cant find any info on the article. Any help?

Thanks
Rick
Debbie
dcaudill@***fuse.net
http://home.fuse.net/dcaudill
Please remove the *'s when replying via email!

# 4208. Re: Kenwood & Icom 13.8VDC connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: rwa@cs.athabascau.ca
Message-ID: <63u8vm$feg$1@aurora.cs.athabascau.ca>
Source record: 89392

k5kne@aol.com (K5KNE) writes:

> It is good to know about the D shaped sleeves not being standard Molex is good
> to know - so they are probably a special plug made for Kenwood and Icom. It
> is amazing that they are compatable, isn't it? I will order some of the ones
> suggested and see what happens.

Her's something I saved from the Icom reflector. Sorry if this is a dupe,
but I can't find the article(s) you referenced:

> The =real= item, locking tabs, six pins and all, can be purchased from the
> ICOM parts department for a little over $2. For example, the ICOM part
> numbers are:
>
> Part #93606287 LLP-06 HF Cord End @ $1.2169 each
> Part #93602726 Pin LLF61T-2.0 Female @ $0.1432 each
>
> A phone call to (425) 454-7619 will get you as many as you like (The above
> prices are based on the dozen sets I ordered.) You can use your credit
> card and for about $3-4 get First Class Mail delivery.
>
> 73, Dick
>
> --
> Dick Flanagan W6OLD CFII Minden, Nevada
> Visit http://www.delphi.com/electronic/

regards,
Ross ve6pdq
--
Oh Lord, won't you buy me a PDP-10?
My friends all hack Vaxen; I must make amends.

Ross Alexander, ve6pdq || rwa@cs

# 4209. Re: Heathkit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: davencinNO@SPAMtdl.com
Message-ID: <3462ac71.10541151@news.tdl.com>
Source record: 89393

On 4 Nov 1997 03:37:54 GMT, taspinw800@aol.com (TAspinw800) wrote:

>Can anyone tell me what this Heathkit power amp Model HA- 202 A is?

It's two meters, sold as a companion to the HW-202 and HW-2036. It's supposed to be 10 watts in, 40 watts out. I have one that I use with my 2036, and it makes about 30 watts across most of the band, being driven with 7 watts. Not a bad amp. Pretty dated, though.
Dave B.

# 4210. +12V from 7912 regulator with 2N3055

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <34624E05.7890@online.no>
Source record: 89394

```
This is a multi-part message in MIME format.

--------------71502811C9
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi
Perhaps not a wellknown circuit over there in the west, but I have made
a few of them......

--
----
OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interest: Amateur radio technical experiments, QRV: 3.5-10369MHz
CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295,
NMT:944-26396

--------------71502811C9
Content-Type: text/plain; charset=us-ascii; name="7912.TXT"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="7912.TXT"

+12VDC from negative voltage regulator with 2N3055:

R (+)--|-------|------------|---------|-----(+12V out
E | | |MC |
C 4700uF 0u1 MYLAR |7912 |
T | | -----|----- |
I | | | gnd | 1000uF
F |- 22R--|------ |IN out | |
E | B -----|----- | LA8AK
R (-)--|-----E C----------| | 1976
| |
simplified circuit diagram ---gnd ----gnd
will work as shown.

DO NOT CONNECT (-) from power supply to GROUND!!!!!
+ side from rectifier carries +12V, minus-side is
floating.
LM320T12/MC7912CT: "input" to 2N3055 base, "gnd" to +12V,
"OUT" to ground
0.1uF between regulator "IN" and "GND" is important,
otherwise bad oscillation in mediumwaveband will occur

--------------71502811C9--
```

# 4211. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <G9qcyEArYuY0EwKs@ddwyer.demon.co.uk>
Source record: 89395

In article <19971106145501.JAA29363@ladder02.news.aol.com>, JohnsonHE
<johnsonhe@aol.com> writes
>>Standard small AT cut crystal designs are limited in Q by their
>>dimensions however low frequency overtones like 5 and 10MHz third
>>overtones can be achieve Qs of 3 to 6 millilon with low loss quartz.
>>Fast grown modern quartz often has a limiting Q of less than a million
>>and limits the Q available from better designs.
>
>Whoa1 You just piqued my interest. A blank with third overtone output at 10
> MHz? Or 30 MHz? Perhaps I'm not asking the right questions of my suppliers.
>
>W4ZCB
The lowest acoustic loss into mounting etc comes from biconvex or plano
convex crystals that are 3rd or 5th overtone, loss in the quartz goes up
in proportion to frequency.
The first design employing this concept came from Bell Labs in the early
50s 5th overtone at 2.5 MHz ultimate Q limited by quartz 4.5M.
Advantage of these designs are that df due to surface loading changes
reduces if as the overall mass is greater. These units are very big
(500kHz fundemental) I designed a double ovened standard employing this
crystal in '67.
Reduced loss into mounting also means that mounting stress effects are
less.
The modern equivilent is the 3rd overtone SC cut at 10MHz Q is less due
to increased quartz loss (800000) but effect of mounting stress is
reduced by the double rotation. Surface effects are improved by better
processing.
The 16.384MHz standard that I sell is a 3rd overtone SC cut and performs
as well as the 2.5MHz design.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

# 4212. INTERFACE CABLE FOR PM150 MAXON

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Bruno F5LRG <f5lrg@hol.fr>
Message-ID: <63utjk$2v9$1@news3.isdnet.net>
Source record: 89396

Hello,
I am looking either for an interface cable or diagram in order to program an transceiver PM-150 from MAXON.
73
Bruno.

## 4213. 4 x 813 PA project ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
Message-ID: <346313A9.C285E01F@era.ericsson.se>
Source record: 89397

Has there been any published articles on 4 x 813 HF PA - during the
years?
I have a copy of the 3x813 project from an old HR magz - but would like
to see
the 4X version before winding up the drill.
73 Chris SM0NCL

# 4214. Re: GLA-1000B Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
Message-ID: <346314A7.51DB1B71@era.ericsson.se>
Source record: 89398

I have not seen any'conv.project - BUT
a project in the ex. Ham Radio magz. - to protect the ''D40'' tubes and make them fool-proof of destructions in case of SWR, by individual AGC for each of the tubes.
/Chris

Charlie wrote:

> Anyone modify a Dentron GLA-1000B amp from Sweep tubes to RF tubes like 811's
> or 6146 ??

# 4215. HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Gary <kc5ldn@--NO-SPAM-sprintmail.com>
Message-ID: <63va0k$arh$1@newsfep3.sprintmail.com>
Source record: 89399
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Please help! I have a large quantity of RG-6 and would like to use it for HF. I need to know if it is okay and if there is any considerations since it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and info would be helpful.

Gary
kc5ldn@sprintmail.com

# 4216. Jennings UCS-300 Vacuum variable for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <63u2ut$6vn$3@news.nts-online.net>
Source record: 89400

Jennings UCS-300 vacuum variable for sale. 20-300 pf at 5 KV.
Complete with drive. $75 plus UPS.

Bryan W5KFT

# 4217. 9400 CJ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34635BBF.556B@trader.com>
Source record: 89401

I need help finding data on an old 9400CJ Frq-to-V/V-to-Frq chip.
Radio Shack #276-1790, but it's no longer in their catalog.
The maufacture's logo looks something like this:

```
---------- ----------
\ / \ /
\ / /\ \ /
\ / / \ \ /
\ / / \ \ /
\/ / \ \/
/ \
/ \
/ \
--------------
```

geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 4218. Need CB Modulation Xfmr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19971107154801.KAA17515@ladder01.news.aol.com>
Source record: 89402

I'm building up a small 6-M AM-mode transceiver, and am looking for the modulation transformer out of a solid-state 5-watt CB transceiver.

Thanks

Rick K1BQT

# 4219. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: "Clair J. Robinson" <cjr@wavefront.com>
Message-ID: <34634B36.53C02168@wavefront.com>
Source record: 89403
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Just go ahead and use it and don't even think about the different impeadance. The only problem will be attaching connectors. A lot of that stuff won't take solder.

Gary wrote:
>
> Please help! I have a large quantity of RG-6 and would like to use it for
> HF. I need to know if it is okay and if there is any considerations since
> it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
> info would be helpful.
>
> Gary
> kc5ldn@sprintmail.com

# 4220. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: DAVID ROWE <elim@ime.net>
Message-ID: <63vj7h$lji$1@news.ime.net>
Source record: 89404
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I use Rg-6 here for all my g5rv applications-- it works quite well, remember it can't take the power rg-8 would but other than that use it.
also you do have to be creative with the connectors because the sheild is aluminum.

# 4221. Re: cheap ARRL paper [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: VE7TBP <nospampoustie@concentric.net>
Message-ID: <63vitn$bo0@examiner.concentric.net>
Source record: 89405

Oh what the heck, I cant resist adding to this thread. My 1957 ARRL handbook still has only slight darkening of the pages and shows no signs of falling apart, which is good, because it contains info that my 1997 book doesn't. Never underestimate the value of the "obsolete" reference manual! Many times I have found my answers in the old book when the new one left me wondering.

Tim

N1DDZ RJC wrote in message
<19971104005401.TAA05591@ladder01.news.aol.com>...
>It's not the content that makes the RSGB books more expensive, it's the paper.
>
> that will not last more than about 15 years.
>
>Good books are made from good paper. I won't buy the ARRL books that use this
> "newsprint".
>
>Bob Crowley>
>
>

# 4222. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: "Peter D. Richeson" <peter.d.richeson@boeing.com>
Message-ID: <34634E46.342E@boeing.com>
Source record: 89406
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Gary wrote:
>
> Please help! I have a large quantity of RG-6 and would like to use it for
> HF. I need to know if it is okay and if there is any considerations since
> it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
> info would be helpful.
>
> Gary
> kc5ldn@sprintmail.com

Should not be a problem for HF. I have used 75 ohm feed line several
times. Of corse I also use an older rig that has tube finals and has to
be tuned(gasp). I, personaly, would not use it for vhf but it would
probably be ok. The problem I have is geting connectors to solder to
it. If any one has a sugestion let me know.

## 4223. downverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: shadow <"\"no spam\" shadow"@rockisland.com>
Message-ID: <34635933.3425@rockisland.com>
Source record: 89407

Iam looking for plans for a downvereter that i could build, if any one
could help that would be good.
thnaks for any info.
to reply just remove the "no spam" i have be getting a lot of it

# 4224. WTB: Collins LSB filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: crabtreejr@aol.com
Message-ID: <19971107180401.NAA27400@ladder01.news.aol.com>
Source record: 89408

I am looking for one of these , eg F455Z 24C (526-9666) or similar.
Please e-mail with part ~ and price, or if you have know a source. Thanks

John Crabtree at crabtreejr@aol.com

# 4225. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <dgfEJAHtw.2ED@netcom.com>
Source record: 89409
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <34634E46.342E@boeing.com> "Peter D. Richeson" <peter.d.richeson@boeing.com> writes:
>Gary wrote:
>>
>> Please help! I have a large quantity of RG-6 and would like to use it for
>> HF. I need to know if it is okay and if there is any considerations since
>> it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
>> info would be helpful.
>>
>> Gary
>> kc5ldn@sprintmail.com
>
>Should not be a problem for HF. I have used 75 ohm feed line several
>times. Of corse I also use an older rig that has tube finals and has to
>be tuned(gasp). I, personaly, would not use it for vhf but it would
>probably be ok. The problem I have is geting connectors to solder to
>it. If any one has a sugestion let me know.

I for one ended up with a 1000' spool of RG6 really cheap. I think the "standard" way of doing a connector for it would be to do a crimp-on F connector. They are readily available as RG6 is still a major standard in the world of Cable TV. You can get adapters from F to other common types of connectors (SO239, etc.) An alternative might be to use a PL259 with the UG(75?) reducer/adapter commonly used with RG8X. I think the OD on 8X and RG6 are about the same, and mechanically it should work.

73 Dave WB0GAZ dgf@netcom.com

# 4226. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <34636037.D6CFB638@arrl.org>
Source record: 89410

Carl R. Stevenson wrote:
>
> K.R.Burtchaell <kburt@telis.org> wrote in article <3458FDFF.7672@telis.org>...
> > Jon Bloom wrote:
> > > Carl R. Stevenson wrote:
> > > > Joe Buch <nospam@nowhere.net> wrote in article
> <345769d0.0@news.dol.net>...
> > > > >
> > > > > An article in the November QST was entitled "A MMIC Preamp
> > > > > for 'DC to Daylight'". The amplifier is a module designed
> > > > > to work from DC to 2000 MHz mounted on a PC board with a few
> > > > > external gazinta and gazouta parts. Not exactly rocket
> > > > > science, but a useful state-of-the-art design with wide
> > > > > application..
> > >
> > >
> > > > > Hardly "state of the art" by any stretch ... those types
> > > > > of broadband amp MMICs have been available for many years.
> > >
> > > Interesting. What technology has displaced the MMIC as a gain block?
>
> I said they have been available for many years ... MiniCircuits "MARs"
> and Avantec/HP "INAs" etc. ... the point I was trying to make is that
> they are NOT some new, "wiz-bang" development

Nobody, including the author of the article in question, said they were
*new*. But "state of the art" is not a synonym for "new." I suggest
MMICs *are* state-of-the-art devices, inasmuch as they are in common use
*in the art*. Let's be clear: Are you saying that MMICs are obsolete
technology?

> and that a "wide-open"
> amp such as the article describes has some potentially serious draw-
> backs, which the article seemed to ignore ...

Read it again, particularly the sidebar. It's described as a simple,
easy preamp, *not* a high-performance preamp, and its problems when
presented with a strong out-of-band signal are noted. Hardly what I'd
call "ignoring" the drawbacks.

> Obviously ANY criticism of ANYTHING that the ARRL does meets with quick
> and certain spin-doctoring response from the loyal staff.

Obviously anything ARRL does meets with quick and certain spin-doctoring
(like claiming that QST was presenting MMICs as "new" when it did no
such thing) from those whose agenda it is to besmirch ARRL. If you don't

mind -- or even if you do -- I'll continue to set the record straight when you present a distorted or downright wrong picture of ARRL and its activities.

> Next, I
> suppose, the league will have counsel petition the FCC to make it a
> violation of Part 97 to utter any words criticizing the high and mighty
> ARRL???

Hey, Carl, *you're* the one up in arms because you're being criticized. I didn't say a word about your right to post your opinions; I only disagreed with the opinions you posted. And for the record, you are welcome to disagree with me and with ARRL as much as you want, on this forum and elsewhere. On the other hand, you attack me not only for the wrongheadedness (you think) of my opinion, but for my even expressing one. Who is the party trying to suppress dissenting opinions here? 'Tain't me, that's for sure.

Jon
--
Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League | Amateur Radio info:
225 Main St., Newington CT 06111 | http://www.arrl.org/

# 4227. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <346372ea.4705589@news.erols.com>
Source record: 89411

On 4 Nov 1997 20:51:00 -0700, europa@primenet.com wrote:

*
*:
*:I just read a chemistry book (I'm a student) which mentioned
*:that the maximum constant exposure limit to HF is 2-3 ppm,
*:for hydrogen cyanide it is 10 ppm; and as we all know cyanide
*:is not particularly good for you... I would do the etching
*:outside, wearing proper chemically resistant gloves, safety
*:glasses and a lab coat or similar. Oh, and glass is etched by
*:HF so you will have to use a propylene or steel (apparently
*:steel is inert to HF) container. The QRP Circuit Book (unsure
*:of the name) here in the UK has a page or two on xtal etching
*:using toothpaste and carborundum powder, much safer.
*:
*: 73 & good luck,
*: Laurens M1CCO
*
*
*Yes it could be dangerous. Those limits you mention are
constant exposure
*limits, I believe, OSHA. Meant for wafer fab people and the
like.
*
*Thousands of people work with 3000VDC capable devices like
linears.
*3000VDC is instantly fatal, unlike dilute HF, where you'd really
have to
*try hard to kill yourself, or to injure yourself maybe splash
some in your
*eyes not wearing goggles- or dunk your hand in the stuff for a
few minutes
*or more.
*
*People should read some chemistry info, and decide whether its
more
*dangerous than stepping out into their neighborhood at nite :)

*
*Wear goggles, gloves, and a plastic lab coat, with some
ventilation and
*you'd be pretty safe.
*
*Rob
*

*ps. HF gives crystals with superior Q

The question about grinding xtals brings back a fond memory of a situation in Korea many years ago. I was a civilian TechRep assigned to 5th AF in Korea. We used RTTY for xmissions to HQ 5th AF in Tokyo. A new frequency was given to us for transmtting.. No Xtals to meet the requirement were available.

I had never ground a xtal before but decided to try with a xtal a bit lower than the required frequency. Tooth paste - nothing happened of any note. Dry cement - same thing. Then I noticed a Korean carpenter sharpening his plane on a small whet stone. I borrowed the whet stone, spit on it and ground away.

Ureka!! Now we can communicate with Tokyo!!

73/Jim/AC4CZ

# 4228. Special Event..

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Jerome Warburton <jerome.warburton@armyemail.com>
Message-ID: <34639DB5.A5D0E61A@armyemail.com>
Source record: 89412
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

Short notice! KF4L club to operate from Columbus' replica ship Nina. 15 Nov. 07:00 to 17:00 CST. Bands and modes to be announced. More info to be posted on CARES Web Page. Join us on the air, for our special QSL!

Jerry
KB0OTW

Short notice! KF4L club to operate from Columbus' replica ship Nina. 15 Nov. 07:00 to 17:00 CST. Bands and modes to be announced. More info to be posted on CARES Web Page. Join us on the air, for our special QSL!

Jerry

KB0OTW

Content-Description: Card for Jerome Warburton
Content-Disposition: attachment; filename="vcard.vcf"

begin: vcard
fn: Jerome Warburton
n: Warburton;Jerome
email;internet: jerome.warburton@armyemail.com
x-mozilla-cpt: ;0
x-mozilla-html: TRUE
version: 2.1
end: vcard

# 4229. 80/40m 2x BUZ21 SIPMOS Linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3463a448.957892@news.online.no>
Source record: 89413

LA7MI mentioned he built a linear amplifier for 80m smd type QRP transceiver. It uses BC547 emitter follower to base of BD135 (1W epoxy - equiv. to 2N3053/2N1711/BFY51) with tapped LC collector circuit to drive 2x BUZ21 low price Sipmos transistors in push-pull circuit. +24V supply voltage
With 0dBm /1mW drive the output is 60W on 80m and 50W on 40m.

...Jan-Martin

---
Email: LA8AK at online dot no

# 4230. Re: $1000/wk Donating Sperm

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: doll@centuryinter.net
Message-ID: <N.110797.135606.91@ppp028.ld.centuryinter.net>
Source record: 89414

Is this some kind of new QRP rig????

Ken
KK5JD

On 11/2/97 2:56PM, in message <021197155706@homei.com>, mavin@homei.com wrote:

> visit http://206.155.252.182/index.html for more detailed information on
> how you can partake in the sperm donor program...
>
>
>
>
>
>
>
> >><<=>><<<<=><==<><<

# 4231. Pixie PC Boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: C SCHIOTZ <CSCHIOTZ@worldnet.att.net>
Message-ID: <3463C086.2AEB@worldnet.att.net>
Source record: 89415

Anyone know who sells Pixie Xcvr PC boards?
Chris K2PGB

# 4232. Re: 1750 M and antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Brooke <brooke@pacific.net>
Message-ID: <3463BC28.3FC5@pacific.net>
Source record: 89416

Mark:

I built a 50 Ft. vertical antenna using military surplus parts from
Fair Radio Sales in Lima Ohio and a kit from Palamor that used a
slug tuned Litz wire coil. I forget who made the CW IDer kit.

Brooke
N6GCE
remove NOSPAM for email address

Mark Morgan wrote:
>
> How do you get an antennna for this type of rig? 825 M (~2475 ft) of
> wire laid out straigh? Or are there practical short anntennas?

# 4233. Pactor MBO & Gateway list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: Albert AERTS <albertaerts@innet.be>
Message-ID: <34634AD6.E435C15F@innet.be>
Source record: 89417

The -ON6TS Fact Sheet- has been updated with a new
"Pactor MBO & Gateway list".

http://www.club.innet.be/~pub01234

73's de Albert

--
Amateur Radio Callsign: ON6TS
HF Pactor: 14076.5, 18106.5 or 21076.5 mark carrier
Email: albertaerts@innet.be
URL: http://www.club.innet.be/~pub01234

# 4234. FS Jennings CVDG-1000 Vacuum Caps 10-1000PF@15KV Motorized!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-07 00:00:00 UTC
From: ke9pq@netnet.net
Message-ID: <63tvhn$80d$4@news.inc.net>
Source record: 89418

This Jennings silver ceramic Vacuum variable capasitor is
10-1000PF@15KV It has a 28 volt DC motor drive on the bell
(It runs nice at 13.8voltDC)...it has limit switches, and a 10K ohm
positioning pot. It is about 4 inches in dia. and about 10 inches
long. Price is $189.00 each I have several

All prices are plus shipping

Mark Olson "KE9PQ" 1490 Norfield Rd.
Suamico,Wi. 54173
Call (920) 434-8097 after 6:00pm central time.
Email ke9pq@netnet.net Thanks and 73 Mark
NOTE: All items listed are guaranteed to be
as described or your money back.

# 4235. Re: 80/40m 2x BUZ21 SIPMOS Linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971108031900.WAA18403@ladder02.news.aol.com>
Source record: 89319

>With 0dBm /1mW drive the output is 60W on 80m and 50W on 40m.
>
>

I'll bet he had a lot of fun taming 47 dB of gain.

W4ZCB

# 4236. Help with Relays Please...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Bob Snyder <rsnyder@pcisys.net>
Message-ID: <01bcec02$95db53c0$6a664ccf@rocky>
Source record: 89320

I am working on a remote antenna switch project and was wondering about the RF going through the relay contacts.

What rating do I need to look for to handle 1k watt of RF? One relay I am looking at is a 3PDT rated at 20A @ 120VAC. I would use all three contacts bridged together to increase the capacity.

Another relay is a DPDT and is rated "Max. Curr. @28VDC 240VAC - 30A. I guess I don't know enough about electronics to understand why 30A @ 28VDC would be the same as 30A @ 240VAC. At 28VDC I figure each pole should be able to handle 840 watts for a total capacity of 1680 when bridging both poles together. Is that right? At 240VAC I figure (but don't believe) that each pole should be able to handle 7200 watts.

Any help on this would be appreciated.

73.
Bob
KB0YGD

# 4237. FS - NOS tubes, books, more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971108064501.BAA07485@ladder01.news.aol.com>
Source record: 89321

FOR SALE: NOS Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco, and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1650 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #1010-T.

# 4238. WTB: RF AMP PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: kb9sikk@aol.com
Message-ID: <19971108065801.BAA08101@ladder02.news.aol.com>
Source record: 89322

Hi need doorknob capacitors 5 and 7.5 kv. A heavy duty switch 10kv 2p6t. Meters and any other things you might no longer need that would go into my amp. Please let me know what you have. Also want a 240v 30 amp variac.

73,
K-K

# 4239. ADI 146 - 2 metre radio help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <5VT9tKAp7DZ0Ew2E@chubs.demon.co.uk>
Source record: 89323
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Hi all,

My friend has an ADI 146 and the PA block appears to have blown. I have a BGY 35 block and would like him to have it to fit in replacement. The problem is he can find any information about the blown block or its pin out. He's not sure of the model number but he assures me it's made by Toshiba. I'm hoping he will get me the model number in the next few days but in the meantime does anyone know about these radios and the PA block fitted?

Thanks in advance for your help.
--
Steve Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

# 4240. Re: Seeking non-appliance operator hams for small microwave/VHF group

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <UO$FvDAWTEZ0EwDa@pacsat.demon.co.uk>
Source record: 89324

In article <345EAB98.7541@northwest.com>, larryc@northwest.com writes
>There it is... frustrated 40-something/Morse-code fanatic (with
>tubed Collins) seeks homebrew types with knowledge, experience,
>and know-how for fun, contesting, and gear building. I live near
>Portland, Oregon but I'm not a native (and **NOT** a Californian). Not
>interested in impressing others' with megabucks of appliances from Icom,
>etc. Cynical sense of humor required.
>
>email replies to larryc@northwest.com
>
>

Check out my webpages below and be redeemed!

73 Simon GM4PLM


+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

# 4241. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <TeKE7GADVEZ0EwDI@pacsat.demon.co.uk>
Source record: 89325

In article <RC+GfBAhSCY0EwL0@kay-dee.demon.co.uk>, Don Ward <don@kay-dee.demon.co.uk> writes
>The latest VHF/UHF handbook is now available to non members for GBP
>18.80. There is also a VHF/UHF DX Book at GBP18.00.
>RSGB have a web site at RSGB.ORG
>Sorry if I am repeating info that may have gone before.

Don't bother with the new VHF/UHF Handbook. Its a waste of space!

Save your money or go for the VHF/UHF DX Book!

73 Simon GM4PLM
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 4242. Re: Parts needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <34647E64.BE9@txeas.net>
Source record: 89326

Seth Taylor wrote:
>
> Looking for the following items for "project":
>
> 1 ea. 10 V 10A fil transformer

[snip]

Last time I needed that transformer, I rewound one. It's faster
than surfing the internet, and easier than dealing with the abuse
served up here.

This is the real reason you need old old TV sets in your junk box....
but if you had to, you might be able to rewind a battery charger
or remove the windings from one, or do the boost/buck trick with
another transformer.

N6OTQ

# 4243. Re: Help with Relays Please...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34646e98.563459294@news.atl.bellsouth.net>
Source record: 89327

On 8 Nov 1997 04:55:51 GMT, "Bob Snyder" <rsnyder@pcisys.net> wrote:
>I am working on a remote antenna switch project and was wondering about the
>RF going through the relay contacts.
>
>What rating do I need to look for to handle 1k watt of RF? One relay I am
>looking at is a 3PDT rated at 20A @ 120VAC. I would use all three contacts
>bridged together to increase the capacity.
>
>Another relay is a DPDT and is rated "Max. Curr. @28VDC 240VAC - 30A. I
>guess I don't know enough about electronics to understand why 30A @ 28VDC
>would be the same as 30A @ 240VAC. At 28VDC I figure each pole should be
>able to handle 840 watts for a total capacity of 1680 when bridging both
>poles together. Is that right? At 240VAC I figure (but don't believe)
>that each pole should be able to handle 7200 watts.
>
>Any help on this would be appreciated.

Bob, the ratings for relay contacts are based on the amount of current
that they can *make or break* without welding. In other words, the spec
is for hot switching. Since you shouldn't be hot switching the relay, this
spec doesn't mean much to you. What you are interested in is the sustain
current of the relay. That's pretty much independent of voltage up to the
point where you get arcing to other contacts or the relay frame.

At the 1.5 kW level, you need a sustain current capability of about
3.33 amps for a 450 ohm system, or about 5.48 amps in a 50 ohm
system. So the relay doesn't have to be that big at all.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4244. Re: WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Jeff Anderson <jeffa@ix.netcom.com>
Message-ID: <641s0d$dlr@dfw-ixnews10.ix.netcom.com>
Source record: 89328

In article <3463BFDF.4017@pacific.net>,
Brooke <brooke@pacific.net> wrote:
>Ted:
>
>WWVB is in the process of upgrading their transmitter from 13 kW to 40
>kW.
>see: http://www.bldrdoc.gov/timefreq/wwvstatus.htm for more information.
>There are a number of desktop digital clocks coming on the market that
>set themselves with WWVB (see Radio Shack for example). Klock Kits has
>an analog movement that also does this.
>

Has anyone had any experience with these desktop clocks? Which are the better ones?

Thanks,

- Jeff, WA6AHL

# 4245. Re: downverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <3464E742.6601@mwt.net>
Source record: 89329

shadow wrote:
>
> Iam looking for plans for a downvereter that i could build, if any one
> could help that would be good.
> thnaks for any info.
> to reply just remove the "no spam" i have be getting a lot of it

What input frequency and what output frequency do you want?
Scott

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

amended 8-29-97: Now after feeling the "Need for Speed", building an
RV-4!
No, the Super Chief is NOT for sale :)

# 4246. 4 X 813 PA project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: dlsnyder@nbnet.nb.CA
Message-ID: <34649055.5BFD@nbnet.nb.ca>
Source record: 89330

Date: Fri, 07 Nov 1997 14:12:09 +0100
From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
Subject: 4 x 813 PA project ?

Has there been any published articles on 4 x 813 HF PA - during the
years?
I have a copy of the 3x813 project from an old HR magz - but would like
to see
the 4X version before winding up the drill.
73 Chris SM0NCL

---

Date: 7 Nov 1997 19:49:00 -0700
From: europa@primenet.com
Subject: 4 x 813 PA project ?

In article <346313A9.C285E01F@era.ericsson.se>, Christer Jogenborn
<Christer.Jogenborn@era.ericsson.se> wrote:

:Has there been any published articles on 4 x 813 HF PA - during the
:years?
:I have a copy of the 3x813 project from an old HR magz - but would like
:to see
:the 4X version before winding up the drill.
:73 Chris SM0NCL

You will have a hard time getting even three 813's to tune up on 10m due
to
the high plate capacitance, if you are going grounded-grid. With four,
maybe even 15m would be difficult.

I tried this years ago, and somehow got 3 tubes working on 10m by having
a
switch that disconnected the plate tuning cap all-together. Then I
adjusted the 10m coil tap to resonate with no tuning cap- just the plate
capacitances.

Rob.

Hi Chris,

Having built one of these a few years ago I can tell you that you may
have trouble getting it to tune on 20 meters with four in the output!
The minimum capacity of your tune cap can play a role on 20 meters.
However the solution is at hand: SERIES tuning.

W1UH

# 4247. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: paul <paul@ct2.nai.net>
Message-ID: <3464BA65.33BA@ct2.nai.net>
Source record: 89331

Rich Griffiths wrote:
>
> jason zawodny wrote:
> >
> > Well the question this week goes as such. Computer power supplies
> > supply both 5V and 12V, and there are plenty laying around at work that
> > I could rig to produce the necessary current (and have backup) for
> > my VHF/UHF rig. Do you think that these supplies, powering a car battery
> > which provides that actual feed (and emergency backup power) to the
> > radio would be sufficient? Im trying to avoid spending the 130 dollars
> > I've seen radio power supplies going for...
> >
> > Thanks
> >
> > jtz
> >
> >
> > --
> > ---------------------------------------------------------------------------
> > Jason T. Zawodny; U of Notre Dame; Computer Engineer
> > zawodny.1@nd.edu; http://www.nd.edu/~jzawodny/
> > Amateur Radio Technician class licencee : KC8HBU : 2m, 70cm Mobile
> > ---------------------------------------------------------------------------
>
> The computer supplies I have actually measured (2 of them) were a true
> 12 Volts. A nominal 12-V battery has a resting voltage of 12.6 to 12.7
> volts, needs about 13.2 V for maintenance charging, and needs over 14 V
> to recharge.
>
> The computer supply is not adequate. Besides, most can't deliver enough
> current. I run much of my equipment off a deep-cycle battery. After
> about one minute of transmitting using my 20-Watt 2-meter rig, the battery
> draws over 2 Amps from the charger.
>
> Rich
Hello,
This is the first time I have ever replied to a newsnet, so here goes.
Rich,
There are some very fine supplies out there for pennies per pound. The
trick is this buy 3 5 volt supplies and run them in series for 15 volts.
Each supply can usually be readjusted. Usual ranges that I have seen are
4-6 volts. So readjust each of them to your requirements.
The above discussion adresses the types of supplies that you see at
hamfests that are floating output.

True PC power supplies may have a groud connection in them on the output. If this is true measured with an ohm meter on the black lead to ground of its chassis, you would want to remove that connection so that you can stack the supplies.
Hope this helps out. I have collected some incredible supplies over the years and could never understand why Hams did not buy the incredible power supplies that were at there feet for 2 bucks a pop, instead they by some silly supply at 150-200 dollars that consists of a LM 723 regulator. Not a bad supply, but thats a 30 dollar solution.
Have fun and save some supplies.
Thanks Paul.

# 4248. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <soEGXLAUxLZ0Ew36@ddwyer.demon.co.uk>
Source record: 89332

In article <europa-ya023580000711971911120001@news.primenet.com>,
europa@primenet.com writes
>In article <346372ea.4705589@news.erols.com>, jsutton@erols.com (James C
>Sutton) wrote:
>
>
>:
>:The question about grinding xtals brings back a fond memory of a
>:situation in Korea many years ago. I was a civilian TechRep
>:assigned to 5th AF in Korea. We used RTTY for xmissions to HQ
>:5th AF in Tokyo. A new frequency was given to us for
>:transmtting.. No Xtals to meet the requirement were available.
>:
>:I had never ground a xtal before but decided to try with a xtal a
>:bit lower than the required frequency. Tooth paste - nothing
>:happened of any note. Dry cement - same thing. Then I noticed a
>:Korean carpenter sharpening his plane on a small whet stone. I
>:borrowed the whet stone, spit on it and ground away.
>:
>:Ureka!! Now we can communicate with Tokyo!!
>:
>:73/Jim/AC4CZ
>
>
>By the way, I was etching crystals from 8mhz or so on up to 9.000mhz for
>use in filters. As most people are only trying to get small freq changes,
>perhaps Comet or equiv is the best choice.
>
>I also would like more info on high Q overtone crystals. How much do these
>monsters cost in ballpark figures?
>
>Rob.
Not always monsters 3rd overtone AT cut in a resistance weld holder at
10MHz could be $30 if it was a standard design best to ask a friendly
LOCAL crystal maker what staandard design he produces in quantity for an
ovened oscillator manufacturer. SC designs are on the increase when
used a maintaining circuit that supresses the nearby unwanted mode is
required.
Glad you asked:) I happen to have 16.384MHz OCXOs (2^14 KHZ) bought on
the surplus market that employ 16.384MHz third overtone SC cut crystals
I sell these OCXOs at $90 they are almost as stable as rubidium
frequency standards.
Douglas Dwyer Frequency Precision Ltd.

# 4249. Re: WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19971108211001.QAA00353@ladder01.news.aol.com>
Source record: 89333

In article <641s0d$dlr@dfw-ixnews10.ix.netcom.com>, Jeff Anderson
<jeffa@ix.netcom.com> writes:

>
>Has anyone had any experience with these desktop clocks? Which are the
>better ones?

The Radio Shack version works here on the east coast, although it seemed
to take about 2 days to find the WWVB signal. However, comparing
the clock to either CHU, WWV or some other supposedly accurate
source, the clock is within the accuracy claimed. About my only
complaint is that I can't set 24 hour time on it.
-art clemons-

## 4250. President Grant (non uniden)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: tom jenkins <tjenkins@corpserv.delta.edu>
Message-ID: <01bcec91$79033e40$cc906ec6@default>
Source record: 89334

Does any one have info and schematics for a President Grant Early model?
This unit is about 20 years old and is not a uniden radio.
Let me know.
Tom

# 4251. Re: PIN diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: rfmoorejr@aol.com
Message-ID: <19971108222601.RAA06896@ladder01.news.aol.com>
Source record: 89335

In article <34636206.50E9@netcom.ca>, Tony Hwang <oolong@netcom.ca> writes:

>Hi,
>I am wondering if I can use MPN3404 in place of MPN3700.
>What is the difference between these two other than prices?
>And good source of these diodes? I need about 60 of them.
>TIA
>Tony

Hi Tony. You can search for these and other Motorola devices starting at http://motserv.indirect.com/cgi-bin/search. It looks like the '3700 has much better reverse voltage tolerance --- 200 Vdc vs. only 20 Vdc for the '3404 -- but that may not mean much in your application.

Frequency may be important: both of these diodes are intended for VHF. I have found that the MPN3404 is no better than a 1N914 when used as a switch below about 10 MHz so I'd guess its recovery time is about 100 ns. The MPN3700 has a 300 ns recovery time and probably works better in the HF region.

Newark has both of these:
08T MPN3700 $1.07 (1-99)
08T MPN3404 $1.04 (1-99)

Hope this helps some
Bob Moore KV1V

# 4252. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: cliffkot@interaccess.com
Message-ID: <cliffkot.183.0007B983@interaccess.com>
Source record: 89336
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <63va0k$arh$1@newsfep3.sprintmail.com> "Gary" <kc5ldn@--NO-SPAM-sprintmail.com> writes:
>From: "Gary" <kc5ldn@--NO-SPAM-sprintmail.com>
>Subject: HELP RG-6 vs RG-8 & RG-58
>Date: Fri, 7 Nov 1997 08:52:58 -0600

>Please help! I have a large quantity of RG-6 and would like to use it for
>HF. I need to know if it is okay and if there is any considerations since
>it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
>info would be helpful.

>Gary
>kc5ldn@sprintmail.com

RG-6 style cables are excellent, with low loss, especially the quad shield variety. Make sure you get really good connectors and rubber boots for out door use.

One caution. Since the RG-6 cables are not intended for transmitter use, you will probably be able to find out how much power they can handle. You should have no problems with a 100 watt transmitter as long as your SWR is not too high (3 to 1 or better).

Cliff

# 4253. in search of dual band amp plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: jeremy hopkins <jhopkins@toltbbs.com>
Message-ID: <34651C9E.BE96CB70@toltbbs.com>
Source record: 89337

looking for webpages or books with plans for uhf/vhf amp plans
also looking for single band plans
--
Jeremy W. Hopkins
KC8GWH
http://www.toltbbs.com/~jhop/
442.850 + mhz in nw ohio

# 4254. CQ 40m Fun Machine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Brian Smithson <smithson@ma.ultranet.com>
Message-ID: <643592$sai$1@decius.ultra.net>
Source record: 89338

Does anyone have experience building n4pc's 40m qrp xcvr project detailed in CQ a few years ago? I've gotten started but stalled out looking for parts, enclosure, etc. Current stumbling block - 40m xtals!

I'd like to do as close to home-brew rig as I can to learn more about the electronics, is this a good choice for a project? Others?

Thanks es 73 !

Brian n8wrl

# 4255. Re: Fantastic Building Photos

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <34654A09.599DFC60@proaxis.com>
Source record: 89339

Jerry Parker wrote:
>
> NorCal QRP Club has posted a fantastic Photo Essay of the
> NorCal Building Contest with fantastic photos.
>
> If your into building equipment check this out!
>
> http://www.fix.net/norcal.htm
>
> Enjoy,,,72,,,Jerry...WA6OWR...K

Make that http://www.fix.net/norcal.html :-)

It looks like a great page.

- Bob W7OV
bobh at proaxis dot com

# 4256. Re: QEX Mag or QST?? thoughts please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <WDP5FCA4hOZ0Ewi7@g3uda.demon.co.uk>
Source record: 89340

In article <Pine.GSO.3.95.971105185037.24469I-100000@oso.slonet.org>,
Clifford Buttschardt <cbuttsch@slonet.org> writes
>Aw come on! You HAVE to be kidding! The only construction going on is
>the increase in the heighth of the income of 73! Cliff K7RR
>
>
>On 4 Nov 1997, Charles T. Young wrote:
>
>> Ken Linney (ken@g3uda.demon.co.uk) wrote:
>> Ken:
>>
>> If you REALLY want home construction, subscribe to 73 Amateur Radio
>> today. Then you get Uncle Wayne's editorials too.
>>
>> Chuck Young
>>
>>
>>
>
Actually Chuck I started the Title of the thread. I did not write the
above. Threads get tenuous the further down the pile they get :-)

... Ken

# 4257. Re: Regen RX Additional

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: doll@centuryinter.net
Message-ID: <N.110797.230952.33@ppp035.ld.centuryinter.net>
Source record: 89341

I built one of these with my son and it works great! I purchased all parts new from a local electronics warehouse for 21 dollars.

Ken S.
KK5JD

On 11/9/97 11:49PM, in message <19971110054901.AAA05656@ladder01.news.aol.com>, CooperJim <cooperjim@aol.com> wrote:

> Hi All
> The 1996 ARRL Handbook has a regenerative receiver project.
> I got a promo for the 1998 handbook that said there it would have a
> super-regenerative project! (Im not sure I like having a bunch of these back
> on two meters hi).
> 73
> Jim Cooper NE6O
> CooperJim@aol.com
>

# 4258. Re: Need Duplexer Design, Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3464008C.582A@onramp.net>
Source record: 89342

Matt Krick wrote:
>
> Greetings,
>
> Does anyone know an internet like or a page telling how to build
> two-meter cavitys and or duplexers?
>
> Thanx in advance
> KC7GSA

The ARRL handbook has had it in there for years..
--
Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 4259. Re: ADI 146 - 2 metre radio help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <34653218.34C4@onramp.net>
Source record: 89343
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Steve Simpson wrote:
>
> Hi all,
>
> My friend has an ADI 146 and the PA block appears to have blown. I have
> a BGY 35 block and would like him to have it to fit in replacement. The
> problem is he can find any information about the blown block or its pin
> out. He's not sure of the model number but he assures me it's made by
> Toshiba. I'm hoping he will get me the model number in the next few days
> but in the meantime does anyone know about these radios and the PA block
> fitted?
>
> Thanks in advance for your help.
> --
> Steve Simpson
> Radio/Night Club D.J.
> Steve@chubs.demon.co.uk
> G-QRP Club Member 9631
> Visit Radio World -
> HTTP://www.chubs.demon.co.uk

SA-V17. The radio is a copy of the Kenwood TM231...
--
Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 4260. Re: HELP! newbie needs portable range

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3463f7be.533029087@news.atl.bellsouth.net>
Source record: 89344

On 7 Nov 1997 20:08:30 GMT, laser@lance.netdoor.com (Patrick Rothwell) wrote:
>me and my buddy just bought a couple of two way radios from
>radio shack, the $75 family series.. they are only 100mw..
>we get about one to one and a half miles out of them.. we
>are totally radio ignorant.. is there any way to get more
>range out of them? our "we have answers" radio shack guy said
>nothing legal would go over two miles.. what are our options?
>other radios? auto radios? we want range and portability,
>but not cellular phones.. any advice?

That's pretty much all the FRS radios are designed to do.
They're designed so you can't use an external antenna or
amplifier with them. If you and your buddy are on high points
with a long common line of sight, you can sometimes get much
better than 2 miles, but in typical suburbia, 2 miles is about the
limit. In some terrain it will be much less than that.

You might look at the GMRS radios instead. The HTs run
about 5 watts and can deliver a 2 to 10 mile range (depending
on terrain), and can be used through a GMRS repeater station
to give up to about 60 mile range (again depends on terrain).

You usually have to pay to use a GMRS repeater, but it
usually doesn't cost much. Check locally to see what's
available. You can also use mobile radios in GMRS, they're
higher power and give more range. You can add external
antennas to either type to improve range somewhat.

Of course you can use regular CBs too. That tends to be a
madhouse in some areas, though, and might not suit your
needs. But if you can find a clear channel, you can often
get a range of 20 miles or so between *legal* mobiles. Some
people run huge illegal amps and get somewhat better range,
but don't do that. You impact everyone else trying to use
CB. When the channel isn't clear (which is often) you won't
get much range at all.

If your communications is "just for fun", then consider getting
an amateur radio license. You can then choose equipment and
frequencies which can deliver practically any range you like
from very local to worldwide. But amateur radio isn't intended
for business use. The other services permit business use. And
you do have to pass licensing exams to get an amateur license.

The Tech exam isn't hard, and lets you do a lot. The exams
for higher classes are progressively harder, and allow you

access to HF, which has worldwide reach. You need to know Morse Code for the latter licenses (for now at least, that's the subject of pending regulatory reconsideration at the international level), Tech does not require it. Amateurs have many repeater systems which you can usually use for free (or for joining the repeater club) as a Tech, and these, like the fee paid GMRS repeaters, can give you a range of 60 miles or so with handheld radios. (And there are lots more amateur radio repeaters than GMRS repeaters, so you're much less likely to be where you are out of range of a repeater you can use.)

If your use is business related, one alternative to cellular you might want to consider is ESMR. Nextel offers this (as do some others). What you get with ESMR is a super-trunked 2 way radio, an alpha pager, and a cellphone-like capability all in one package. The only per minute charge you incur is when you make a cellphone-like call.

As long as you are just talking to your call group, its like ordinary 2 way radio. The range of the system can be very good. For example, if one member of your talk group is in Atlanta, another can be in Birmingham. You can chat back and forth just as if you were both local, and there is no long distance charge or per minute charge. This service costs about $40 a month. (Considering the avoidance of per minute charges, this is a good deal better than cellular if you talk with the same group of people most of the time.)

Like cellular, however, ESMR requires that you be in range of the network. If you're in the back woods somewhere, you won't be able to talk directly unit to unit. For that sort of thing, you need FRS, GMRS, CB, or amateur radio. (You could also get an itnerant business band license, but the range wouldn't be much better than with FRS or simplex GMRS, and your use is supposed to be strictly job site related, IE it isn't intended for casual chatting.)

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4261. Re: Ten Tec 1208 convsion

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3464042d.536212774@news.atl.bellsouth.net>
Source record: 89345

On 7 Nov 1997 21:00:34 GMT, David Hand <dhand@mdi.com> wrote:
>I am interested in the TenTec 1208 transverter but was wanting to use my
>10M moble as the source. IE 10M-> 6M instead of 20 -> 6 m
>Any one have any comments or suggestions?

That's a bit of a problem, Dave. The second harmonic of the 10m
rig falls near the 6m band and is hard to suppress coming out of the
transverter mixer (which is, of course, a great harmonic generator).
That can cause interference to channel 2 TV. That's why Ten-Tec
chose 20m as the input frequency.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4262. CPI STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: email@tig.com.au
Message-ID: <6419e5$4bv$4@toto.tig.com.au>
Source record: 89346

I AM LOOKING TO BUY ANY CPI STUFF ..... PLEASE EMAIL ME IF U CAN HELP ....
CHEERS !

# 4263. BLW77 gain factor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: "Frank R. Oppedijk" <fro@xs4all.nl>
Message-ID: <3464DB95.4BC8@xs4all.nl>
Source record: 89347

Hi all!

Does anyone of you know the gain of a BLW77 power amp?

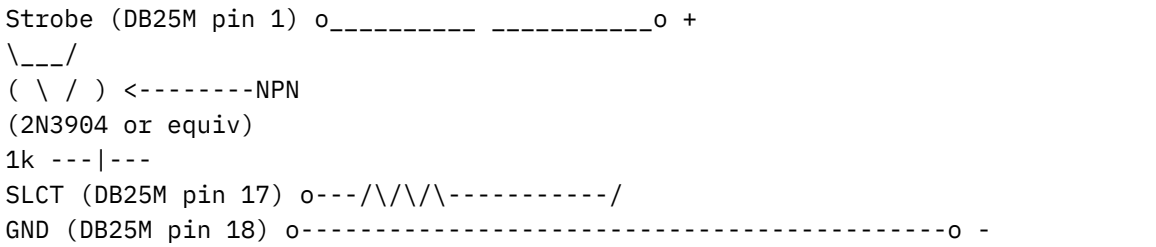
TIA es 73,

Frank PA3FLV
fro@xs4all.nl

# 4264. HELP with CW Keying Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: n9mxt@aol.com
Message-ID: <19971108164601.LAA06652@ladder02.news.aol.com>
Source record: 89348

Hello,
I run DXBASE 4.5 and CT K1EA in the manual it has a section that allows you to make
a CW Keying Circuit.




Well, I made this and it used to work on my TS450S but seems not to work on my TS850

Anyone, have another way of making a cable to allow myself to send CW from the keyboard?

## 4265. heathkit meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: peter <peteselectronics@juno.com>
Message-ID: <6425n9$8un@world1.bawave.com>
Source record: 89349

looking for a meter for a oem heathkit model 2141.
it must be the original meter in working order.

# 4266. PIN Diode Source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-08 00:00:00 UTC
From: n4ij@aol.com
Message-ID: <19971108230301.SAA10046@ladder01.news.aol.com>
Source record: 89350

What mfgrs make PIN diodes suitable for 100W+ switch for HF?

Doug N4IJ

# 4267. Re: FS- Yaesu FRG-9600 Service/Owners manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: bush143@postoffice.worldnet.att.net
Message-ID: <3465f1a8.7585553@netnews.worldnet.att.net>
Source record: 89269
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amatuer.misc,rec.radio.amateur.homebrew

On Mon, 27 Oct 1997 16:09:30 GMT, bush143@postoffice.worldnet.att.net
(Kin Ho) wrote:

>>>>I have a bunch of excess radio manuals for sale. Some are originals
>>>>and some are photocopies. All of the original manuals are in MINT
>>>>condition. All photocopies were professionally made copies purchased
>>>>from the manufacturer, and are either bound or in binders. ALL
>>>>MANUALS INCLUDE SCHEMATICS AS INCLUDED FROM THE MANUFACTURER!
>>>>
>>>>These manuals are being sold to clear out my radio shelf. Shipping is
>>>>extra. Some manuals are thick and some are thin, but it should not
>>>>take more than a few bucks to ship any of these manuals to the lower
>>>>48 States. Please e-mail if interested and I will provide an estimate
>>>>on shipping. Thank You!!!!!
>>>>
>>>>SCHEMATICS & BOARD-PARTS LAYOUTS (originals):
>>>> Icom R-70 $10
>>>> Icom R-71/71A $10
>>>>
>>>>OPERATIONS/OWNERS MANUALS:
>>>> AOR-3000A (original) $15
>>>> J.I.L. SX-400 and J.I.L. RF-1030 rf up converter (copy) $15
>>>> Kenwood R-1000 (copy) $10
>>>> Radio Shack Pro-2004 (original) $10
>> Sony CRF-V21 (copy-two volume set) $20
>>>> Sony 2010 (original) $10
>>>> Sony Pro-80 (copy) $10
>>>> Yaese FRG 8800 (original) $15
>>>> Yaesu FRG 9600 (original0 $10
>>>>
>>>>SERVICE MANUALS:
>>>> Radio Shack Pro-34 (original) $20
>>>> Radio Shack Pro-2004 (original) $20
>>>> Sony 2010 (copy) $10
>>>> Sony SW-55 (original) $10
>> Yaesu FRG-9600 (copy) $25
>>>>
>>>>RACAL TECHNICAL MANUAL: $25 (shipped)
>>>> Covers model RA-6217A, 6217A-3, 6217E
>>>> This thick manual includes parts list, circuit pictorials and
>>>> alignment procedures. (copy)
>>>>
>>>>

>>>>
>>>>
>>>
>>
>

# 4268. Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: "Kraig D. Brumbaughj" <ua666@aiusa.com>
Message-ID: <3466219A.7DC467B2@aiusa.com>
Source record: 89270

Hi All,

Does anyone have a schematic for a simple transistor regen receiver that
is capable of covering 80 and 40 meter CW ?

Thanks.....

73,

Kraig

# 4269. Regen RX Additional

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: "Kraig D. Brumbaughj" <ua666@aiusa.com>
Message-ID: <34662427.A387FC92@aiusa.com>
Source record: 89271

About 20 years ago Radio Shack had available their 'P Box" kits. I purchased the SW radio kit which was a regen. Unfortunately I have lost the kit and schematic. This was a pretty good little rx and would suit my purposes now, if I can find someone that has the schematic or one similar :-)

Thanks again,

Kraig WB2PLW

# 4270. Re: WTB: RF AMP PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: James M Walker <chejmw@acsu.buffalo.edu>
Message-ID: <3466186E.5A8D@acsu.buffalo.edu>
Source record: 89272

Howdy,
My name is Jim and CallSign is WB2FCN, I have a lot of HIGH POWER
Amplifier Parts. Send me E-mail with your list and I'm sure I can
Probably fill most of your requirements. I am not a commercial outfit
just a regular Ham operator who builds his own equipment. So I have lots
of parts available most new or at least in good shape.
Xmtg caps 5kv 10kv etc filament chokes for 4-400 3-500 and 4-1000a type
amplifiers. vacuum variables and other goodies. email your wants I'll
see what I have that you want. and then we can work something out. ok
73 for now ... -.- de WB2FCN

# 4271. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: skerns@postoffice.ptd.net
Message-ID: <64567d$26$1@news3.ptd.net>
Source record: 89273
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

A easy way to use any impedance coax with 50 ohm transmitters and antennas
is to cut the transmission line to be an electrical (or multiple) half
wave-length. This is easly found by l=(468/f)*VF where f= freq in Mhz,
VF=velocity factor of the coax and l= the lenght of a electrical wavelength.
I use Belden 9213 (75ohm .3db loss at 30mhz per 100') during my portable
contests efforts using this trick. Many hams use CATV 1/2 & 3/4" hardline
for long (>500') using this same method!

73 Steve N3FTI

In article <63va0k$arh$1@newsfep3.sprintmail.com>,
kc5ldn@--NO-SPAM-sprintmail.com says...
>
>Please help! I have a large quantity of RG-6 and would like to use it for
>HF. I need to know if it is okay and if there is any considerations since
>it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
>info would be helpful.
>
>Gary
>kc5ldn@sprintmail.com
>
>
>

# 4272. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Cecil Moore <w6rca@ibm.net>
Message-ID: <34662BB6.6154@ibm.net>
Source record: 89274
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Rick Snyder wrote:
> There may be antenna considerations as far as baluns go but I'm not too
> sure about them so I'm not going to tread there.

Why Rick? Everybody else does. ( including me :-)

73, Cecil, W6RCA, OOTC

# 4273. Transistors ITP2535 BSN304A BSP304A?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3465df27.3770930@news.online.no>
Source record: 89275

Hi
I got few douzens transistors from LA3VW today they are ITP2535
BSN304A BSP304A, any idea what they are ? need only simple details,
connections, will check more closely from possible site, but at the
moment acrobat acrobe 3.01 fails to operate on this 486DLC

73
Jan-Martin

---
Email: LA8AK at online dot no

# 4274. 73 Magazine Article.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <645ehi$nih@news.asu.edu>
Source record: 89276

I am trying to straighten out a circuit for an Old Timer friend. He built it over a year ago and hasn't been able to get it to work. It is an Audio to Push to Talk circuit that appeared in 73 Magazine in January of 95. There seems to be a problem with a change in the size of R5 and R8. There is an update in the May 95 issue but I don't have any issues past that and it doesn't mention those resistors. Has anyone successfully built that project? Any help appreciated.

Also, if anyone has a copy of the June, 1995 issue of 73 magazine and could look in it and see if there is an "update" talking about the above mentioned article, I'd appreciate knowing what it said. I don't have that particular issue. Thanks.

73 George, KQ7C

--

# 4275. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: la8ak@online.nospam.thanks
Message-ID: <3465da25.2489365@news.online.no>
Source record: 89277

On Sat, 8 Nov 1997 10:56:03 +0000, Simon Lewis
<pacsat@pacsat.demon.co.uk> wrote:

>Don't bother with the new VHF/UHF Handbook. Its a waste of space!
>
>Save your money or go for the VHF/UHF DX Book!

please explain!!!

---
Email: LA8AK at online dot no

# 4276. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3465d28a.8391547@news.crosslink.net>
Source record: 89278
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sat, 8 Nov 1997 18:25:48 -0600, cliffkot@interaccess.com (Seek Wisdom) wrote:

>In article <63va0k$arh$1@newsfep3.sprintmail.com> "Gary" <kc5ldn@--NO-SPAM-sprintmail.com> writes:
>>From: "Gary" <kc5ldn@--NO-SPAM-sprintmail.com>
>>Subject: HELP RG-6 vs RG-8 & RG-58
>>Date: Fri, 7 Nov 1997 08:52:58 -0600
>
>>Please help! I have a large quantity of RG-6 and would like to use it for
>>HF. I need to know if it is okay and if there is any considerations since
>>it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
>>info would be helpful.
>
>>Gary
>>kc5ldn@sprintmail.com
>
>RG-6 style cables are excellent, with low loss, especially the quad shield
>variety. Make sure you get really good connectors and rubber boots for out
>door use.
>
>One caution. Since the RG-6 cables are not intended for transmitter use, you
>will probably be able to find out how much power they can handle. You should
>have no problems with a 100 watt transmitter as long as your SWR is not too
>high (3 to 1 or better).
>
>Cliff

Gentlemen,

Sorry that I didn't see the original post and can only respond to the response.

Use of 75 ohm cable with 50 ohm equipment is not as strange as it may seem.

The impedance seen by your transmitter (or tuner, if you are using a tuner) is not the impedance of the cable - it's the impedance of the load at the far end of the cable, transformed. The transformation is a function of the frequency, characteristic impedance of the line, and the length of the line.

For example, assume that the antenna presents a complex impedance of 75+j60 ( 109 ohms magnitude). Further, assume a 75 ohm cable and a

length of cable of 0.15 wavelength. For example, at a frequency of 3.8 MHz the cable would be physically 29.13 ft. This is from the equation relating the number of wavelengths (N), length (L), velociy factor(VF) and frequency(f). (I used VF=.75 for RG-6)

N = L * f / (984 * VF). (VF=.75)

If you now go to the Smith Chart with these values (0.15 wavelength, 75 ohm line, and the antenna impedance above, you will see that at the transmitter the impedance will be seen as 50 ohms. (50 + j0). So, there's an example of how the 75 ohm line can be used effectively.

My general advice is to become familiar with transmission line theory and the Smith Chart. You then have to put connectors on various lengths of cable and be prepared to use them where needed. It often turns out that a specific length of some strange characteristic impedance is just what you need in a given situation.

Good Luck,
Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4277. NOS Tubes, large quantities of each available.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: kevin@emodus.com
Message-ID: <3466554a.0@news.randori.com>
Source record: 89279

```
NOS Tubes, large quantities of each available.
-----------------------------------------
5R4WGB, $4.00 each (only 13 left)
6AZ8 Philips, $2.90 each
JAN 5751 GE, $3.50 each
6186W (6AG5WA) philips, $.25 each
JAN 6922(E88CC, 6DJ8) Philips, $2.90 each
7062 (E180CC) Amperex,$3.90 each

USED, UNTESTED, large quantities of each available,
Pulled from Surplus Equipment, sold "AS-IS"
-----------------------------------------
5U4G, $2.00 each
6AH6 $0.25 each
6AL5 $0.25 each
6AN8A $.75 each
6AU6A $0.40 each
6CL6 $.40 each
6X4 $.40 each
12AT7 $1.25 each
5651A $0.40 each
5726 $.25 each
5963 (12AU7A) $1.40 each
6189 (12AU7WA) $1.40 each
8068 $5.00 each
8136 $0.40 each

Test Equipment, turned on and checked,working condition,but may need
minor repairs, has not been calibrated, no manuals or accessories
included .Re-conditioning, calibration, accesories & manuals are
available at extra cost, e-mail us for a quote.
-----------------------------------------
HP 141T with 8552B, 8553B, 8554B, 8555A Spectrum Analyzer $2425.00
HP 1741, 100 MHz Oscilloscope, $325.00
HP 8405 Vector Impedance Meter, $250.00
HP 8505A with 8503A & 8501A Network Analyzer $4200.00
HP 8614A, Signal Generator, 800 to 2400 MHz, $395.00
HP 8616A, Signal Generator, 1.8 to 4.5 GHz, $325.00
HP 8640B/323 ( AN/USM 323 ) Signal Generator, $450.00
HP 8640B, opt. 1 & 3, Signal Generator, $1075.00
Kay 5071B Signal Generator, 10 to 250 MHz, CW & Pulse, works, but has low
output, $60.00
Kikusui COS6100, 100 MHz 5 channel scope, $425.00
Tek 453, 50 MHz Oscilloscope, $185.00
Tek 455, 50 MHz Oscilloscope, $285.00
```

Tek 464, 100 MHz Storage scope, $365.00
Tek 465, 100 MHz Oscilloscope, $425.00
Tek 465M, 100 MHz Oscilloscope, $360.00
Tek 475, 200 MHz Oscilloscope, $525.00
Tek 485, 350 MHz Oscilloscope, $625.00
Tek 492, Spectrum Analyzer, $3895.00
Tek 1502 with thermal chart recorder & battery $1295.00
Tek 067-0520-01 Standard Amplitude calibrator $150.00

Microwave Components, used, untested, sold "as is".
---
Anzac RB-3-MOD, VSWR Bridge, 3 to 1500 MHz, $35.00 each
HP774D, Dual Directional Coupler, 20 dB, 215 to 450 MHz, $50.00 each
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $25.00 each
HP8731B, Pin Diode Attenuator, .8 to 2.4 GHz, $25.00 each
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $35.00 each
HP8732B, Pin Diode Attenuator, 1.8 to 4.5 GHz, $35.00 each
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $35.00 each
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $35.00 each
HP8734B, Pin Diode Attenuator, 7.0 to 12.4 GHz, $35.00 each
HP11517A, Mixer, 12.4 to 40 GHz, $90.00 each
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $35.00 each

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.

For shipping cost outside of USA & Canada, e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 139%
of the US $ amount ( conversion rate .72 ). No minimum order.
Prices valid until 11-12-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"
Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

# 4278. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <645qbs$eof@nntp02.primenet.com>
Source record: 89280

John Miles <jmiles@pop.removethistomailme.net> wrote:
: Don Huff wrote:
: >
: > Couldn't agree more. It is called "dumbing down". Less fundamental
: > information, more shortcut-to-the-supposed-answer information. MANY
: > times I can find the info I want in >20 year old ARRL (especially the
: > antenna) handbooks, that is not to be found in a current version (which
: > I never buy, by the way. Check it out at the local library. Haven't
: > yet done that and then gone out and bought one for $30; it just is not
: > worth that much money).
: >

<<<***VERY MUCH SNIPPING***>>>

Am I to understand that there is a need for a tutorial series on
basic solid state RF design, starting with the raw basics??

Don't think that your observations are limited to hobby books
and periodicals. Many times I have found that professional books,
costing near $100 or more, will leave the reader totally in the dark
as to where it all came from. The result is that I have accumulated
a substantial library of books discarded from libraries (institutional
as well as private) becasue they were considered "obsolete."

But this is where the fundamentals are contained that develop
into the "new" technology. And some of this "new" stuff, quite
frankly, sucks. 8{O If you go back 40 years or more, you are amazed at
what people were doing without being able to use 20-30 active devices
in a single function. We're talking tubes here.

This philosophy carried into the early days of transistor
circuit design, but was then overrun with the integrated circuit,
which although they made things simpler, they compounded certain
problems like distortion and noise by the shear quantity of devices
being used. Absolutely not a suitable solution for RF design prob-
lems.

I'm glad to see that others have discovered the value of the
older handbooks. But let's not overlook the fact that society is, in
general, "dumbing down" just about everything. Most of the newer
engineers I see don't know how to bias a simple one-transistor ampli-
fier. But they can make the background colour of the screen change.

Whooppee!

,----------------------. Circuit Design for the
/ What's all this \ RF Impaired
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ ATG Design Services
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ Technical Editor,
. ( ) \ QRP Quarterly
'-| )__| :. \ QRP ARCI 9464
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com
http://www.primenet.com/~ctrask

Graphics by Loek Frederiks

# 4279. FS Eimac 3-500z Power amplifier tubes Pulled, tested Guaranteed $85.00 ea.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: ke9pq@netnet.net
Message-ID: <6456d2$bk8$1@news.inc.net>
Source record: 89281

These Eimac 3-500z Tubes are tested and have the curve charts for each tube. They are full output and late date codes. The price is $85.00 each

All prices are plus shipping

Mark Olson "KE9PQ" 1490 Norfield Rd.
Suamico,Wi. 54173
Call (920) 434-8097 after 6:00pm central time.
Email ke9pq@netnet.net Thanks and 73 Mark
NOTE: All items listed are guaranteed to be
as described or your money back.

# 4280. WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971109005248Z-10227@whpost.wh.lucent.com>
Source record: 89282

>>Date: 8 Nov 1997 03:21:24 GMT
>>From: johnsonhe@aol.com (JohnsonHE)
>>Subject: WWVB Signal strength

>>>
>>>WWVB is in the process of upgrading their transmitter from 13 kW to 40
>>>kW.

>>That 4 dB will do a whole lot of good.

>>W4ZCB

From what I understand, N.I.S.T., successor to Nat. Bureau of Standards, got some Navy surplus AN/FRT-88 or 89 transmitters (I'm not sure of the number) for free ($1 to make it official) to replace their aging WWV equipment. As a direct swap from one agency of the government to another, N.I.S.T. saved alot of tax dollars by doing this. The Navy had excessed these units and would have likely only received pennies on the dollar for scrap. It just so happens that the replacement transmitters run 40 KW. The old transmitters were not replaced just for the 4 dB. The new transmitters are also more efficient since they can run upper of lower sideband with carrier injection (to simulate an AM signal) and reduce power consumed in one sideband.

Seth KC2WE

# 4281. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <0py92EAiyjZ0EwVD@pacsat.demon.co.uk>
Source record: 89283

In article <3465da25.2489365@news.online.no>, J M Noeding
<la8ak@online.nospam.thanks> writes
>On Sat, 8 Nov 1997 10:56:03 +0000, Simon Lewis
><pacsat@pacsat.demon.co.uk> wrote:
>
>
>>Don't bother with the new VHF/UHF Handbook. Its a waste of space!
>>
>>Save your money or go for the VHF/UHF DX Book!
>
>please explain!!!
>
>---
>Email: LA8AK at online dot no
>

Here's my review of said book, extracted from this months issue of the
European Microwave News:

THE NEW RSGB VHF/UHF MANUAL
---
A Review By Simon Lewis GM4PLM

The RSGB have recently released the latest edition of the VHF/UHF manual
and I decided to pick up a copy at the Leicester rally to review for EMN
readers.

The last edition was printed in 1983 and was pretty well out of date
before it even made it to press. This latest edition is fairly up to
date but the latest format has turned this book into a form of
'beginners guide' to VHF/UHF operating and has lost alot of its sparkle
in doing so. Having said that it is up to date, there are some glaring
omissions! No detail or discussion of modern semiconductor devices such
as GaAsfets or MMIC's, outside of the equipment examples, and the only
detailed technical semiconductor discussion seems to look at high power
semiconductor amplifiers.

The old style manual is gone and the filter, components and dedicated
sections are gone. In comes a combined receiver, transmitter and
transceiver chapter. The equipment details in this chapter either
originate from VHF Communications magazine and are by German authors or
are ancient designs from the previous edition.

Surely someone has built 144 Mhz amplifiers in the UK which use
something better than a single 4CX250B ? The only glimmer of hope comes
with a US designed 432 Mhz 3CX800!

The microwave chapter has been removed (citing the Microwave Handbooks as the reason) but has briefly touched on 23cms with a 144 Mhz - 23cms transverter by DB6NT (not for beginners from UK builders experience) and a few loop yagi details. A single 2C39 valve amplifier is shown in the now ancient and over published G4PMK/G3SEK design (Sorry Roger/Ian!).

Chapters are written by contributors but I can honestly say that some of the contributors are not well known figures in VHF/UHF DX'ing and that the inclusion of some chapters is questionable and others a complete waste of time. I am pretty certain AMSAT UK could have come up with more than 1 page of text, which tells an interested newcomer to satellites very little, other than where to send his/her money for AMSAT membership. Does 1 page actually constitute a chapter?

Chapters included in the book:

Introduction to VHF/UHF Dave Stockton GM4ZNX
Getting Started Dick Pascoe G0BPS
Propagation Ray Flavell G3LTP
Receivers, Transmitters and Transceivers Mike Wooding G6IQM,
Steve
Thompson G8GSQ, Geoff
Pike GI0GDP.
Antennas and Transmission Lines Peter Swallow G8EZE.
EMC Dave Lauder G0SNO
Data Modes Chris Lorek G4HCL
Amateur Television Brian Kelly GW6BWX
Satellite Communications Ron Broadbent G3AAJ
Repeaters Geoff Dover G4AFJ
Test Equipment, methods and Accessories Clive Smith G4FZH
General Data Dick Biddulph G8DPS
Fitting Coaxial Connectors Roger Blackwell G4PMK

Overall the book is disappointing and certainly not worth the 20 UKP asking price. The content is weak and occasionally questionable and indeed in the case of the satellite 'chapter' (!) laughable. The equipment designs are either old and previously well published, or are new and of non-UK origin. Surely someone in the UK has built other designs? I also question the use of the VHF Comms designs. The designs are well documented and includes PCB layouts but they cannot be easily reproduced as they also have the component overlays on them and they are not clear. Is this a case of protecting their designs? I was also concerned to see the transverter designs using 3 MMIC amplifiers in series and then a complete lack of filtering before the antenna! Hmmmmm!

So for anyone thinking about buying the new VHF/UHF manual, don't bother! Either save your 20 pounds or go and buy the VHF/UHF DX Book instead!

Simon Lewis GM4PLM

---

Enough said!

73 Simon

+---------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---------------------------------------------------------------------+

# 4282. Re: PIN Diode Source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <645jje$a61@camel21.mindspring.com>
Source record: 89284

Macom makes a pin diode that works great. I have used them at 200 power
level. The part number is:

MA4P1250

You can purchase them in small quantities from Down East Microwave
@
http://downeastmicrowave.com

73's
de N4IP

N4ij wrote in article <19971108230301.SAA10046@ladder01.news.aol.com>...

:What mfgrs make PIN diodes suitable for 100W+ switch for HF?
:
:Doug N4IJ
:

# 4283. Re: Project Kits where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: badger@vbe.com
Message-ID: <34664e02.448676@news.vbe.com>
Source record: 89285

On 9 Nov 1997 15:20:06 GMT, jhine41015@aol.com (JHine41015) wrote:

>Other than Ramsey Electronics are there any other mfrs of project kits, and
> where would I get a hold of them?
>
>Thanks and '73
>
>Jeremy
>KF4RTY

http://www.tentec.com

73 de Mike kb9qhu

## 4284. Fantastic Building Photos

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: jparker@fix.net
Message-ID: <64344q$1j9$4@zinger.callamer.com>
Source record: 89351

NorCal QRP Club has posted a fantastic Photo Essay of the
NorCal Building Contest with fantastic photos.

If your into building equipment check this out!

http://www.fix.net/norcal.htm

Enjoy,,,72,,,Jerry...WA6OWR...K

# 4285. Re: PIN diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971109014801.UAA24815@ladder01.news.aol.com>
Source record: 89352

>
>Hi Tony. You can search for these and other Motorola devices starting at
http://motserv.indirect.com/cgi-bin/search. It looks like the '3700 has much
better reverse voltage tolerance --- 200 Vdc vs. only 20 Vdc for the '3404 --
but that may not mean much in your application.
>
>Frequency may be important: both of these diodes are intended for VHF. I have
found that the MPN3404 is no better than a 1N914 when used as a switch below
about 10 MHz so I'd guess its recovery time is about 100 ns. The MPN3700 has
a 300 ns recovery time and probably works better in the HF region.

Newark has both of these:
08T MPN3700 $1.07 (1-99)
08T MPN3404 $1.04 (1-99)

Hope this helps some
Bob Moore KV1V

Gee. I don't think so. I know that the recovery time is not specified for the
04, and I was concerned about intermod I was experiencing on an old Cubic 103
that uses them for front end switching. (and just about everything else too!)
The Ip3 ultimately turned out to be the Taiwan powdered iron transformers in
the front end RF filter. (+21) I tested the 3404's at 1.8 MHz and they are
clean to about +35, the upper limit of my test gear.

Tony, if you wind up buying them from Newark, and you need 60 of them, I'd take
the other 30-40 to get us to the next price break.
(3404's)

W4ZCB

# 4286. Re: PIN Diode Source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971109014901.UAA24440@ladder02.news.aol.com>
Source record: 89353

>
>What mfgrs make PIN diodes suitable for 100W+ switch for HF?
>
>Doug N4IJ

Unitrode

W4ZCB

## 4287. impedance match

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Enrique Fern&#65533;ndez Olea <ea1fq@mundivia.es>
Message-ID: <01bcecbf$463ad260$LocalHost@pedrorod>
Source record: 89354

Hello and excuse my english. Sorry.

Could somebody explain me how calculate "capacitor dividers" or "capacitor maths" (I dont know the correct name in english) to match a band-pass filter to any impedance?

Thanks in advanced.

Enrique, EA1FQ
e-mail: ea1fq@mundivia.es

# 4288. 4 x 813 PA project ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971109014716Z-10229@whpost.wh.lucent.com>
Source record: 89355

>Date: Fri, 07 Nov 1997 14:12:09 +0100
>From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
>Subject: 4 x 813 PA project ?
>
>Has there been any published articles on 4 x 813 HF PA - during the
>years?
>I have a copy of the 3x813 project from an old HR magz - but would like
>to see
>the 4X version before winding up the drill.
>73 Chris SM0NCL

You would be better off with a single 3-500Z and have the same plate dissipation as four 813's. The interlectrode capacitance would present major problems on 15 and 10 meters to the point where you might not be able to achieve an adequate loaded pi net Q. If your need is for 160, 80 or 40 meters only maybe that would be the limit for a 4 tube amp design.

Seth KC2WE

# 4289. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Rick Snyder <st962965@pip.cc.brandeis.edu>
Message-ID: <01bcece2$54a82140$c0704081@129.64.112.192>
Source record: 89356
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

75 Ohm cable is pretty much okay at HF, although the impedence mismatch may make your transmitter back down on power. All you need to do is put in a tuner and tune out the mismatch and you should be all set.
There may be antenna considerations as far as baluns go but I'm not too sure about them so I'm not going to tread there. Look in the antenna handbook or the Amateur Radio handbook and they'll tell you what you need to know.

Rick, WI1G

Gary <kc5ldn@--NO-SPAM-sprintmail.com> wrote in article <63va0k$arh$1@newsfep3.sprintmail.com>...
> Please help! I have a large quantity of RG-6 and would like to use it for
> HF. I need to know if it is okay and if there is any considerations since
> it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
> info would be helpful.
>
> Gary
> kc5ldn@sprintmail.com
>
>
>
>

# 4290. Re: 4 X 813 PA project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Rod Davis <rdavis@abac.com>
Message-ID: <346570d8.0@news1.abac.com>
Source record: 89357

Hi,

It is probably worth considering using one larger and newer tube type.

At 125 watts dissipation each, the 813's may not be the one of the
better choices, considering the problems of paralleling that many.

I assume you want to use class C. It may be worth considering tubes
that would run AB2, such as a pair of 4CX250's, etc.

I encourage you to explore alternatives to the quad 813's.

Do not reply to the address in the header. Instead, remove the
one-two from the following address:

rdavis12@abac.com

Best Regards, and Good Luck with H/B
Rod

dlsnyder@nbnet.nb.CA (dlsnyder) writes: > Date: Fri, 07 Nov 1997 14:12:09 +0100
> From: Christer Jogenborn <Christer.Jogenborn@era.ericsson.se>
> Subject: 4 x 813 PA project ?
>
> Has there been any published articles on 4 x 813 HF PA - during the
> years?
> I have a copy of the 3x813 project from an old HR magz - but would like
> to see
> the 4X version before winding up the drill.
> 73 Chris SM0NCL
>
> ------------------------------
>
> Date: 7 Nov 1997 19:49:00 -0700
> From: europa@primenet.com
> Subject: 4 x 813 PA project ?
>
> In article <346313A9.C285E01F@era.ericsson.se>, Christer Jogenborn
> <Christer.Jogenborn@era.ericsson.se> wrote:
>
> :Has there been any published articles on 4 x 813 HF PA - during the
> :years?
> :I have a copy of the 3x813 project from an old HR magz - but would like
> :to see
> :the 4X version before winding up the drill.
> :73 Chris SM0NCL
>

> You will have a hard time getting even three 813's to tune up on 10m due
> to
> the high plate capacitance, if you are going grounded-grid. With four,
> maybe even 15m would be difficult.
>
> I tried this years ago, and somehow got 3 tubes working on 10m by having
> a
> switch that disconnected the plate tuning cap all-together. Then I
> adjusted the 10m coil tap to resonate with no tuning cap- just the plate
> capacitances.
>
> Rob.
>
>
> Hi Chris,
>
> Having built one of these a few years ago I can tell you that you may
> have trouble getting it to tune on 20 meters with four in the output!
> The minimum capacity of your tune cap can play a role on 20 meters.
> However the solution is at hand: SERIES tuning.
>
> W1UH

# 4291. Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34656009.41E@pop.removethistomailme.net>
Source record: 89358

Don Huff wrote:
>
> <snip>
>
> Hi Tim,
>
> Couldn't agree more. It is called "dumbing down". Less fundamental
> information, more shortcut-to-the-supposed-answer information. MANY
> times I can find the info I want in >20 year old ARRL (especially the
> antenna) handbooks, that is not to be found in a current version (which
> I never buy, by the way. Check it out at the local library. Haven't
> yet done that and then gone out and bought one for $30; it just is not
> worth that much money).
>
> 73,
> Don, W6JL

OK, I've gotta interject some commentary into this thread.

What really floors me is not any "dumbing down", perceived or real, but the horrific organization of intra-chapter content in some of the newer Handbooks.

As a follow-up to a post of mine in another newsgroup describing a homebrew receiver project, one fellow recently sent me e-mail asking for good references on the basic principles of superhet receivers. He said he had access to a late-model ARRL Handbook, so I thought "great, I'll look through the book and recommend some chapters on basic receiver theory to go over." He mentioned that he'd leafed through the Handbook and found it rather "intimidating," a remark which I sort of blew off at the time. Hell, how intimidating can the Handbook be? The older editions I once studied could get pretty involved at times, but all you had to do was start on page 1 of the chapter of interest and stick with the program, and eventually you'd get the insight/information you were after.

So I pick up my '95 handbook, the most recent edition I own, and start leafing through chapter 17, "Receivers, Transmitters, Transceivers, and Projects," intending to recommend it to the guy who sent me the mail. But... whoa. The first page's headings look like "Voltage Gain", "Actual Power Gain", "Available Power," "Available Power Gain," "Transducer Power Gain," "Transformation Methods," "Noise Factor of a Passive Device"...

HOLY COW, PEOPLE. This material is WORSE THAN USELESS as the lead-off text in a chapter on receivers. There is absolutely no context for the beginner to grab hold of, no sense of relevance or practical application to any of this stuff unless you are already well-versed in the theory and operation of a radio receiving system.

Make no mistake, the content is there. The chapter in question was written by Bill Sabin and it's great stuff, for those already acquainted with receiver elements at a structural (block) level. It is the height of absurdity to claim, as some on the newsgroup have, that this is "dumbed down" material. Don, go compare chapter 17 of the '95 Handbook to, say, chapter 5 of the 1966 edition, and then come back here and tell me with a straight face that you think the '95 Handbook has been "dumbed down." (Note that what you perceive as "dumbing down", or loss of meaningful content, may actually represent material that's been moved out of the Handbook into more specialized publications like the UHF/Microwave Experimenter's Handbook and ARRL Antenna Book, and greatly expanded upon at the same time.)

Now that I've deliberately tried to look at a modern ARRL Handbook from a beginner's perspective, I really have to come down hard on the organization of the material in this chapter -- the Handbook editors can, and have, done better. There is a reason why I initially pointed the student who wrote me towards the ARRL Handbook, and not the latest $100 treatise by Ulrich Rohde or some generic recycled unedited opus from TAB Books. To me, the ARRL Handbook always represented the ideal compromise between theory and practice. And it still does, to a great extent. But somebody had better put some effort into accessibility.

I mean, what *possesses* an author to present a "typical block diagram of an image-cancelling direct conversion receiver" (with 15 stages) BEFORE finally getting around to showing the block diagram of the canonical superhet (complete with trigonometric mixer-function equations, no less) on the NEXT page, 22 pages into the chapter? Used to be that the first few pages in a book on receivers would lead into a description of the 'All-American Five.' Nowadays, it seems we expect beginners to be able to field-strip a Collins 95S-1 by the time they've gone 20 pages into the chapter. :-)

Anyway, enough ranting!

-- jm (de KE5FX)

---
Note: My E-mail address has been altered to avoid spam
---

# 4292. Re: Fantastic Building Photos

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: rwa@cs.athabascau.ca
Message-ID: <643rg9$ese$1@aurora.cs.athabascau.ca>
Source record: 89359

jparker@fix.net (Jerry Parker) writes:

>If your into building equipment check this out!
> http://www.fix.net/norcal.htm

Looks like that page is being hosted on a machine that isn't running
gatesware - ie, isn't using an 8-and-3 directory structure. The
correct URL is

http://www.fix.net/norcal.html

Notice that there are four letters after the dot.

regards,
Ross ve6pdq
--
Oh Lord, won't you buy me a PDP-10?
My friends all hack Vaxen; I must make amends.

Ross Alexander, ve6pdq || rwa@cs

# 4293. Re: WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971109092401.EAA28627@ladder02.news.aol.com>
Source record: 89360

>
>From what I understand, N.I.S.T., successor to Nat. Bureau of Standards,
>got some Navy surplus AN/FRT-88 or 89 transmitters (I'm not sure of the
>number) for free ($1 to make it official) to replace their aging WWV
>equipment. As a direct swap from one agency of the government to
>another, N.I.S.T. saved alot of tax dollars by doing this. The Navy had
>excessed these units and would have likely only received pennies on the
>dollar for scrap. It just so happens that the replacement transmitters
>run 40 KW. The old transmitters were not replaced just for the 4 dB. The
>new transmitters are also more efficient since they can run upper of
>lower sideband with carrier injection (to simulate an AM signal) and
>reduce power consumed in one sideband.
>
>Seth KC2WE

Should have bought ten dollars worth of them, and really done an upgrade. Now concerning efficiency...For a carrier that is shifted 45 degrees in phase for ten seconds once every minute? Get real. The electric bill however, will indeed be borne by you and I.

W4ZCB

# 4294. Re: impedance match

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: jnpotter@prodigy.net
Message-ID: <3465b574.39495337@news.prodigy.net>
Source record: 89361

"Enrique Fern&#65533;ndez Olea" <ea1fq@mundivia.es> wrote:

>Hello and excuse my english. Sorry.
>
>Could somebody explain me how calculate "capacitor dividers" or "capacitor
>maths" (I dont know the correct name in english) to match a band-pass
>filter to any impedance?
>
>Thanks in advanced.
>
>Enrique, EA1FQ
>e-mail: ea1fq@mundivia.es

I believe the idea is to split the input ot output capacittance of the
filter into two capacitors. This assumes that the filter is the type
to have a shunt capacitance at it's input or output.

Assume that the top capacitor (the one that goes from the filter to
the new output terminal)is Ctop and the one from the output terminal
to ground is Cbottom,
The total capcitance is found using the formula for series
capacitance:
1/Ctop +1/Cbottom=1/Ctotal

i.e. Ctotal = Ctop * Cbottom/(Ctop+Cbottom)

The voltage ratio is:

R=Ctop/(Ctop+Cbottom)

The impedance ratio is a step down of 1/R^2 (R squared) at the output
or a step up ratio of 1/R^2 at the input.

For example, if you want to use a filter designed for 100 ohms in a 50
ohm system, R^2 = 0.5 and R = 0.707.

If the input capacitance was 100 pf, Cbottom would be 141.4 pf and
Ctop would be 341.3 pf.

If the output ca[acitance was also 100 pf the top and bottom
capacitors would be the same as on the input.

Replacing the input and output capacitors and connecting to the
junction of the two capacitors (at each end) would then give you a
filter matched to 50 oms, even though it was designed for 100 ohms.

Jim Potter

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

# 4295. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3465EFDE.7809@trader.com>
Source record: 89362

John Miles wrote:
> HOLY COW, PEOPLE. This material is WORSE THAN USELESS as the lead-off
> text in a chapter on receivers. There is absolutely no context for the
> beginner to grab hold of, no sense of relevance or practical application
> to any of this stuff unless you are already well-versed in the theory
> and operation of a radio receiving system.

Absolutely right John. I keep the 96 version check out of the library continuosly, trying to learn RF concepts after 20 years of digital experience. It's like Unix Man Pages. Every one of them assumes you've read every other page! Talking to old RF guys is the same. At least the book doesn't get bored when you access it over and over and over, trying to grasp an idea. The BIGGEST problem is there are no SIMPLE examples of circuits that the no code tech can use!

> To me, the ARRL Handbook always represented the ideal
> compromise between theory and practice. And it still does, to a great
> extent. But somebody had better put some effort into accessibility.

I believe you have identified the primary reason no code techs don't stay with the hobby actively. They don't _want_ to be component consumers (which folks here accuse them of being). So when they start asking questions, they get pointed to "The Handbook", and then get lost.

> Anyway, enough ranting!

No! Let's rant about this some more! I can even offer _specific_ topics!
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 4296. Re: Dumbing Down

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3465C7E1.31D7@one.net>
Source record: 89363

John Miles wrote:
> <snip>

> What really floors me is not any "dumbing down", perceived or real, but
> the horrific organization of intra-chapter content in some of the newer
> Handbooks.

<snip>
>
> -- jm (de KE5FX)

I had to go look for myself just now. My newest Handbook is a '91.

It's extraordinary! The elementary here's-how-a-typical-radio-works stuff is buried amid detailed descriptions of dielectric constants, thermal noise, etc.

I suppose I don't normally expect a handbook also to be a primer. But this one probably should have more primer-type material as the intro to each chapter.

Becoming a new Ham suddenly looks more daunting, and learning code is not the worst part of it.

Thanks for a well-thought-out, well worded posting.

73

Rich W2RG

# 4297. WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971109143713Z-10271@whpost.wh.lucent.com>
Source record: 89364

>Should have bought ten dollars worth of them, and really done an upgrade. Now
>concerning efficiency...For a carrier that is shifted 45 degrees in phase for
> ten seconds once every minute? Get real. The electric bill however, will
> indeed be borne by you and I.

>W4ZCB

The upgrade that I was referring to was WWV HF operations which are being upgraded with the Navy transmitters. Due to severe budgets constraints, NIST has to work with what ever they can scrounge. A free transmitter will buy alot of electrical power. As far as the WWVB upgrade, the extra field strength is needed in areas of CONUS where the WWVB signal is marginal. Using ground wave the calculations for field intensity being rather straight forward, the field intensity is increased by a factor of 1.41 X field strength as calculated by the cosine law. A sky wave HF model for propagation is not valid at 60 Khz. A 4 dB increase at 60 Khz IS a significant increase. Comparisons to a free space model (used above 30 Mhz) are even less valid. The main factor besides transmitted power that effects the received field strength for a ground wave signal is soil conductivity. Since they can't control that and most LF antennas don't have much gain, they most practical and cost effective way to get more E field is to raise power.

KC2WE

# 4298. NEW 8877 $275.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: "Bruce P. Sidari" <sidarib@eznet.net>
Message-ID: <3465CC4D.C8CE8C03@eznet.net>
Source record: 89365

FS: New never used 8877
Tested to FULL+ OUTPUT
This tube is MINT it was in an amp for fifteen minutes for testing ....
thats it.
This tube was part of a spares kit that was never utilized.

$275.00

Bruce Sidari
1 -800 862-4723 days
716 589 9038 wknd/eve

## 4299. Project Kits where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: jhine41015@aol.com
Message-ID: <19971109152000.KAA11283@ladder02.news.aol.com>
Source record: 89366

Other than Ramsey Electronics are there any other mfrs of project kits, and where would I get a hold of them?

Thanks and '73

Jeremy
KF4RTY

# 4300. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <vNerMWAQadZ0Ew1S@southwestuk.demon.co.uk>
Source record: 89367
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <01bcec97$fc2c26a0$118cf1c3@default>, "H.P. Vermeulen"
<pd1adi@amsat.org> writes
Snip

>All info on 6>meters is welcome and don't spare the dirty details ;-)
>
>Please reply by email to pd1adi@amsat.org (not in the newsgroup itself pse
>'cause I'm not able to read it on a regular basis).

For general info on 6m try the following excellent sites:

http://user.itl.net/~equinox/
www.uksmg.org

Also posted via e-mail

Trev G3ZYY ...-.-
--
Trevor Day

# 4301. Re: 4 x 813 PA project ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-09 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <3465eb75.799872@news.zippo.com>
Source record: 89368

On Fri, 07 Nov 1997 14:12:09 +0100, Christer Jogenborn
<Christer.Jogenborn@era.ericsson.se> wrote:

>Has there been any published articles on 4 x 813 HF PA - during the
>years?
>I have a copy of the 3x813 project from an old HR magz - but would like
>to see
>the 4X version before winding up the drill.
>73 Chris SM0NCL
>

I think Chris has chosen the 813's because of the nostalgia,
cheap ( $10, nos), cheap sockets, and a KW cw for two tubes.

Steve Carlisle

# 4302. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <647abv$8fk_001@leeds.ac.uk>
Source record: 89219

What is the VHF/UHF DX Manual like? Could anyone point me to a review? (I enjoy browsing through the VHF/UHF Manual 3rd ed. (they've even got a copy at the University Library!)).

Laurens

# 4303. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <3467333B.7B3C@arrl.org>
Source record: 89220

I finally got around to building my 142 to 432 MHz
transverter--its a lot more difficult than most people
think to get all the spurs filtered out--there are
some nasty ones just 6 MHz away. I ended up using
a rather large interdigital filter out of machined
aluminum--the cover made a nice mounting plate for
the rest of the transverter... Seemed a lot easier
than trying to couple cavity resonators together.

I found an ERA-4/6 could drive the SAU-4 to 10 watts
output with the IMD down 30 dB relative to either tone.

--Zack Lau W1VT

## 4304. IC R7000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: ted1920@aol.com
Message-ID: <19971110165300.LAA04213@ladder02.news.aol.com>
Source record: 89221

FS icom R7000........ voice synthersizer........verrrry good
condition......$700.........Ted1920
1920

# 4305. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <647mi8$rv2@hpcvsnz.cv.hp.com>
Source record: 89222
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Gary (kc5ldn@--NO-SPAM-sprintmail.com) wrote:
: Please help! I have a large quantity of RG-6 and would like to use it for
: HF. I need to know if it is okay and if there is any considerations since
: it is 75 ohm and most HF and VHF rigs call for 50 ohm. Any suggestions and
: info would be helpful.

(I trimmed the followup-to line to just rec.radio.amateur.antenna...seems like this doesn't need to be in 7 different groups!)

I agree strongly with the response that mentioned that a 75 ohm cable can be used to transform a possible antenna impedance to 50 ohms...and the key is knowing what impedance your antenna is, and using a chart or formulas to find out what impedance your rig, thru the coax, will actually see. But for one very practical use on HF, you can see that 75 ohm line may give results no worse than 50 ohm line: if you feed a dipole that's up high enough to have a nominal 75 ohm resonant feedpoint impedance, then that 75 ohm line will deliver a 75 ohm load to the transmitter, a 1.5:1 SWR. If you used 50 ohm line, your 75 ohm load still yield a 1.5:1 SWR, at least at the load end of the line, and it won't be significantly better at the transmitter if the line is low loss. In either case, to get to 1:1, you need some impedance transformation, like a tuner, and you might just as well use that RG-6, which will have loss nearly as low as RG-8 solid dielectric line. (I'd expect nearly any transmitter with a tuned output stage, like the TS520 series, to handle 75 ohms just fine; and transmitters like the TS440S with the optional built-in autotuner should also be able to handle that 1.5:1 without any trouble.)

There's RG-6/U, and there's RG-6-type (many different varieties!)...the graph I have of safe power handling for RG-6/U shows 1kW at 14MHz and below, falling to about 300 watts at 150MHz and over 175 watts at 450MHz. The graph is based on a maximum ambient temp of 40C, and line in free air, and 1:1 SWR.

--
Cheers,
Tom
tomb@lsid.hp.com

# 4306. Re: Project Kits where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEJG3CE.7y6@netcom.com>
Source record: 89223

In article <19971109152000.KAA11283@ladder02.news.aol.com>,
JHine41015 <jhine41015@aol.com> wrote:
>Other than Ramsey Electronics are there any other mfrs of project kits, and
> where would I get a hold of them?

Tandy's new mail order outfit Tech America (www.techam.com) has kits
from Rainbow and Velleman. There's also a guy who ran a Hong Kong
outfit, DIYKit (?) that was posting to the electronics groups a
while back, they have a web site, too. Also check out the ads section
in Electronics Now, Popular Electronics (look for the fat issues that
have the Electronics Shopper section) or Nuts & Volts magazines. Often
one of the surplus shops or hobby oriented distributors will have
some of these lines in their catalog (JDR Microdevices sells Ramsey,
and Jameco has some).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 4307. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <XeCF70Agd0Z0EwD7@pacsat.demon.co.uk>
Source record: 89224

In article <z5qzLHAxbwZ0EwEE@ifwtech.demon.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> writes
>Simon Lewis wrote:
>> A single 2C39 valve amplifier is shown in the
>>now ancient and over published G4PMK/G3SEK design (Sorry Roger/Ian!).
>
>No apology required!
>
>Roger (G4PMK) and I are tired of RSGB re-re-re-publishing this design
>without ever asking us about it. For the record we regard our design as
>outdated, and we now recommend the N6CA design instead.
>
>We have told various RSGB book editors about this, but we never find out
>until the book has been published - they don't ask first.
>
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.demon.co.uk/g3sek

Hi Ian,

I was disappointed to see your design 'yet again'! (as good as it was at
the time!)

I am not sure what the RSGB have done with this version of the book, it
seems to have gone from a comprehensive 'bits and pieces' book to a
beginners guide.

As its been published yet again this leads me to two possible
conclusions:

1. That no new designs or equipment has been produced since last
issue.

2. People are hacked off with the RSGB and its publications and
cannot be bothered to write and get them published!

I hope that its not case 1 and people just cannot be bothered to build,
but from what I have seen in the EMN and my dealings with 'real'
microwave operators and builders is that the construction world is very
active and people are building their own gear.

I am sorry if you thought I was being 'negative' about your design. Far
from it, but I thought they could have come up with something a little
newer. Strange selection of articles though? Included a valve amp for
23cm but nothing solid state to accompany the transverter, and a

transverter that is anything but easy to build. Ask G4DDK!

73 Simon GM4PLM

+----------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+----------------------------------------------------------------------+

# 4308. FS: RF Det. Probes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: The Thomas Family <k6kc@lightspeed.net>
Message-ID: <3467DE6E.4D42@lightspeed.net>
Source record: 89225

For Sale: Ballantine RF Detector probe sets. Good to 700 MHz.,
max. 30 volts AC/200 volts DC. For use with meters w/ 10M ohm input Z.
Has dual banana plug (on 3/4" centers). Complete with accessory kit.
NEW, in sealed pkgs. $18.00 each POSTPAID. 73, Lowell, K6KC

# 4309. Swap Yaesu filter.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Andre Antunes <andre.antunes@individual.eunet.pt>
Message-ID: <645jgj$2vt@news.EUnet.pt>
Source record: 89286
Cross-posted to: alt.ham-radio.marketplace,fr.rec.radio,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap,uk.radio.amateur

Hello everyone,
I have a 350 Hz CW filter for the Yaesu FT-707.
I would like to swap it for a AM 6 Khz filter. If anyone is interrested or
has the AM filter for sale, please e-mail me with a proposal.
Thanks to all.

Andre Antunes

# 4310. Re: Regen RX Additional

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: kd9fb@xnet.com
Message-ID: <346b684f.6188832@flood.xnet.com>
Source record: 89287

On Sun, 09 Nov 1997 12:59:19 -0800, "Kraig D. Brumbaughj" <ua666@aiusa.com>
wrote:

>About 20 years ago Radio Shack had available their 'P Box" kits. I
>purchased the SW radio kit which was a regen. Unfortunately I have lost
>the kit and schematic. This was a pretty good little rx and would suit
>my purposes now, if I can find someone that has the schematic or one
>similar :-)
>
>Thanks again,
>
>Kraig WB2PLW

The 1968 ARRL Handbook has a 4 transitor regen that covers 3.5mhz to 51mhz. If
you can get your hands on a copy.

Peter Mikalajunas
kd9fb@xnet.com
http://www.xnet.com/~kd9fb

# 4311. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <346649c6.38920803@news.crosslink.net>
Source record: 89288
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

My wonderful example:
>For example, assume that the antenna presents a complex impedance of
>75+j60 ( 109 ohms magnitude).

would have been a lot better if I had said "75-j60" instead of 75+j60.
Then the reader would have been able to follow the path around the
Smith Chart and gotten the correct answer.
Sorry about that.

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4312. WTB: 4CX1000 or 4CX1500 socket

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Rod Davis <rdavis@abac.com>
Message-ID: <3466748f.0@news1.abac.com>
Source record: 89289

Hi

I am looking for a SK-800 series socket and SK806 chimney for
either a 4CX1000A or a 4CX1500B.

Used/good condition ok.
Please do not reply to the junkmail-proof address in this message
header.

Please email direct to me at rdavis(atsign)abac.com

with socket condition and price info.

Thanks,

Rod

# 4313. Increase the power output on FM HT?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: readthebottom@nospam.mil
Message-ID: <34668c3f.41647527@news.willinet.net>
Source record: 89290

Hello. This might be a _little_ off topic. It does
involve some homebrewing.

I just bought my nephew a pair of cheap 49MHz FM walkie-talkies.
He lives on a large farm, and these things barely make it from
my kitchen to the living room, and those rooms are next to each
other! So my question is, is there an easy way to get a little
more power out of these? Replace a final transistor with one
of a little higher value, maybe? With a heat sink? Or might
this unit already be capable of higher power, but is limited
internally to something, like older CB's used to be? It only
has 4 transisistors. Which one may be the final? One is
located near the antenna lead, but does not look to be connected
to it. It seems to go to the one and only adjustable coil type
thing. This transistor says 9014 on one line, C: 624 on the second.
The other is right next to the coil, and it says S9018 on one line,
G 320 on the second. They are both (all 4 actually) normal, small
plastic type cases. (TO-226, or TO-92 ?? )

Thanks so much for any help you can give me.

Please reply via email if possible. Thanks.

ryans at willinet dot net /* this won't fool them for much longer */

Ryan
KB0TKZ

# 4314. Re: GLA-1000B Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <6462rc$d6q$1@news3.microserve.net>
Source record: 89291

In article <NEWTNews.878874923.23093.constant@lanc03-24.ca.qnet.com>,
constant@news.qnet.com says...
>
>
>Anyone modify a Dentron GLA-1000B amp from Sweep tubes to RF tubes
like 811's
>or 6146 ??
>
6146 would be a bad choice because of the 1100v plate voltage. 6146
would probably arc over and self destruct. i thought about the 811
or maybe some other low voltage hi permeance power triode.
73 KD3SH

# 4315. Re: Regen RX Additional

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19971110054901.AAA05656@ladder01.news.aol.com>
Source record: 89292

Hi All
The 1996 ARRL Handbook has a regenerative receiver project.
I got a promo for the 1998 handbook that said there it would have a
super-regenerative project! (Im not sure I like having a bunch of these back
on two meters hi).
73
Jim Cooper NE6O
CooperJim@aol.com

# 4316. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m200pjh0l.fsf@spinner.ecofe.com>
Source record: 89293

The last edition was printed in 1983 and was pretty well out of date before it even made it to press. This latest edition is fairly up to date but the latest format has turned this book into a form of 'beginners guide' to VHF/UHF operating and has lost alot of its sparkle in doing so. Having said that it is up to date, there are some glaring omissions! No detail or discussion of modern semiconductor devices such as GaAsfets or MMIC's, outside of the equipment examples, and the only detailed technical semiconductor discussion seems to look at high power semiconductor amplifiers.

Oh, dear! That's exactly what i was trying to avoid. *Sigh*

The old style manual is gone and the filter, components and dedicated sections are gone. In comes a combined receiver, transmitter and transceiver chapter. The equipment details in this chapter either originate from VHF Communications magazine and are by German authors or are ancient designs from the previous edition.

It sounds like they're going the same direction as the ARRL... I hope the folks on the other side of the pond will make lots of noise about this!

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4317. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <z5qzLHAxbwZ0EwEE@ifwtech.demon.co.uk>
Source record: 89294

Simon Lewis wrote:
> A single 2C39 valve amplifier is shown in the
>now ancient and over published G4PMK/G3SEK design (Sorry Roger/Ian!).

No apology required!

Roger (G4PMK) and I are tired of RSGB re-re-re-publishing this design without ever asking us about it. For the record we regard our design as outdated, and we now recommend the N6CA design instead.

We have told various RSGB book editors about this, but we never find out until the book has been published - they don't ask first.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 4318. Re: 4 x 813 PA project ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Harold Smith <MRHANEY@SPYDEE.NET>
Message-ID: <64767a$ibb$1@usenet88.supernews.com>
Source record: 89295

carlisle@capescott.net (Steve Carlisle) writes: > On Fri, 07 Nov 1997 14:12:09 +0100, Christer Jogenborn
> <Christer.Jogenborn@era.ericsson.se> wrote:
>
> >Has there been any published articles on 4 x 813 HF PA - during the
> >years?
> >I have a copy of the 3x813 project from an old HR magz - but would like
> >to see
> >the 4X version before winding up the drill.
> >73 Chris SM0NCL
> >
>
> I think Chris has chosen the 813's because of the nostalgia,
> cheap ( $10, nos), cheap sockets, and a KW cw for two tubes.
>
> Steve Carlisle

# 4319. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: frussle@erols.com
Message-ID: <34691cbf.5647041@news.erols.com>
Source record: 89296

On Sun, 09 Nov 1997 01:02:33 -0600, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>OK, I've gotta interject some commentary into this thread.
>
>What really floors me is not any "dumbing down", perceived or real, but
>the horrific organization of intra-chapter content in some of the newer
>Handbooks.
>
>As a follow-up to a post of mine in another newsgroup describing a
>homebrew receiver project, one fellow recently sent me e-mail asking for
>good references on the basic principles of superhet receivers. He said
>he had access to a late-model ARRL Handbook, so I thought "great, I'll
>look through the book and recommend some chapters on basic receiver
>theory to go over." He mentioned that he'd leafed through the Handbook
>and found it rather "intimidating," a remark which I sort of blew off at
>the time. Hell, how intimidating can the Handbook be? The older
>editions I once studied could get pretty involved at times, but all you
>had to do was start on page 1 of the chapter of interest and stick with
>the program, and eventually you'd get the insight/information you were
>after.
>
>So I pick up my '95 handbook, the most recent edition I own, and start
>leafing through chapter 17, "Receivers, Transmitters, Transceivers, and
>Projects," intending to recommend it to the guy who sent me the mail.
>But... whoa. The first page's headings look like "Voltage Gain",
>"Actual Power Gain", "Available Power," "Available Power Gain,"
>"Transducer Power Gain," "Transformation Methods," "Noise Factor of a
>Passive Device"...
>
>HOLY COW, PEOPLE. This material is WORSE THAN USELESS as the lead-off
>text in a chapter on receivers. There is absolutely no context for the
>beginner to grab hold of, no sense of relevance or practical application
>to any of this stuff unless you are already well-versed in the theory
>and operation of a radio receiving system.
>
>Make no mistake, the content is there. The chapter in question was
>written by Bill Sabin and it's great stuff, for those already acquainted
>with receiver elements at a structural (block) level. It is the height
>of absurdity to claim, as some on the newsgroup have, that this is
>"dumbed down" material. Don, go compare chapter 17 of the '95 Handbook
>to, say, chapter 5 of the 1966 edition, and then come back here and tell
>me with a straight face that you think the '95 Handbook has been "dumbed

>down." (Note that what you perceive as "dumbing down", or loss of
>meaningful content, may actually represent material that's been moved
>out of the Handbook into more specialized publications like the
>UHF/Microwave Experimenter's Handbook and ARRL Antenna Book, and greatly
>expanded upon at the same time.)
>
>Now that I've deliberately tried to look at a modern ARRL Handbook from
>a beginner's perspective, I really have to come down hard on the
>organization of the material in this chapter -- the Handbook editors
>can, and have, done better. There is a reason why I initially pointed
>the student who wrote me towards the ARRL Handbook, and not the latest
>$100 treatise by Ulrich Rohde or some generic recycled unedited opus
>from TAB Books. To me, the ARRL Handbook always represented the ideal
>compromise between theory and practice. And it still does, to a great
>extent. But somebody had better put some effort into accessibility.
>
>I mean, what *possesses* an author to present a "typical block diagram
>of an image-cancelling direct conversion receiver" (with 15 stages)
>BEFORE finally getting around to showing the block diagram of the
>canonical superhet (complete with trigonometric mixer-function
>equations, no less) on the NEXT page, 22 pages into the chapter? Used
>to be that the first few pages in a book on receivers would lead into a
>description of the 'All-American Five.' Nowadays, it seems we expect
>beginners to be able to field-strip a Collins 95S-1 by the time they've
>gone 20 pages into the chapter. :-)

The "handbook" concept suffers from one major problem: It doesn't know who the reader is. It has to assume that one already knows everything needed to understand the topic under discussion.

The problem is similar to that of writing an encyclopedia entry. You can either dumb it down or make it extremely complex. Either way, you're likely to lose readers.

What many beginning folks are lamenting is the lack of simple receiver design concepts in a book that progressively takes them through a few projects. Suggesting they read the Handbook is like feeding somebody breakfast lunch and dinner all at once.

Further, I've noted that some replies here have suggested the handbook is like reading man-pages. Having read a good deal of both, I'll suggest one clear difference. You can easily experiment with the command (or subroutine call, or file structure, etc.) from a man-page. It's not so easy to "throw together some junk" and experiment with the projects in the handbook. In other words, you can (and do) test the man page entries. You can't do the same with a chapter of the Handbook.

We need a tutorial RF designer's book. I have my favorites, and they all have their strong points. The problem is that none of the chapters in any of these books are really focused toward the goal of understanding how a radio is designed and built. Remember those books

that Radio Shack sells by Forrest Mimms? He has the right idea. Now if only we can carry that concept a bit further with common parts...

You know, someone could make a good living just from selling a tutorial of this sort and the parts to go with it. Something like what NRI used to do... only better.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

## 4320. Wanted: Portable antenna tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Ted Grant <Ted.Grant@GalaxyScientific.com>
Message-ID: <01bcedf2$2c2ac400$53e9dd26@grantt.galaxyscientific.com>
Source record: 89297
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.spac

Heard that there are some surplus antenna towers on trailers floating around.

Anyone who has information on where to find one-- it would be greatly appreciated if you'd pass the information on to me.

(FYI- I am in Southern New Jersey)

Ted Grant

# 4321. Re: Wanted: Portable antenna tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: "Brian M. Begg" <bmbegg@erols.com>
Message-ID: <346763BF.74A0@erols.com>
Source record: 89298
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.spac

Ted Grant wrote:
>
> Heard that there are some surplus antenna towers on trailers floating
> around.
>
> Anyone who has information on where to find one-- it would be greatly
> appreciated if you'd pass the information on to me.
>
> (FYI- I am in Southern New Jersey)
>
> Ted Grant

Hello Ted!
Me thinks thou hast missed the boat by about 12+ years!
I used to live in Vineland, and when Cable-TV was coming in hot and
furious, I decided to ride around the area, check for TV towers by a
house that had the familiar Cable line going into it, and 'offer' to
dismantle their obsolete tower for them for no charge! I believe I
acquired over 30 towers like that! Which I then sold to people up here
in No. Jersey. Around the Middlesex/Union Counties areas.
Yepper.....I made big bucks those 2 years!
Try doing what I did. There may be some left.
Regards,
Brian
73
--
Icom R-71A, Icom IC-R10, Drake SW8, Uniden BC8500XLT,
Patrolman PRO-78, RS Pro-2041, National NC-100A,
Universal M-400 Decoder, GRE Super Amp. 3001,
GRE Super Conv. 9001, JPS ANC-4, Sangean ATS-803A,
MFJ-1214PC, RS PRS-101 GMRS, RS Business 2-Chnl 154.600,
Packard Bell and IBM PC's, and lotsa other 'stuff'.

"In God We Trust.....All Others We Monitor!"

# 4322. wood construction help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Message-ID: <Pine.HPP.3.96.971110093825.24358A-100000@holmes.ece.orst.edu>
Source record: 89299

I am working on re-building an old crystal controlled, CW tube transmitter my grandfather and I started a number of years ago. I would like to build this transmitter up on wood, but I'm not familiar with the construction techniques (I missed that era of radio by quite a few years ;)

I have several questions. How do you mount the tube sockets? In a sheet metal chasis, it's pretty straight forward so the tube is above the metal plane and the pins below; I'm not sure how that works with wood.

How do you mount the front panel controls? My thought is to use the same heavier wood I plan for the base (1/2"), and to router out "tracks" behind the panel controls to make a thinner mounting area.

How do you create a ground? In the original metal chasis, this was no problem... the chasis made short ground leads simple and straightforward. I have thought about putting a piece of copper on top of the wood base, or possibly running several copper strips on the base and connecting them together as my ground.

Any suggestions to attractively mount the tubes? I didn't pay a lot of attention to this project when I was a kid, but now I am impressed by the beautiful simplicity of the tubes and would like to mount them in a 'show off" position.

TIA.

Please respond to CONOLLJ@JUNO.COM

# 4323. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34676FA7.5E4E@trader.com>
Source record: 89300

Jake Brodsky wrote:
> It's not so easy to "throw together some junk" and experiment with the
> projects in the handbook. In other words, you can (and do) test the
> man page entries. You can't do the same with a chapter of the Handbook.

Amen.

> We need a tutorial RF designer's book...with common parts...
> You know, someone could make a good living just from selling a
> tutorial of this sort and the parts to go with it.

Any time someone responds to one of my requests for help, I ask if
they want to write that book. I will edit and bubba proof it, and
hand carry it to my good friend Janos, who is a publisher, and works
with a large distributer.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 4324. help re: typ 5633 output impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Message-ID: <Pine.HPP.3.96.971110093147.23826A-100000@holmes.ece.orst.edu>
Source record: 89301

I am working on an old CW, crystal controlled tube transmitter that my grandfather and I started quite a few years ago. A 12BY7A is used in the oscillator/driver section to drive a 5633 pentode power amplifier section. (I think that number is correct). My question is, what is the typical output impedance of this tube? I am using a low pass PI network to match it to an antenna, and would like to match it to approximately 50 ohms.

The PI network consists of variable shunt capacitors at the input and output, and a tapped coil (tapped for 20, 40, and 80 meters).

Any help you can give me would be appreciated. TIA.

Please reply to CONOLLJ@JUNO.COM

# 4325. Old Transformer Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: tanger@gualala.Cadence.COM
Message-ID: <647hnm$4pp$1@news.cadence.com>
Source record: 89302

I recently began scrounging parts for a high/medium/low voltage supply to power flea market tybe radio (Boatanchor) acquisitions. I found a pair of good looking 6.3 VAC @ 10 amp filament transformers. The promary and secondary were clearly marked. The primary with 0-110-115-125 on pins 1,2,3 and4. I connected 110vac between 1 and 4....the transformers (both) overheated and would have smoked were it not for the fact they were potted. What did I do wrong? Were these transformers bad in some way? The secondary was not connected in any way. These were OLD transformers is it possible the potting had gone bad?

Tony WA6LZH

# 4326. Re: WWVB Signal strength

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: spammers@must.die.com
Message-ID: <wsandersEJG03w.82q@netcom.com>
Source record: 89303

The Radio Shack unit also works for me in the SF Bay Area CA. It doesn't seem to be able to acquire a signal whenever I'm around but stays synced up OK. I live in RFI hell, however, so it's probably getting a good signal during the day when everyone is at work, away from their cheapo light dimmmers and un-FCC-certified computers. Yes the extra 4 db will help.

As the previous poster said, the unit works fine except you cannot set it to display UTC or 24-hr time.

-w

# 4327. Re: Increase the power output on FM HT?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <647mp8$spg$1@news1.rmi.net>
Source record: 89304

Ryan (readthebottom@nospam.mil) wrote:
: Hello. This might be a _little_ off topic. It does
: involve some homebrewing.

: I just bought my nephew a pair of cheap 49MHz FM walkie-talkies.
: He lives on a large farm, and these things barely make it from
: my kitchen to the living room, and those rooms are next to each
: other! So my question is, is there an easy way to get a little
: more power out of these?

They should do Much Better than you've described!! Are you sure
they're crystalled for the same frequency?
Maybe you have some horrendous nearby interference that is severly
desensing the units.

I use a pair to 'detect' 6 meter openings. A vox unit mounted on
the 6 meter rig's speaker and a walk-around unit with squelch.
Both with short (~~16") whip antennas. I know it works Real Well
around 100 yards -- used it at that distance on Field Day to
keep tabs on the 6 meter station between openings.
The only drawback is the Phone Sex QRM from a cordless phone two
blocks away!! <BG>

73
Jonesy W3DHJ

--
SK

# 4328. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <647m4a$nrf@freenet-news.carleton.ca>
Source record: 89305

"Maurice Lewton" (mplewton@ix.netcom.com) writes:
> I have ground many crystals, in the type FT 243 holder. 6.8+ MHz can be
> moved up into the 40 Meter band, 5+ MHz crystals will not make it with any
> activity left. You can only grind up in frequency. I used a glass plate
> with water, Bon Ami or Comet Cleanser as a grinding agent. You have to go
> slow, grind a little, clean, then assemble the x'tal and test it. If you
> overshoot a few kHz, you can put a pencil mark on the x'tal and it will
> bring it down slightly - also reduces the Q.
> In fact when I noticed this post, I went out in my crystal box and lo and
> behold there were all my reground 40M and 2M crystals, they were ground in
> 1961 through 1964. Grinding 8 MHz crystals for use on 2 M was really
> difficult, but it works.
> Maurice Lewton WA6PHR
> mplewton@ix.netcom.com
>

I'm making some assumptions, but were these fundamental AT-cut crystals
that you reground for use on 2 metres by operating it on an overtone?

Assuming you wanted something to operate on 146MHz on it's 5th (or 7th?)
overtone, what fundamental frequency xtals would you look for as suitable
candidates?

thanks de va3rr@amsat.org

# 4329. Re: Need Duplexer Design, Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EJG57E.Fqo@world.std.com>
Source record: 89306

> Matt KC7GSA asked:
> > Does anyone know an internet like or a page telling how to build
> > two-meter cavitys and or duplexers?

Clif <avvid@onramp.net> replied
> The ARRL handbook has had it in there for years..

True, but not what he asked.

You can make Cans, Helicals, or Coax-stubs. Helicals are typically
broader band than the other two, depends what your purpose is.

For Coax-stubs, see both of the following; the first also covers 6m cans:
http://www.dallas.net/~jvpoll/dup6m/dup6m.html
http://www.qth.com/topten/stubs.htm

The ARRL UHF/VHF projects book (I forget exact title) has helicals
if the handbook doesn't. Toko 2m helicals can also be ordered from
Digikey for not too much money.

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 4330. Re: Help with Relays Please...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <647ov8$rv2@hpcvsnz.cv.hp.com>
Source record: 89307

Gary Coffman (ke4zv@bellsouth.net) wrote:

(about a remote antenna-switching relay:)

: At the 1.5 kW level, you need a sustain current capability of about
: 3.33 amps for a 450 ohm system, or about 5.48 amps in a 50 ohm
: system. So the relay doesn't have to be that big at all.

(Oops, Gary, I think you forgot the sqrt on that 3.33 ... I get
sqrt(1500/450) = 1.82 amps RMS.)

But...beware of voltage! 1.5kW at 450 ohms is about 1200 volts peak
(821 volts RMS). And...if the antenna impedance really is higher
than that, like a full-wave center fed dipole at maybe 2000 ohms,
the voltage would be twice that for that power level. If an arc
gets started it only needs a small voltage to keep going. Antenna
switches and relays that work in systems where there may be high
impedances usually have pretty wide contact spacing, from what I've
seen...or operate in vacuum. If in air, they also usually have
nicely rounded corners. A point of comparison is air-variable
capacitors, which at the few-kilovolt level have fairly wide
spacing and rounded edges on the plates.

--
Cheers,
Tom
tomb@lsid.hp.com

# 4331. Re: help re: typ 5633 output impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971110213700.QAA27796@ladder02.news.aol.com>
Source record: 89308

>
>I am working on an old CW, crystal controlled tube transmitter that my
>grandfather and I started quite a few years ago. A 12BY7A is used in the
>oscillator/driver section to drive a 5633 pentode power amplifier section.
>(I think that number is correct). My question is, what is the typical
>output impedance of this tube? I am using a low pass PI network to match
>it to an antenna, and would like to match it to approximately 50 ohms.
>
>

Plate load = Plate voltage/1.8 * Plate current

W4ZCB

# 4332. WTB: RF Power generator 8-pill pcb's.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <8JGA$CB+W5Z0Ew3J@two-way.demon.co.uk>
Source record: 89309

I'm after at least four 8 transistor pcb's from a RF generator such as ENI, RF Power Labs, RF Power Products or any other unit that runs 50 v FET's in the output.
I just need good used/new boards, not the complete amp as it'll be too heavy to ship to the UK.

(((73)))

Phil G4ZOW/M

## 4333. WTB:805s and transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: n1ddzrjc@aol.com
Message-ID: <19971110232000.SAA09165@ladder02.news.aol.com>
Source record: 89310

Looking for a couple of 805s, sockets and a filament transformer for a modulator project here.

Could also use 810s, socket and trans.

Also looking for a hefty plate transformer 220V primary at least 1600VCT at an amp.

Can pick up anywhere in the US

Bob
Sudbury

# 4334. Anyone have a SPICE Model for 4-400 Tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Ron Harshbarger <rnharsh@visi.com>
Message-ID: <648a2c$hip$1@darla.visi.com>
Source record: 89311
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I wanted to try modeling a 4-400 amp on my SPICE system, does anyone have the accurate model?

K3PID
rnharsh@visi.com

# 4335. Re: wood construction help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: vank6@ptconnect.infi.net
Message-ID: <879218967.31052@dejanews.com>
Source record: 89312

In article <Pine.HPP.3.96.971110093825.24358A-100000@holmes.ece.orst.edu>,
"Jeff W. Hockert" <hockerj@ece.orst.edu> wrote:
>
> I am working on re-building an old crystal controlled, CW tube transmitter
> my grandfather and I started a number of years ago. I would like to build
> this transmitter up on wood, but I'm not familiar with the construction
> techniques (I missed that era of radio by quite a few years ;)
>
> I have several questions. How do you mount the tube sockets? In a sheet
> metal chasis, it's pretty straight forward so the tube is above the metal
> plane and the pins below; I'm not sure how that works with wood.
>
> How do you mount the front panel controls? My thought is to use the same
> heavier wood I plan for the base (1/2"), and to router out "tracks" behind
> the panel controls to make a thinner mounting area.
>
> How do you create a ground? In the original metal chasis, this was no
> problem... the chasis made short ground leads simple and straightforward.
> I have thought about putting a piece of copper on top of the wood base, or
> possibly running several copper strips on the base and connecting them
> together as my ground.
>
> Any suggestions to attractively mount the tubes? I didn't pay a lot of
> attention to this project when I was a kid, but now I am impressed by the
> beautiful simplicity of the tubes and would like to mount them in a 'show
> off" position.
> I would use a hole saw the size of the tubes you'll be using and use the

mounting tabs just like in a metal chassis. Your idea of a copper ground
around the base is good. Good Luck with the project. Van

> TIA.
>
> Please respond to CONOLLJ@JUNO.COM

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 4336. Wanted 6-M KW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Ken Gentry <kc4var@worldnet.att.net>
Message-ID: <648sbc$ho0@mtinsc05.worldnet.att.net>
Source record: 89313

WHER CAN I FIND 6-M KW AMP'S? ANYTHING LET ME NOW OF ANYTHING..
KEN KC4VAR@WORLDNET.ATT.NET

## 4337. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: John Fleenor <johnf@cyberramp.net>
Message-ID: <3467CF4F.F86F3D50@cyberramp.net>
Source record: 89314

http://www.cyberramp.net/~johnf

## 4338. Tunnel Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: dsweeney@vt.edu
Message-ID: <dsweeney.24.0016A07A@vt.edu>
Source record: 89315

Does anyone know where I can get some tunnel diodes such as the old GE TD-X series diodes?

Thanks,

Dennis Sweeney
WA4LPR

# 4339. FS Kenwood CW Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Lionel Booth <lbooth@comm.net>
Message-ID: <648hai$iq6$1@fox.comm.net>
Source record: 89316
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Kenwood YG-455CN-1 CW Filter 250hz wide. For TS450/850/930/940.
$110.00 shipped UPS and insured.
N5LB

--
Lionel Booth - lbooth@comm.net
Bush, Louisiana

# 4340. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m3el5jhe7.fsf@spinner.ecofe.com>
Source record: 89317

John Miles wrote:
> HOLY COW, PEOPLE. This material is WORSE THAN USELESS as the lead-off
> text in a chapter on receivers. There is absolutely no context for the
> beginner to grab hold of, no sense of relevance or practical application
> to any of this stuff unless you are already well-versed in the theory
> and operation of a radio receiving system.

Absolutely right John. I keep the 96 version check out of the library
continuosly, trying to learn RF concepts after 20 years of digital experience.
[geosynq@trader.com]

Same story here; i used to say "I only hack hardware out of self-defense."
(Nevermind that i could resurrect machines that the manufacturer gave up on
and understand why...) I'm working with the 1993 edition, and i'm not sure
the newer edition isn't better...

It's like Unix Man Pages. Every one of them assumes you've read every other
page! Talking to old RF guys is the same. At least the book doesn't get
bored when you access it over and over and over, trying to grasp an idea.
... [ibid.]

Yeah, but unlike the 'man' pages, i've been thru the relevant chapters of
the Handbook N times and still don't get it.

> To me, the ARRL Handbook always represented the ideal
> compromise between theory and practice. And it still does, to a great
> extent. But somebody had better put some effort into accessibility.
[John Miles]

I'm sorry, it's not there for me. As previously noted in a previous post,
it's a fine overview, but i feel there isn't much in there between the
theory and projects. What about the practice part of it?

The BIGGEST problem is there are no SIMPLE examples of circuits that the
no code tech can use!
...

I believe you have identified the primary reason no code techs don't stay with
the hobby actively. They don't _want_ to be component consumers (which folks
here accuse them of being). So when they start asking questions, they get
pointed to "The Handbook", and then get lost.
[geosynq@trader.com]

Maybe it's better in more recent editions(?), but it seems like the vast
majority of the projects that don't require substantial experience or
sophisticated equipment are HF-oriented. I guess in the old days, an elmer

would help folks get started. WA6GZU (i still remember the callsign after 33 years) was very helpful back then, but i've asked time and time again in the S.F. Bay Area for an elmer for VHF and above, and so far, no luck. Getting back to the projects in the Handbook, some folks might even wonder if it's not an attitude of "We'll force 'em to learn CW one way or another!"

No! Let's rant about this some more! I can even offer _specific_ topics! [ibid.]

Why aren't there QRP quality projects for 6 meters and above? The R2/T2 forms the heart of a state-of-the-art transceiver. It'll run just fine without a pre-amp and with a simple homebrew final for QRP use in the HF bands. And it's an excellent choice to connect to a transverter. But it's not standalone. You need a low-noise pre-amp, and with 3mW out, you need something to get up to at least 2W and then another module for serious SSB work. Not to mention a stable VFO. Not easy for 6 meter, a challenge for 2 m, and then what about 70 cm? By the time i'm all done, i figure, starting from kits wherever possible, i'm looking at over $500 just to get on the air. Do i have a better choice between that, lucking out at the flea market and converting a surplus mobile rig? No wonder ALOT of no-coders don't upgrade beyond FM! (And few even do much simplex.)

There are lots of neat IC's out there. Like the AD607, designed by Gilbert, which has a conventional mixer in its front end, but does alot of what R2 does (minus the audio processing) with its IF. Or one of several transmitter chips (Motorola has one for UHF and one for 6 meters), various synthesizers for 1.2 GHz and 2.4 GHz, or one of several transverters-on-a-chip for 2.4 GHz. And, of course, there are lots of conventional approaches utilizing simpler ICs or even the lowly transistor (such as a couple of ATV projects seen in that past five years). Or, utilizing the lowly MC3362 for 6 meters, instead of 2 meters given in its application notes, or for HF as in the 1993 ARRL Handbook ("A Portable QRP CW transciever for 20 and 30 meter", pp 30-26:30-32). (Of course, a pre-amp would be needed and perhaps a better VFO, but perhaps it could even be all-mode [minus opposite sideband rejection] without alot of extra effort.) No doubt, newer IDs might be better choices, and the MC3362's replacement is still available as a DIP.

Now, what about a reproducible project for 6 meters or above?
---

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4341. Re: 4 x 813 PA project ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-10 00:00:00 UTC
From: Harold Smith <MRHANEY@SPYDEE.NET>
Message-ID: <6476e8$ibb$2@usenet88.supernews.com>
Source record: 89318

carlisle@capescott.net (Steve Carlisle) writes: > On Fri, 07 Nov 1997 14:12:09 +0100, Christer Jogenborn
> <Christer.Jogenborn@era.ericsson.se> wrote:
>
> >Has there been any published articles on 4 x 813 HF PA - during the
> >years?
> >I have a copy of the 3x813 project from an old HR magz - but would like
> >to see
> >the 4X version before winding up the drill.
> >73 Chris SM0NCL
> >
>
> I think Chris has chosen the 813's because of the nostalgia,
> cheap ( $10, nos), cheap sockets, and a KW cw for two tubes.
>
> Steve Carlisle
Chris, My experience has shoen that 3 813 tubes perform best , you could possibly run 4 tubes up to 40 mtrs. but three tubes work best.Harold W4pqw

# 4342. Re: HELP! newbie needs portable range

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111173601.MAA03676@ladder02.news.aol.com>
Source record: 89169

You are getting about as much out of those radios as they are capable of doing. There is nothing that will do better that does not require a license and better equipment. As to where to go next - get a couple of Codeless Technician study books and get yourselves ham licenses - then your communications will be anything that you want them to be. That is what ham radio is for. The questions are easy to memorize and code is no longer a requirement for the first license.

# 4343. Re: HELP RG-6 vs RG-8 & RG-58

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111174001.MAA04055@ladder02.news.aol.com>
Source record: 89170

Try it, Gary. It will have a slight mismatch, but it will work. I used 75 ohm coax for HF for years because it was readily available free. If it doesn't work on your VHF antennas, what is the consequence - changing it out? Good luck.

# 4344. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <3467736b.4931221@news.online.no>
Source record: 89226

On Mon, 10 Nov 1997 15:48:16 +0000 (GMT), CBS5LD@leeds.ac.uk (L. DE BRUIJN) wrote:

>What is the VHF/UHF DX Manual like? Could anyone point me to a review? (I
>enjoy browsing through the VHF/UHF Manual 3rd ed. (they've even got a copy at
>the University Library!)).
>
>
> Laurens
I have an early issue, the book is good, but 13/23cm designs are missed. The book shows some interesting details you won't find in other books. I designed peak-reading anode current meter for my 2m PA, and power meter, so I can tune the PA using cw dots - saves the PA valve
only bete noir: It shows only a simple cwms upconverter, hi! now it is outdated, anyhow

73 jan-martin

---
Email: LA8AK at online dot no

# 4345. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <34676eab.3715072@news.online.no>
Source record: 89227

On Sun, 9 Nov 1997 22:43:46 +0000, Simon Lewis
<pacsat@pacsat.demon.co.uk> wrote:

Hi
I got the impression that many designs in the old book was made
"before the availability of a spectrum analyzer", and now it seems
that the next book may be after....
Thanks for you good advices, I will not buy it! How to send notes to
EMN?
I printed the november issue today but the text wasn't clear, several
symbols seems to be unknown for netscape explorer or printer, they
could not be printed, I got repeatedly through text =20, =91, =92,
=3D=3D=3D... I did not try to edit it in winword

...jan-martin

---
Email: LA8AK at online dot no

# 4346. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: kd9fb@xnet.com
Message-ID: <3467b050.2026341@flood.xnet.com>
Source record: 89228

On Tue, 11 Nov 1997 00:15:20 GMT, LA8AK@nospam.thanks (J M Noeding) wrote:

>On Sun, 9 Nov 1997 22:43:46 +0000, Simon Lewis
><pacsat@pacsat.demon.co.uk> wrote:
>
>Hi
>I got the impression that many designs in the old book was made
>"before the availability of a spectrum analyzer", and now it seems
>that the next book may be after....
>Thanks for you good advices, I will not buy it! How to send notes to
>EMN?
>I printed the november issue today but the text wasn't clear, several
>symbols seems to be unknown for netscape explorer or printer, they
>could not be printed, I got repeatedly through text =20, =91, =92,
>=3D=3D=3D... I did not try to edit it in winword

Those are hex representations of characters:

Hex Decimal Character
20 32 space
91 145 ae
92 146 AE
3D 61 =

Hope this helps a bit.

Peter Mikalajunas
kd9fb@xnet.com
http://www.xnet.com/~kd9fb

# 4347. Re: Old Transformer Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971111015801.UAA28427@ladder01.news.aol.com>
Source record: 89229

>tanger@gualala.Cadence.COM (Tony Angerame) wrote:

>I found a pair of
>good looking 6.3 VAC @ 10 amp filament transformers. The promary and sec-
>ondary were clearly marked. The primary with 0-110-115-125 on pins 1,2,3
>and4.
>I connected 110vac between 1 and 4....the transformers (both) overheated
>and would have smoked were it not for the fact they were potted. What did I
>do wrong? Were these transformers bad in some way? The secondary was not
>connected in any way. These were OLD transformers is it possible the potting
>had gone bad?

I have two guesses as to what might have happened (and they're just guessses!).

1) Even high quality milspec potted transformers and chokes go bad. All it takes is a single shorted turn on any winding and it's all over.

2) Lots of good looking military surplus transformers are meant for use on 400 Hz power and will burn up on 60 Hz unless run at a fraction of the rated voltage. This is because, for the same applied voltage and iron structure, you need far fewer turns for 400 Hz than 60 Hz.

Try applying 12 volts or so to the primary (adequately fused) and see what happens. If it gets hot and draws lots of power even with no secondary connection, it's probably bad anyway. If it stays cool, it may be a high frequency (400 Hz) unit.

Hope this helps.

73 de N2EY

# 4348. Re: Source for 40m xtals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971111024401.VAA03985@ladder01.news.aol.com>
Source record: 89230

>Brian Smithson" wrote:

>Anyone know of a source for 40m xtals for homebrewing?

Check out AF4K's GREAT website at

http://www.mnsinc.com/bry/

He lists sources for all kinds of stuff, including about two dozen xtal suppliers.

73 de N2EY

# 4349. Re: PIN Diode Source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Mike <NoSpam@Today.Thanks>
Message-ID: <34685367.A0D@Today.Thanks>
Source record: 89231

RFMooreJr wrote:

> There's also Microsemi (www.microsemi.com) who makes:

> UM9401(SMD) and UM9402(axial) 100 watt antenna switch diodes
> UM9415 1000 watt antenna switch diodes

> I have not used these and cannot find them in catalogs. But their web site
> has good
> data sheets, application notes and a distributor list by state.

> Bob KV1V

Thanks, Bob.

I just wasted an hour downloading all their app notes. Total is about 11 megabytes.

I have never seen such incredible waste. Most of them are only one or two pages, yet they require 700k to a megabyte.

For example, 102.PDF, an app note on Transient Suppressors, takes 1,082,901 bytes. It contains 2 pages of text! No graphics, only text.

113.PDF takes 954,353 bytes. It is 1 page of text plus 2 small paragraphs on a second page. No graphics.

Some of the other app notes are completely garbled. I have the latest Adobe software, and have never seen PDF files this bad. My download software is reliable.

If they make semiconductors they way they publish app notes, I think I'll start making my own transistors.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4350. Re: Tunnel Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Marvin Moss <mmoss@gelac.mar.lmco.com>
Message-ID: <34685222.7D5F@gelac.mar.lmco.com>
Source record: 89232

Dennis Sweeney wrote:
>
> Does anyone know where I can get some tunnel diodes such as the old GE TD-X
> series diodes?
>
> Thanks,
>
> Dennis Sweeney
> WA4LPR

Someone posted here in the past few days Tunnel Diodes for $1 each but I
can't find it in dejanews. I'll keep looking for you because I'd like
to buy a dozen Just In Case.

Marv

# 4351. Re: Wanted 6-M KW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bceea9$baab3f40$0b8a92d0@bitnet.bit-net.com>
Source record: 89233

You could mod a SB-200. 73, DavidC AA1FA

Ken Gentry <kc4var@worldnet.att.net> wrote in article
<648sbc$ho0@mtinsc05.worldnet.att.net>...
> WHER CAN I FIND 6-M KW AMP'S? ANYTHING LET ME NOW OF ANYTHING..
> KEN KC4VAR@WORLDNET.ATT.NET
>

# 4352. Re: CQ 40m Fun Machine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3468aa40.65108809@news.erols.com>
Source record: 89234

On Sat, 8 Nov 1997 20:51:32 -0500, "Brian Smithson"
<smithson@ma.ultranet.com> wrote:

>Does anyone have experience building n4pc's 40m qrp xcvr project detailed in
>CQ a few years ago? I've gotten started but stalled out looking for parts,
>enclosure, etc. Current stumbling block - 40m xtals!
>
>I'd like to do as close to home-brew rig as I can to learn more about the
>electronics, is this a good choice for a project? Others?
>
>Thanks es 73 !
>
>Brian n8wrl
>
>
Brian: Looked like a great project to me. I especially liked the
stage-by-stage construction process and the wooden baseboard approach.
I used the "build on wood" technique on my 20 meter superhet.
Crystals should not be a problem. You can have them custom made by
JAN crystals. For parts, use MOUSER or others. Order via
Internet or FAX to save time. Don't be afraid to modify the
circuits to your liking as you go through. Good luck.
73 Bill N2CQR

# 4353. Re: Old Transformer Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: lordell@aol.com
Message-ID: <19971111152700.KAA23495@ladder01.news.aol.com>
Source record: 89235

Hi Tony,

Try putting 6.3 volts on the secondary and measure the primary voltages. If it still overheats it could have a shorted turn or be a 400 cycle xfmr. This might also indicate if the original labeling is wrong.------Joe---W1PNH

# 4354. Re: Help with Relays Please...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <346885c2.831573950@news.atl.bellsouth.net>
Source record: 89236

On 10 Nov 1997 19:57:28 GMT, tomb@lsid.hp.com (Tom Bruhns) wrote:
>Gary Coffman (ke4zv@bellsouth.net) wrote:
>
>(about a remote antenna-switching relay:)
>
>: At the 1.5 kW level, you need a sustain current capability of about
>: 3.33 amps for a 450 ohm system, or about 5.48 amps in a 50 ohm
>: system. So the relay doesn't have to be that big at all.
>
>(Oops, Gary, I think you forgot the sqrt on that 3.33 ... I get
>sqrt(1500/450) = 1.82 amps RMS.)
>
>But...beware of voltage! 1.5kW at 450 ohms is about 1200 volts peak
>(821 volts RMS). And...if the antenna impedance really is higher
>than that, like a full-wave center fed dipole at maybe 2000 ohms,
>the voltage would be twice that for that power level. If an arc
>gets started it only needs a small voltage to keep going. Antenna
>switches and relays that work in systems where there may be high
>impedances usually have pretty wide contact spacing, from what I've
>seen...or operate in vacuum. If in air, they also usually have
>nicely rounded corners. A point of comparison is air-variable
>capacitors, which at the few-kilovolt level have fairly wide
>spacing and rounded edges on the plates.

You're right, Tom. The relay contacts don't really face a
challenging amount of current, even at a currrent maximum,
but the spacing needs to be generous or arcing may occur
at a current minimum point.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4355. Re: Old Transformer Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111165700.LAA00267@ladder02.news.aol.com>
Source record: 89237

Tony, if the windings are not shorted on either the primary or secondary coils the transformer should not overheat. Be sure that none of the coil wires are touching each other on the outside of the transformer and try it. If it overheats with no load at all it must be internally shorted - trash it. Good luck.

## 4356. Re: Cheap/decent 12V supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111172901.MAA03057@ladder02.news.aol.com>
Source record: 89238

If you are using a car battery for power, it need only a trickle charger to keep it up. Try one of the little plug in transformers that makes 12vdc instead of fooling with a computer ps.

# 4357. Re: ADI 146 - 2 metre radio help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111173000.MAA04060@ladder01.news.aol.com>
Source record: 89239

Better ask ADI. They will tell you if it would be a good idea.

## 4358. Re: Increase the power output on FM HT?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111171501.MAA01836@ladder02.news.aol.com>
Source record: 89240

Those little devices are not worth trying to get more range out of. You time and money would be better spent getting some better radios. May I suggest the new family radio service radios or some high band 1 watt takies. Good Luck.

## 4359. Relieve the depression of Veteran's day

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: bobciz@aol.com
Message-ID: <19971111175300.MAA05972@ladder01.news.aol.com>
Source record: 89241

Relieve the depression of Veteran's day

http://www.potg.com/
See: Why everyone on the internet is talking about this progressive new website; why up until now, this site has grown simply by word-of-mouth.
Hear: The show that is breaking boundaries on the radio, making it an entertaining medium once more, and why certain sites have already heralded it as "the show that will redefine radio and will usher in a new style of comedy for the 21st century."
Taste: The difference between Planet of the Grapes' potent style of humor and the type of humor that makes you turn off your television or radio in disgust. The show's hosts guarantee that whether you like it or not, it is impossible to deny that it has a unique, fresh style.

The Hosts: Deaze Beans, Yahdderman, and U.B. Jackson
The Show : Planet of the Grapes
The Site: http://www.potg.com/
The Reason: Join the bandwagon that is headed into the future of comedy!

## 4360. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111175301.MAA05998@ladder01.news.aol.com>
Source record: 89242

It looks like you are getting plenty of responses. I used to move crystals by rubbing them on a piece of glass with toothpaste as the grinding compound. I put graphite on them with a pencil to move them down. It is almost a lost art nowdays.

## 4361. Re: Hand held Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111175900.MAA05641@ladder02.news.aol.com>
Source record: 89243

You would be better off getting a radio that you didn't have to try to improve to use on packet. Those little radios are neat but made to be small - not to really use for regular contacts.

## 4362. Designing Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <HeGgnBAg8Ja0EwpA@falstaf.demon.co.uk>
Source record: 89244

Dear All,
I am interested in building some switch mode supplies. My knowledge of transformer designs goes as far as turns ratios and stops about there. What would be a good source for designing such things. Basically I want to be able to select the appropriate number of turns for a given core, frequency, voltage change, power etc.

If this is covered by some simple ABACs or software could some one point me in the appropriate direction please. Answers both posted and Email would be appreciated.

Regards

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

## 4363. RE: Project Kits where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9711111022278643@atdbbs.com>
Source record: 89245

>>Other than Ramsey Electronics...

I just emailed you a 24Kb testfile with SCORES of kit manufacturers.

---
Clint Bradford 909.681.6210 Voice sysop@atdbbs.com
KE6LCS/KAF3359 909.681.6221 BBS ftp@atdbbs.com

# 4364. Re: 1759 meter band and "lowfers"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111180500.NAA06168@ladder02.news.aol.com>
Source record: 89246

There was a club in California which offered a kit radio for this band. After considering the problems with antennas for this band, I decided not to pursue it.

It is my recommendation that you study and get your ham license before spending any money on that band. It is true that no license is required. But like everthing else free - it is seldom of any real value. Get a copy of the small Codeless Technician study guide from Radio Shack (about 10 or 12 dollars now). Don't get the big book (20 dollar range). You will be able to memorize the questions easily and a license will open a lot of doors for you.

Good luck. If you do decide to pursue the low frequency stuff - you should be able to find help on the internet.

# 4365. Does Solar Panel Need Regulator Before Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bceed1$f00890c0$0b8a92d0@bitnet.bit-net.com>
Source record: 89247

I have acquired a gel-cell 12v battery (big one, similar in size to deep cycle marine battery).
I have also acquired a 12V 1A solar panel. If I want to trickle charge the gel-cell, do I need to protect the battery with a regulator of some sort?
I understand that gel-cells have a "attitude" about a too-high charging voltage. (Ooops, anthropomorphizing alert!)
Suggested circuit, please?
--
Thanks & 73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

# 4366. CHINA HAM NEWS 11/11/97: EME Schedule

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Xiaopeng Rick Niu <xn6@columbia.edu>
Message-ID: <64a9er$7mo$2@apakabar.cc.columbia.edu>
Source record: 89248
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,relcom.radio.ham

CHINA HAM NEWS 11/11/97: EME Schedule

Contributed by Lars Melin, SM0KAK
Member, Tsinghua University Amateur Radio Club, Beijing, China

Edited by Rick Niu, BD1QL
MBA '99, Columbia Business School, New York, NY
xn6@columbia.edu

BY1QH will be QRV on 144MHz EME at 1300-2300z, Saturday, November 15, 1997.

1400-1600z CQ
1600-1700z Listen around
1700-1900z CQ
1900-2000z Listen around
2000-2100z CQ
2100-2200z Listen around
2200-2300z CQ

BY1QH will always call CQ on 144.120MHz, using two-minute timing, with BY1QH transmitting in the first period. BY1QH plans to stay on 144.120MHz the full even hour, and stay there longer if someone is heard at the end of the hour.

During the contest, BY1QH will be QRV on a borrowed mobile phone: (86-10) 9085-4674.

So far BY1QH has worked SM5FRH, SM5BSZ, SM2CEW, KB8RQ, and W5UN.
If you want to see some pictures taken at BY1QH just before the first leg of the ARRL EME contest, take a look at the homepage of PA3DSS:
http://www.horizon.nl/~tdekkers/by1qh/index.html.

CHINA HAM NEWS is available for unlimited, appropriate distribution.

# 4367. Re: Tunnel Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <64acsl$icr@hpcvsnz.cv.hp.com>
Source record: 89249

Marvin Moss (mmoss@gelac.mar.lmco.com) wrote:
: Dennis Sweeney wrote:
: >
: > Does anyone know where I can get some tunnel diodes such as the old GE TD-X
: > series diodes?
: >
: > Thanks,
: >
: > Dennis Sweeney
: > WA4LPR

: Someone posted here in the past few days Tunnel Diodes for $1 each but I
: can't find it in dejanews. I'll keep looking for you because I'd like
: to buy a dozen Just In Case.

I have some N.O.S. TD-1A's ... my stock is getting low enough I'm going to
charge enough that it's clear someone really wants them, but I can make
some available. If you can find the $1 each ones, get them. If you can't
find them, email me and see what you can negotiate. (I'm thinking $10 each,
_total_ limit about a dozen, but the right proposal from a student would get
one _much_ cheaper.)

--
Cheers,
Tom
tomb@lsid.hp.com

## 4368. tube screen bias help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: "Jeff W. Hockert" <hockerj@ece.orst.edu>
Message-ID: <Pine.HPP.3.96.971111115450.7712B-100000@holmes.ece.orst.edu>
Source record: 89250

I am working on a xtal controlled, CW tube transmitter using a 12BY7A as the oscillator, coupled to the grid of a 5933 as the PA. The existing circuit on both tubes uses the same supply voltage for both the plate and the screen (isolating the plate with a RF choke). Typical circuit examples usually show a biasing resistor dropping the screen supply below the plate. I am only using 175v supply (that was the regulator tube I had available), which puts me well below rated supply voltage (plate or screen on either tube).

My question is, do I need to drop the screen voltage below the plate for proper operation? Or can I get away with using the same voltage for both because of my low supply voltage?

TIA
--Jason, N7IME

Please respond to CONOLLJ@JUNO.COM

# 4369. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4men4nw5h7.fsf@spinner.ecofe.com>
Source record: 89251

I like the last one best, also a nice one for mobile / dxpeditions, but unfortunately a radical profit for the European importer. I would like to
>> found out if anyone has more suggestions for a 6 meter rig, or anyone knows
>> anything about a kit (build-it-yourself) ?? Does anyone have anything on 6 meters for sale and how can we import that to "the low lands" over here? Anyone have any experience with the 6 m rigs I mention? All info on 6 meters is welcome and don't spare the dirty details ;-)
<pd1adi@amsat.org>

If anyone has kit/homebrew suggestions for 6 meters (besides the excellent state-of-the-art R2/T2 pair), please also send me e-mail and i'll summarize for the 'net.
-- KD6PAG (Networking Old-Timer, RF newbie)

# 4370. WTB: Yaesu filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Andre Antunes <andre.antunes@individual.eunet.pt>
Message-ID: <64ai57$ahv@news.EUnet.pt>
Source record: 89252
Cross-posted to: alt.ham-radio.marketplace,fr.rec.radio,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap,uk.radio.amateur

Hello everybody,
I need to buy a AM Wide (6 Khz) filter for the Yaesu FT-707.
If anyone has one to sell, please contact by mail with a price.
Also can change for a CW Narrow (500 Hz) filter.
Cheers.

Andre Antunes
andre.antunes@individual.eunet.pt

# 4371. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bceeeb$0c868900$0b8a92d0@bitnet.bit-net.com>
Source record: 89253

Why not use the TenTec 1208 Transverter? This will allow a multimode HF rig (via 20 meters) to receive and transmit 6. (It is a kit, $95.)

Power is limited, I understand the TenTec has a max. capacity of 10w in and out, but I suppose a linear on 6 is possible with the proper relay setup.

73, DavidC AA1FA

> >> John Mock
> >> found out if anyone has more suggestions for a 6 meter rig, or > >> anyone knows
> >> anything about a kit (build-it-yourself) ?? Does anyone have > >> anything on 6
> >> meters for sale and how can we import that to "the low lands" over > >> here?
> If anyone has kit/homebrew suggestions for 6 meters (besides the
> excellent state-of-the-art R2/T2 pair), please also send me e-mail and i'll
> summarize for the 'net. -- KD6PAG (Networking Old-Timer, RF > newbie)

# 4372. AD607 Question. Info on QAM demodulation needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971111223901.RAA03281@ladder01.news.aol.com>
Source record: 89254

Howdy,

I am working on a 20 meter superhet receiver and am using the AD607 as the mixer, IF, and demodulator stages. It is designed to demodulate QAM, it has "In-Phase" and "Quadrature" modulation outputs. The data sheets say that the chip will demodulates ssb and cw as well. I assume that by applying a BFO signal to the demodulator that is tuned to the IF will yield the SSB signal at the In Phase output, where I can go straight to the audio chain. Has any body used this chip in a CW or SSB application? Any info at all will be reatly appreciated, thanks.

-Kevin Ames
AA7YQ

# 4373. Re: Tunnel Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Brooke <brooke@pacific.net>
Message-ID: <3468DDB9.43D4@pacific.net>
Source record: 89255

Dennis Sweeney wrote:
>
> Does anyone know where I can get some tunnel diodes such as the old GE TD-X
> series diodes?
>
> Thanks,
>
> Dennis Sweeney
> WA4LPR
Try:

http://www.metelics.com/

Brooke
N6GCE
>>>>>>> remove NOSPAM to reply <<<<<<<<

## 4374. Reconstructing the ol' Heathkits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: navigatr@arn.net
Message-ID: <3468E7C2.5903@arn.net>
Source record: 89256

I found out Heath will sell copies of the old assembly manuals. Has anyone ever tried to reconstruct any kits from these manuals from scratch? What about availability of parts?

All I'm trying to do is get back into it...after a 35 year absence.

Tnx

# 4375. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34693B45.56E3@pop.removethistomailme.net>
Source record: 89257

Hi, Ed --

Ed Hare, W1RFI wrote:
>
> John Miles <jmiles@pop.removethistomailme.net> wrote:
>
> >OK, I've gotta interject some commentary into this thread.
>
> >What really floors me is not any "dumbing down", perceived or real, but
> >the horrific organization of intra-chapter content in some of the newer
> >Handbooks.
>
> First, I have taken the liberty of forwarding your comments on to the
> current Handbook editor. This kind of frank assessment is useful to us.
> I wish more folks would offer us constructive feedback.
>

No prob, hope the feedback is helpful!

> I will note, however, that I don't think the points you raised
> necessarily apply to all of the chapters.

I agree... I was only ragging on the layout of the "receivers" chapter
because it happened to cover the topics that were brought up by the
fellow who wrote me. That's a pretty important chapter, IMHO, because
it's responsible for introducing so many basic electronic concepts.

All in all, I actually think the newer Handbooks look great. The
language is clear and informal without being gratuitous, which is always
a fine line to walk. And the content is dead-on target for the most
part.

For example, I think the RFI
> chapter (okay, it was mine!) and the DSP chapter were organized "from the
> beginner to the intermediate," leaving the finer points to be picked up
> by our other publications -- what I perceive as the appropriate "Handbook
> goal."
>

Agreed on all counts.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 4376. Re: Designing Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <m4JtIjAI9Na0EwPp@lfheller.demon.co.uk>
Source record: 89258

In article <HeGgnBAg8Ja0EwpA@falstaf.demon.co.uk>, Robin Birch
<robin@falstaf.demon.co.uk> writes
>Dear All,
>I am interested in building some switch mode supplies. My knowledge of
>transformer designs goes as far as turns ratios and stops about there.
>What would be a good source for designing such things. Basically I want
>to be able to select the appropriate number of turns for a given core,
>frequency, voltage change, power etc.
>
>If this is covered by some simple ABACs or software could some one point
>me in the appropriate direction please. Answers both posted and Email
>would be appreciated.
>

Switch-mode supplies are rather tricky to design. Horowitz and Hill have
a good explanation in the A of E.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 4377. Need to build 929MHz Receiver. . .

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: George Viaud <geo69@concentric.net>
Message-ID: <3468F025.4EFA8AD3@concentric.net>
Source record: 89259

I am presently looking into building a 929MHz receiver
to be used in conjunction with my PC to decode POCSAG . .

If anyone knows how to design receivers at this frequency,
or better yet has a schematic or knows of a place where I
can obtain a schematic, an email telling me so would be
greatly appreciated. Any help would really be great.
My ARRL Handbook (1988) doesn't have any receivers near
my desired Frq. range. . .

Thanks!

George

## 4378. 2m or 70cm AMPs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: tljess@itexas.net
Message-ID: <648fov$g5r@news1.iamerica.net>
Source record: 89260

There seems to be lots of homebrew Liniears out there for HF ... where the amplifiers for VHF and the low end of UHF???

Please respond to tljess@itexas.net!

Thanks, 73 KD5BWD

# 4379. Looking for a 2m or 70cm Pager SIzed XMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: tljess@itexas.net
Message-ID: <648g0u$g5r@news1.iamerica.net>
Source record: 89261

ORIGINAL Question to Fox-List:
I am looking for a pager sized fox to use sort of like an EPIRB. not a lot of output power. Small enought for a hike to be comportable wearing. Any ideas ... circuit deisgns etc. The important part is to be much less expensive than the standard 400 MHz or 900MHZ EPIRB.

---

Below are your several ideas and comments ... hopefully the first few of several. I like Kevins idea of fiiting it in a "Sharpie Pen". The low power of 10-50mw should be sufficient ... I would like this to be a "learn more about Amateur Radio and do something useful projects". The "Stubby Duck" antenna is workable ... if it is on 440 it would make things more reasonable in the antenna area. Looks like the FET oscillator works for that plan.

A schematic and a parts list seems in order. I don't have the where-with-all in that area, lets see what we can come up with.

I got the little idea that this could be made real small by looking at the 140mw XMTR used on OSCAR I ... a few resistors, caps, inductors and only 2 transistors. Also some of the commercial Foxes seemed real small.

Look over each others ideas and lets see what esle we can stir up. The least of my hopes it to by it ready to go ... I like "home brew" and networking with you all is half of the fun.

Some Background:
-- EPIRB - "Emergency Position Inicating Radio Beacon"
They operate on 406MHz and or 121.5MHz and several satalites report them to authorities - ID and posit. These operate as from 50mw to 5W. The prices I have seen are from $200 to over $2000. The EPIRB ID is registered and then when yoy file your travel plan you list youi EPIRB and the authorities know your genarl plans.

My plan is to know that several of my own group are hiking and then use the "psuedo EPIRB" to track them if needed.
73's looking forward to our next CyberQSO

TomE - Arlington, TX KD5BWD
---
Much smaller than a pager, you can go with a single FET oscillator. Fits well into a "magic marker." If you can get AAAA batteries (they're a little hard to find) you can get it into a "sharpie" pen.

The simplest FET oscillators in the Sams FET book are fine. Cost is, indeed, less than an epirb (approx 1% of an epirb. 0.3% if you have a good junk box).

The little 1.5 inch stub-duck antennas for 2m that most people laugh at, you see 'em at flea markets - don't laugh. Put one on an analyzer and you find they really do work. The good ones have a tiny 28 ga or so gold plated helix inside which really does resonate at 2m. No reason you can't wind a good resonant antenna like that.

You'll definitely be QRP with a watch battery, or AAAA cell for power, and a pip squeek of a little coil for an antenna, but it works.

For a couple of bux extra, pick up an electeret mic element at Radio Shack. Smaller than a watch battery. If you bias the FET with the thing, you'll actually end up AMing and FMing the output
at the same time - but it will work.

XTAL control is much better than just a free running LC circuit for the thing, but you'll probably never find a suitable crystal that will fit into a "sharpie" marker. (I never could) And an XTAL FET osc
only takes an FET, the XTAL, one resistor, cap, and coil, and the coil itself can be the antenna if you like.

Kevin WB9MUP ( wb9mup@amsat.org )

---
I think I can put something like that together. Depends on what exactly you what it to do and how small a tx board I can come up with. May depend on supply pwr too.

Leon ( microchip@centuryinter.net )

---
I'm "working on" one... As the winter months come on, I may actually get a round tuit. It will be based on a Motorola chip for the transmitter, and a Microchip PIC processor to control it. It will have MCW ID, and crystal controlled timing for the processor, which could be programmed to turn it on and off as desired ("Wait till 9PM on Saturday next, then start transmitting one minute on/ four minutes off..."). The transmitter chip is cute: it's a phase locked loop, which multiplies the crystal by 8 or
32, depending on whether you choose an MC13175 or MC13176 chip. You can modulate either FM or AM. The PLL avoids the several stages of multiplier. The output power is about 10 milliwatts. My plan is that I'll take apart a NiCd "9V" battery, which is 6 cells, and remove 3 cells. The transmitter
will fit in where the 3 cells were, and the remaining cells will provide power. I plan to do it for 2 meters, but the chips officially are designed for 350-950MHz, so you could put the transmitter anywhere in that range.

I _believe_ they will work fine on 2 meters, too, but I'm not positive about that yet.

Interested?

Cheers,
Tom
tomb@lsid.hp.com

---

# 4380. Old Transformer Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k3ky@juno.COM
Message-ID: <19971111.035359.13358.1.k3ky@juno.com>
Source record: 89262

The transformers might be designed for 400Hz as used in aircraft.
If that were so, they would definitely fry if they were hooked up
to our 120vac/60Hz household supply. 73, David

tanger@gualala.Cadence.COM (Tony Angerame) wrote:

I recently began scrounging parts for a high/medium/low voltage supply
to
power flea market tybe radio (Boatanchor) acquisitions. I found a pair of
good looking 6.3 VAC @ 10 amp filament transformers. The promary and sec-
ondary were clearly marked. The primary with 0-110-115-125 on pins 1,2,3
and4.
I connected 110vac between 1 and 4....the transformers (both) overheated
and would have smoked were it not for the fact they were potted. What did
I
do wrong? Were these transformers bad in some way? The secondary was not
connected in any way. These were OLD transformers is it possible the
potting
had gone bad?

David Sinclair K3KY
e-mail: k3ky@juno.com

# 4381. Re: PIN Diode Source ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: rfmoorejr@aol.com
Message-ID: <19971111041301.XAA14181@ladder02.news.aol.com>
Source record: 89263

There's also Microsemi (www.microsemi.com) who makes:

UM9401(SMD) and UM9402(axial) 100 watt antenna switch diodes
UM9415 1000 watt antenna switch diodes

I have not used these and cannot find them in catalogs. But their web site has good
data sheets, application notes and a distributor list by state.

Bob KV1V

# 4382. FS: Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: THEHOSSMAN <THEHOSSMAN@prodigy.net>
Message-ID: <01bceec3$73f1ef80$930b73cf@JohnF.Haase>
Source record: 89264

I have a large quantity of tubes available. Please contact me for prices, quantities, and shipping.
I prefer if you use the e-mail address: "thehossman@hotmail.com".

Thank you.

Boxed Min 8-Pin, etc.
1G3/1B3 2AD6 1G3GT/
2AS2 2D21 1B3GT
3A3/3B2 3HQ5 1K3
5U4BG 4DT6A 5Y3GT
5Y3GT 4HM6 6AS7G
6AG5 4JC6 6BK4
6AH6 4JD6 6BQ6/
6AK5 4KT6 6CU6
6AK6 5AQ5 6D6
6AN5 6AF4 6V6
6AU4GTA 6AH6 6Z10
6AU6GTA 6AL5 12AY3
6AV6 6AN5 12D4
6AX8 6AQ5 12DQ6B
6AY3 6AS5 12SN7GT
6BA6 6AW8 12SQ7
6BC5 6BA6 12V6GT
6BF5 6BH6 17BE3
*6BH6 6BQ7 17BF11
6BK7B 6BZ6 17JZ8
6BN6 6C4 21JZ6
6BQ7 6CG7 25L6GT
6CB6A/ 6CL8 38HE7
6CF6 6CQ8 50L6
6CL6 6CZ5 OD3
6CL8A 6DE6 6528
6CW4 6EA5 75
6CZ5 6EB8 829B
6D4 6ER5
6EA5 6GH8
6EB8 6GM6 Metal
6EH7 6HB7 6AC7
6FQ7 6J6 6AG7
6FV8 6KE8 6C5
6GF7A 6T8 6J5
6GH8A 6X4 6L7
6GM6 8FQ7/
6J4 8CG7

6J6 8JV8
6JE6A 10LZ8
6K7 12FX5
6KE8 OA5
6SJ7 OB2
6W4GT 5654
7F8 5696
8EM5 5726
12AL5 5749
12BH7A 5750
12DT5 5814
35L6GT 6136
OB2WA 6189
OC2 6197
OG3 6201
5651WA 747
5749
5763
6112
6977
S-5018
(silicon rectifier)

## 4383. Help with FT-727R

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: Larry <lphillipsNOSPAM@cpros.com>
Message-ID: <6499pg$q1t$1@news.chatlink.com>
Source record: 89265

I want to use the external mike jack on a Yaesu FT-727R HT, but don't have a schematic for it, and the manual doesn't provide any information about using it. I need to know if it is a 2.5 mm stereo jack (looks like it), what each contact does, and what the value of the series (or shunt) resistor is for the PTT circuit (if any).

Thanks in advance.

Larry KC7LVZ
lphillips@cpros.com

# 4384. Re: Wanted 6-M KW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111170900.MAA02230@ladder01.news.aol.com>
Source record: 89266

Ken, let me encourage you to not pursue a kw amplifier for 6 meters. As you get more experienced in ham radio you will find that "doing it with antennas" is a lot more productive than running high power. One big negative about high power is TVI. Six meters is very bad about causing interference to neighbor's tvs and fm receivers. Another negative is the expense of building or buying such an amplifier. Another problem you will encounter is feedline and antenna perfection - you will burn up your amplifier, and coax if everything is not perfect with that much power.

One of the main things is "You can't work them if you can't hear them". Unless you have a fantastic antenna system - a kw will not do you any good unless you have the receiving cabability. Receiving is mostly antenna. Your receiver is important, but a good antenna is more important. You are better off with a good antenna and a fair radio than with a poor antenna and the most expensive radio money can buy.

Put you money on the antenna and forget about high power is my recommendation after 36 years of hamming. Good luck.

## 4385. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111171800.MAA02114@ladder02.news.aol.com>
Source record: 89267

You might consider some of the little direct conversion receivers that are popular with QRP people. They work pretty good and are quieter than regen receivers.

# 4386. Re: 1750 M and antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-11 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971111174700.MAA05490@ladder01.news.aol.com>
Source record: 89268

Most LF antennas are nowhere near as long as desireable. Loops and verticals are used by people who play with those frequencies. Loading coils and capacitors are used to tune them.

# 4387. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: yeccchhh@aol.com
Message-ID: <19971112002301.TAA15148@ladder01.news.aol.com>
Source record: 89171

> ﷺDemonstrating to the government that you Know the Holy Code allows
>one to enter the Temple of the Holy HF, the Lower Bands Lodge Hall
>where only the Good and True amateurs reside.ﷺ
>
>quote from Len Anderson
>
>
>
>--

The old and dead in an old and dead hobby.

## 4388. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: yeccchhh@aol.com
Message-ID: <19971112001801.TAA13591@ladder02.news.aol.com>
Source record: 89172

maybe in about 30 years we will have a breed of hams that wont bitch about incentive licensing and morse code requirements.

# 4389. Re: Old Transformer Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: bgudgel@eskimo.com
Message-ID: <64b1je$rfi$1@eskinews.eskimo.com>
Source record: 89173

K5KNE (k5kne@aol.com) wrote: If it
: overheats with no load at all it must be internally shorted - trash it.

OR you're applying too high of voltage to it.

Bob K7IQ

--
K7IQ

# 4390. Re: Reconstructing the ol' Heathkits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcef26$dba2b340$0b8a92d0@bitnet.bit-net.com>
Source record: 89174

Have you chatted with Ed Mosher, formerly of Heathkit?
wa8zvo@juno.com

73, DavidC AA1FA

navigatr@arn.net wrote in article <3468E7C2.5903@arn.net>...
> I found out Heath will sell copies of the old assembly manuals. Has
> anyone ever tried to reconstruct any kits from these manuals from
> scratch? What about availability of parts?
>
> All I'm trying to do is get back into it...after a 35 year absence.
>
> Tnx
>

# 4391. Re: wood construction help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: mailfrmpa@aol.com
Message-ID: <19971112051601.AAA18451@ladder02.news.aol.com>
Source record: 89175

>I am working on re-building an old crystal controlled, CW tube transmitter

>How do you mount the tube sockets?

I like to make the front panel from masonite: when painted it gives a very hansome gloss look. You can contact cement aluminum foil to the back side. There used to be tube sockets made for the breadboard. They mounted flat with the connect-lugs comming out at a right angle. I'll bet you could still find them at a good size hamfest, but in the meantime, I have used chassis-type sockets mounted to the breadboard using standoffs and wood screws. Again, if you begin by gluing aluminum foil to your board you will have a decent planar ground. In the "old days" the grounding was handled by heavy bare wire...called the "ground buss."
Hope this helps some,

K0MB

# 4392. Re: help re: typ 5633 output impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: mailfrmpa@aol.com
Message-ID: <19971112052701.AAA19487@ladder02.news.aol.com>
Source record: 89176

>I am working on an old CW, crystal controlled tube transmitter

> drive a 5633 pentode power amplifier section.

This would be a strange choice for cw service.This tube was designed for class A amplification. I don't have access to the output impediance of this tube. Most rigs of early vintage used link-coupling, and the links and couples were made specifically for the band in use. Maybe another will step up to help on this.

K0MB

# 4393. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <346a3d10.52059301@news>
Source record: 89177

On 12 Nov 1997 00:18:46 GMT, yeccchhh@aol.com (Yeccchhh) wrote:

>maybe in about 30 years we will have a breed of hams that wont bitch about
> incentive licensing and morse code requirements.

You're right. By then they'll both be long gone, or maybe Ham Radio
will be.

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

# 4394. Wanted Plans for HF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Brian <kg9jy@springnet1.com>
Message-ID: <64bm21$m9b@ns1.ccinet.net>
Source record: 89178

Need plans for building a 160-10 meter hf amplifier that would put out
600-1000 watts with 100 watts drive. Reply via e-mail.

kg9jy@springnet1.com
Brian

# 4395. Re: PS Heating Up Charging Battery - Concern?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <64bml4$pfm$1@alice.walrus.com>
Source record: 89179
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

DavidC (davidc@bit-net.com) wrote:
: I recently acquired a used gel-cell battery. It is a large (car battery
: size).
: It measured just under 9v when I got it. I connected a 2.5A 13.8v Micronta
: PS I had laying around and started the charging process. After several
: hours the battery was up to 11v.
: My concern is that the PS is getting very hot, should I have diodes in the
: charging line or something to protect the PS, or is the process of bring
: the voltage back up in the battery just unusually taxing on the PS?

A gel-cell battery of that size can draw a fair amount of current-the
current will go down when the battery is near full charge.

: Oh, and my meter is unable to measure the amperage over 600MA, what
: inexpensive metering setup would be good to monitor this battery - the goal
: is to keep a trickle charger (the Micronta?) on it.

One way to measure high current is to find a high power low ohmage
resistor(under 1 ohm is best, to reduce voltage drop).
Put the resistor in series with the battery, and put the meter across
it:simple ohms law will allow you to determine the current.
If you can't find a suitable resistor, then use a length of wire...if a
digital meter is used, copper wire may do, but if a analog meter used,
then resistance wire may be needed.

: Thanks in advance for your help!
: --
: 73, DavidC AA1FA
: "Now may the God of hope fill you with all joy and peace in believing, that
: you may abound in hope by the power of the Holy Spirit." Romans 15:13

# 4396. THE CHRISTIAN BUSINESS OPPORTUNITY WEBSITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: graham@arlington.net
Message-ID: <64bj0k$9r9@lepton.startext.net>
Source record: 89180

Thank You,
The response has been so phenomenal that I cannot
handle my e-mail. I am posting the Christian Business
Opportunity Website for your direct viewing. You may
SIGN UP for FREE and GET A FREE WEBPAGE at the URL below
and you will receive a free info pack.
<http://get-it.net/cgi-bin/get-it/1/jgraha1015/scriptures>

Everything you need to make a logical decision is cover
in the info pack. You may call 1-800-585-5873 and give
ID. 6744 for a free sign up and info pack.

Please e-mail me if there is anyway I can be of service
to you and the group.

May God Bless All of You
and Your Families.

Joe Graham #6744
graham@arlington.net

P.S. If you have receive this by mistake, Please FORGIVE ME.

# 4397. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <64bng9$pfm$2@alice.walrus.com>
Source record: 89181

K5KNE (k5kne@aol.com) wrote:
: You might consider some of the little direct conversion receivers that are
: popular with QRP people. They work pretty good and are quieter than regen
: receivers.

On the other hand, with a regen, you could send CW using the same unit
:-)

## 4398. Re: Crystal Grinding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34697A3B.445B@trader.com>
Source record: 89182

> ...put graphite on them with a pencil to move them down.
> It is almost a lost art nowdays.

I can remember watching my dad do this, but didn't realize what he
was doing. There sure seems to be enough interest in the subject.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 4399. AD607 Question. Info on QAM demodulation needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <oAuu22AW2Va0EwsA@lfheller.demon.co.uk>
Source record: 89183

In article <19971111223901.RAA03281@ladder01.news.aol.com>, MTNCLIMB
<mtnclimb@aol.com> writes
>Howdy,
>
>I am working on a 20 meter superhet receiver and am using the AD607 as the
> mixer, IF, and demodulator stages. It is designed to demodulate QAM, it has
> "In-Phase" and "Quadrature" modulation outputs. The data sheets say that the
> chip will demodulates ssb and cw as well. I assume that by applying a BFO
> signal to the demodulator that is tuned to the IF will yield the SSB signal at
> the In Phase output, where I can go straight to the audio chain. Has any body
> used this chip in a CW or SSB application? Any info at all will be reatly
> appreciated, thanks.

This chip is usually used to feed the I and Q outputs into a DSP, where
any type of demodulation can be done in software.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 4400. Re: Help with FT-727R

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19971112091001.EAA02956@ladder01.news.aol.com>
Source record: 89184

In article <6499pg$q1t$1@news.chatlink.com>, Larry
<lphillipsNOSPAM@cpros.com> writes:

>
>I want to use the external mike jack on a Yaesu FT-727R HT, but don't
>have a schematic for it, and the manual doesn't provide any information
>about using it. I need to know if it is a 2.5 mm stereo jack (looks like
>it), what each contact does, and what the value of the series (or shunt)
>resistor is for the PTT circuit (if any).

The External mike jack only has TWO connections, it's not a stereo
jack. The CAT connection, which is the third connection on the
top of th HT does use a stereo plug and has a stereo jack.

For a TNC to key properly, I usually used somewhere between 3000
and 5000 ohms to key reliably, although as I recall, it would work
without too much loading down to 2000 ohms. I also note before
you spend too much time playing with this, that Radio Shack and
MFJ both provide external HT microphones which will work with
the 727.
-art clemons-

# 4401. Re: Designing Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971112105601.FAA05108@ladder01.news.aol.com>
Source record: 89185

>
>Dear All,
>I am interested in building some switch mode supplies. My knowledge of
>transformer designs goes as far as turns ratios and stops about there.
>What would be a good source for designing such things. Basically I want
>to be able to select the appropriate number of turns for a given core,
>frequency, voltage change, power etc.
>
>

As a closed loop servo system, a switch mode power supply has lots more complexity than the transformer! Particularly if you want to live with the noise they generate. Most people that design them still are considered black arts magicians. Get the books from the manufacturers. Unitrode for the chipsets. Ferroxcube for the core material and the design equations. These are just the first two that come to mind, there are a dozen others. Then study them.

W4ZCB

# 4402. 2m MC3362

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Suleyman Yalcinkaya <suleyman@netas.com.tr>
Message-ID: <34698282.CF1@netas.com.tr>
Source record: 89186

hi all,
I try to make 2m receiver with motorola MC3362 but I didn't prepare
LO OSC L(0.41uH) C(33p) connected PIN 21 and 22.

Does anybody know which component (L and C) i can use for the
144-148 MHZ or how do i calculate value of L and C.

73's

mailto:suleyman@netas.com.tr

# 4403. 2m MC3362 receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Suleyman Yalcinkaya <suleyman@netas.com.tr>
Message-ID: <34698314.77A8@netas.com.tr>
Source record: 89187

```
This is a multi-part message in MIME format.

--------------505B40D82C7
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

hi all,
I try to make 2m receiver with motorola MC3362 but I didn't prepare
LO OSC L(0.41uH) C(33p) connected PIN 21 and 22.

Does anybody know which component (L and C) i can use for the
144-148 MHZ or how do i calculate value of L and C.

73's

mailto:suleyman@netas.com.tr

--------------505B40D82C7
Content-Type: application/pdf; name="mc3362rev2h.pdf"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="mc3362rev2h.pdf"

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ZGUxMTc0YzgzOT5dCj4+CnN0YXJ0eHJlZgoyODYyNjYKJSVFT0YK
--------------505B40D82C7
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Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="3362.gif"

<encoded_portion_removed>
cA33cBE3cRV3cRm3cR33cSE3ciV3cim3ci33cu2jAAAAOw==
--------------505B40D82C7--
```

# 4404. Re: Does Solar Panel Need Regulator Before Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: codeman@gj.net
Message-ID: <3469aa1e.0@news.gj.net>
Source record: 89188

"DavidC" <davidc@bit-net.com> wrote:

>I have acquired a gel-cell 12v battery (big one, similar in size to deep
>cycle marine battery).
>I have also acquired a 12V 1A solar panel. If I want to trickle charge the
>gel-cell, do I need to protect the battery with a regulator of some sort?
>I understand that gel-cells have a "attitude" about a too-high charging
>voltage. (Ooops, anthropomorphizing alert!)
>Suggested circuit, please?
>--
>Thanks & 73, DavidC AA1FA
>"Now may the God of hope fill you with all joy and peace in believing, that
>you may abound in hope by the power of the Holy Spirit." Romans 15:13

David,

I run solar panels to power my repeater and the only thing that I have
put between my panels (4-amps per panel) and battery bank is a solar
panel controller. This controler cost about $40 and what it does is
shut off the current from the panel(s) to the batteries when the
batteries reach a voltage of 13.6 volts. When voltage drops below
13.4V, then the controller opens up and current starts flowing again.
Your 12V-1Amp panel is small and I would guess it will have a hard
time keeping your battery fully charged if there is any kind of load ,
on the batteries, so I do not think you have to worry about damaging
your gel-battery.

Ross
N7VWX

# 4405. 'Help: D-104 Microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: "G. M. Privette" <timeblue@bellsouth.net>
Message-ID: <3469B5ED.2EF1@bellsouth.net>
Source record: 89189

I have the Astatic D-104 microphone mounted on the T-UG8 stand (with built-in amplifier).

1. What is the impedance of the D-104 element?
2. What is the small slide switch mounted inside the base with positions marked "E" and "R"? How do I set it? I intend to connect this microphone to my Yaesu FT-840 HF Transceiver (requires 500-600Z impedance input).

Thanks for your assistance.

G. M. (Jerry) Privette, WD4MDK
E-mail address: timeblue@bellsouth.net

# 4406. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: ddenter@nospam.ca
Message-ID: <64cer5$4f8@bcarh8ab.bnr.ca>
Source record: 89190

In article <4m90uux5oe.fsf@spinner.ecofe.com>,
John Mock <kd6pag@nospam.mocha.ecofe.com> writes:
> Why not use the TenTec 1208 Transverter? This will allow a multimode HF
> rig (via 20 meters) to receive and transmit 6. (It is a kit, $95.)
>
> Please don't assume everyone has HF gear. The point of the question was
> to look for ways for a Technician to get beyond FM-only operation. If you
> *have* to suggest HF, at least choose a band with Tech Plus privileges.
> With a six meter transciever, the transverters to other UHF and above make
> sense. Hence the request for kit/homebrew suggestions for 6 meters (besides
> the excellent state-of-the-art R2/T2 pair).
>

There's also the TenTec 2m-6m kit (1206?), it uses whatever you've got
on 2M.

Only problem with this solution is that it's designed for HTs and it only
take 5W in, has anyone tried modifying it for use with a 10W rig?

regards,
Dean.

--

Dean Denter work -> ddenter at nortel dot ca
VA3CDD play -> ddenter at ottawa dot com
[[[[[[[[[[[[[I speak only for myself]]]]]]]]]]]]]

# 4407. Re: PS Heating Up Charging Battery - Concern?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: dk3410@gnc.net
Message-ID: <64civ2$lf@niven.ksc.nasa.gov>
Source record: 89191
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I assume the batt. is 12 V so IMHO if it only came up to 11 in 2hrs at 2.5 amps, you have a bad batt.

# 4408. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Maurice Lewton <mplewton@ix.netcom.com>
Message-ID: <64cmhc$7s1@dfw-ixnews11.ix.netcom.com>
Source record: 89192

http://www.mfjenterprises.com/
http://www.tentec.com/

Kraig D. Brumbaughj wrote in message <3466219A.7DC467B2@aiusa.com>...
>Hi All,
>
>Does anyone have a schematic for a simple transistor regen receiver that
>is capable of covering 80 and 40 meter CW ?
>
>Thanks........
>
>73,
>
>Kraig
>

# 4409. 3-500Z AMP on 160M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Wes Atchison <wes@iphase.com>
Message-ID: <346A8421.19BB508F@iphase.com>
Source record: 89193

I am rebuilding a HF amp that uses a 350-Z. The amp was designed to operate 160 m thru 10m. I can not get the amplifier to resonate on 160m. On 80, 20 and 15 meters the amp works fine. On 40m the protection circuit trips before I can get the amp to take any drive. The meters do not indicate an over current state when it trips. I think this is a resonance in the protection circuit. On 10 m the plate RF choke fried.

I rewound the choke and have the amp work like before on 80, 20 and 15. 40m works the same. Have not tried 10m. I wound the choke with the same number of turns as a 2 tube amp. This choke had more turns than the original in the amp. I checked the tank circuit that with my grid dipmeter to see if it resonates. It does. I think the RF choke is not of a high enough impedance at 160m.

What I am looking for is help in determing what the RFC should be for a 3-500Z operating on 160 thru 10 meters. Also, any experience with the bypassing of the RFC.

73's

Wes

WA5TKU

# 4410. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3469e5c3.921700511@news.atl.bellsouth.net>
Source record: 89194

On 12 Nov 1997 00:19:36 GMT, "Ed Hare, W1RFI" <ehare@arrl.org> wrote:
>John Miles <jmiles@pop.removethistomailme.net> wrote:
>
>>OK, I've gotta interject some commentary into this thread.
>
>>What really floors me is not any "dumbing down", perceived or real, but
>>the horrific organization of intra-chapter content in some of the newer
>>Handbooks.
>
>First, I have taken the liberty of forwarding your comments on to the
>current Handbook editor. This kind of frank assessment is useful to us.
>I wish more folks would offer us constructive feedback.

I also think that the "dumbing down" charge is absurd. The Handbook offers more information on modern radio practice than did the older Handbooks (one would hope that would be the case, and it is). It isn't a cutting edge volume by any stretch, but it isn't dumbed down compared to earlier editions either. Much that was archaic has been cut, but it isn't really missed. I like several of the new additions such as the electronic math tutorial and the chapter on DSP (though that's a bit light, some algorithm examples would be welcome to point the budding coder in the right direction).

Where it suffers is in comparison to some other reference works, such as some RSGB publications, which go into more detail about various things than the Handbook offers (though much of the RSGB information is dated).

But I must say that the organization really is the pits. I use the Handbook as a quick reference, and the indexing, table of contents organization, and internal chapter organization for rapidly finding specific information is just simply awful compared to the older Handbooks.

A handbook is supposed to be a quick desk reference, but because of the poor layout and organization, the ARRL Handbook isn't a quick desk reference anymore. The CD remedies that to an extent because one can employ search techniques to find needed information, but the paper volume could stand a serious attempt to get it back into a shape that allows quick access to specific information.

Specifically, I would like to see a return to a comprehensive table of contents in the front of the book, including intra-chapter headings and a list of figures. Most important, there should be *page numbers* in the TOC. I'd like to see the Handbook pages numbered sequentially from start to finish as it used to be rather than renumbered at each

chapter boundary. That would at least give a clue as to how deep in the volume to start a search.

And the index needs to be more comprehensive as well. Ideally, a permuted index would be preferred, or at least a lot more "see also" cross references. Most things are pointed to by the index, but not always under the headings most likely to be searched first.

Chapter organization should follow a logical flow, with the more basic information leading into more comprehensive details. I agree with those who think that the receiver chapter needs a total rewrite. Most of the information one would want is there, but it is so scattershot that it is difficult to access quickly or absorb coherently.

Both the receiving and transmitting chapters need to be tied to the modulation chapter, and that needs to be expanded to cover demodulation more throughly. There is an unfortunate tendency in both the receiving and transmitting chapters to make assumptions about the sort of modulation which will be employed which aren't always justified today.

Gary

Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4411. Re: AD607 Question. Info on QAM demodulation needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <JM0mVAA+aZa0Ewo9@lfheller.demon.co.uk>
Source record: 89195

In article <oAuu22AW2Va0EwsA@lfheller.demon.co.uk>, Leon Heller
<leon@lfheller.demon.co.uk> writes
>In article <19971111223901.RAA03281@ladder01.news.aol.com>, MTNCLIMB
><mtnclimb@aol.com> writes
>>Howdy,
>>
>>I am working on a 20 meter superhet receiver and am using the AD607 as the
>> mixer, IF, and demodulator stages. It is designed to demodulate QAM, it has
>> "In-Phase" and "Quadrature" modulation outputs. The data sheets say that the
>> chip will demodulates ssb and cw as well. I assume that by applying a BFO
>> signal to the demodulator that is tuned to the IF will yield the SSB signal at
>> the In Phase output, where I can go straight to the audio chain. Has any body
>> used this chip in a CW or SSB application? Any info at all will be reatly
>> appreciated, thanks.
>
>This chip is usually used to feed the I and Q outputs into a DSP, where
>any type of demodulation can be done in software.
>

Sorry, I should have checked the AD607 data sheet before sending the
above. It is obviously intended for use with special baseband
converters.

As I read the data, for SSB you need to phase-lock your BFO to the
internal VCO, by feeding it to the FDIN pin, instead of the IF, which
would be used for AM demodulation. I don't think that you be able to get
away without the phase-locking, because the internal VCO will then be
free-running.

A DSP could be used, of course, as I suggested, to do the SSB
demodulation on the I and Q baseband outputs; you wouldn't need the
phase-locked BFO in that case.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 4412. Re: Does Solar Panel Need Regulator Before Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3469f404.925350325@news.atl.bellsouth.net>
Source record: 89196

On 11 Nov 1997 18:43:17 GMT, "DavidC" <davidc@bit-net.com> wrote:

>I have acquired a gel-cell 12v battery (big one, similar in size to deep
>cycle marine battery).
>I have also acquired a 12V 1A solar panel. If I want to trickle charge the
>gel-cell, do I need to protect the battery with a regulator of some sort?
>I understand that gel-cells have a "attitude" about a too-high charging
>voltage. (Ooops, anthropomorphizing alert!)
>Suggested circuit, please?

If the panel has a reverse polarity diode in it (and most intended for
battery charging do), then just hook it to the battery and walk away.
If it doesn't have the reverse diode, install one. This prevents the
battery from discharging through the solar panel when there is a
LOLI (Loss of Light Incident).

The reason you can do this is that the 1 amp rating is the *short
circuit* current rating of the cells. It won't be able to deliver that
much current at 12 volts. In bright sunshine, a 12 volt panel will
produce about 18 volts *no load*, but even a light load will drop
the voltage down near 12 volts. So it is inherently self-limiting when
connected to a large gell cell.

Note that a 12 volt 1 amp panel is *not* a 12 watt panel. The ratings
on these things don't work that way. You don't get *both* 12 volts
and 1 amp at the same time. A 12 watt panel would have a much
larger short circuit current than 1 amp. But even a 12 watt panel
won't harm a large automotive size gell cell. If you had a 50 watt
panel, you'd need a charge controller.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4413. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3469f1ec.924814209@news.atl.bellsouth.net>
Source record: 89197

On 12 Nov 1997 07:56:57 GMT, marc_k@walrus.com (marc_k) wrote:
>K5KNE (k5kne@aol.com) wrote:
>: You might consider some of the little direct conversion receivers that are
>: popular with QRP people. They work pretty good and are quieter than regen
>: receivers.
>
>On the other hand, with a regen, you could send CW using the same unit
>:-)

Noting the smiley, if you must send CW, you can do it with the DC receivers too since their LOs are on frequency, but only when you want to, and not all the time. That's the problem with the regen, unless it is fronted with a good unilateral front end, it radiates madly all the time. (DC receivers can radiate too, if they aren't designed properly, but a good DBM does offer some isolation not present in the simple regens.)

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4414. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EJJtvn.AGw@world.std.com>
Source record: 89198

Ed W1RFI wrote:

> First, I have taken the liberty of forwarding your comments on to the
> current Handbook editor. This kind of frank assessment is useful to us.
> I wish more folks would offer us constructive feedback.

I'd suggest the Hanbook not try to compete with Horowitz and Hill's Art of Electronics, but rather referencing that book and an equivalent book for RF (is Hayward's ARRL press RF Design book _the_ book? I'd hoped Carr's RF book was, but it's just a colleciton of magazine articles. If Hayward's isn't the A of E of RF, we need one!).

> I will note, however, that I don't think the points you raised
> necessarily apply to all of the chapters.

Agreed, I've found some of the chapters useful, without significant prior background. Whether the Handbook should be a tutorial or a reference or a dual purpose book is the key question. Even though I'm a beginner on the hardware side, I'd recommend the handbook being a reference volume with other books supplying the tutorial.

In the old days, the Handbook (perhaps together with the license study book that taught you about Pierce oscillators etc) were all one really needed to learn what you needed _and_ to keep working on it; it can't be so today.

The handbook should NOT look like a shovel-ware collection of QST articles loosely sorted by topic (which I think is the criticism levelled at the Receiver section, if I'm not mangling it); this is appropriate for the Antenna Compendia books, but as you, Ed, correctly note, the editors of Some sections take care to truely edit the section into a coherent whole, and we would like to see the rest of the Handbook so well organized, with a sensible progression of the material in each chapter/section. But it is fair to assume basic electronics in the projects sections.

I just renewed my ARRL membership yesterday, and added QEX subscription, so I'll (hopefully) get some decent projects to read in addition to the magazine that every month tells me how great CW is. Now I gotta go through all the ARRL pubs I've got and clip the litte coupons so I can get my member discount on the rest of the books I need (starting with Hayward, I think, but also the rest of the Compendia volumes).

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 4415. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EJJuqr.3sB@world.std.com>
Source record: 89199

In article <4m90uux5oe.fsf@spinner.ecofe.com>,
John Mock <kd6pag@nospam.mocha.ecofe.com> wrote:
> Why not use the TenTec 1208 Transverter? This will allow a multimode HF
> rig (via 20 meters) to receive and transmit 6. (It is a kit, $95.)

> Please don't assume everyone has HF gear.

It's perfectly legal for a Tech-minus (like me) to OWN an HF
transciever (as I do) and operate it into a dummy load (will need to
when it gets its turn on the bench) or a transverter (I don't,
probably won't). And HF multimodes usable as IF's are a lot cheaper
used than the VHF/UHF multimodes one sees used!

> The point of the question was
> to look for ways for a Technician to get beyond FM-only operation. If you
> *have* to suggest HF, at least choose a band with Tech Plus privileges.

As previously noted in another thread, the 1208 was put on 20m
because 10m has a harmonic that's hard to filter on 6m.
You can go from 10 to 2 or 440 but not to 6 easily.

> With a six meter transciever, the transverters to other UHF

I thought most WS transverters used a 144-148 IF. This is why
I bought an ancient 2m multimode when I saw one cheap, because
it had NFM, WFM, USB, LSB, and CW. (Probably a collector's
item, who's ever heard of a Fukuyama/ITC Multi-2000 ? :-) I
gotta retrobrew a PL and selectable filter sizes into it (I
think it's got the same RX filter for NFM and WFM, and rumor
is we're going to shift from mixed 15/20kc spacing to 12.5kc
on the repeaters. I'm already getting too much co-channel
from repeaters up 20kc as it is!)

> sense. Hence the request for kit/homebrew suggestions for 6 meters (besides
> the excellent state-of-the-art R2/T2 pair).

Sounds like you've given your own answer? (Or are they FM only?)

The assumption does seems to be that Homebrew/kitbrew is either (a) CW
or (b) based on a commercial SSB/FM IF radio. Homebrew/kit for SSB are
few and far between, and little enough for VHF+ too. (After all,
it's well known that Tech-Minuses grabe the wrong end of the
soldering iro ?-( )
Far Circuits has an index of magazine projects for which they have
circuit boards and reprints; it's a pretty good list of what
projects have appeared lately.
There's some activity -- in Cuba and elsewhere -- in homebrewing HF

DSB-SC , which should be applicable to VHF too. I think the NE-612
would work in that applicatoin.

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

# 4416. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <64dcq5$mre@hpcvsnz.cv.hp.com>
Source record: 89200

Gary Coffman (ke4zv@bellsouth.net) wrote:

: That's the problem with the regen, unless it is fronted with a good
: unilateral front end, it radiates madly all the time.

Gee, regens have kind of passed out of my vocabulary, but my recollection is that a regen doesn't radiate...a superregen does. Have I just forgotten?? I'm thinking of a regen as an RF amplifier with positive feedback below the point of oscillation, with something to detect the RF amplitude in its tank, and a superregen as a gated oscillator, where the amplitude of the osillation at the end of the gate time is proportional to the RF (signal level) in the tank at the start of the gate.

--
Cheers,
Tom
tomb@lsid.hp.com

# 4417. 2m MC3362 receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Suleyman Yalcinkaya <suleyman@netas.com.tr>
Message-ID: <3469844D.5D3A@netas.com.tr>
Source record: 89201

```
This is a multi-part message in MIME format.

--------------62006A7E4831
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

hi all,
I try to make 2m receiver with motorola MC3362 but I didn't prepare
LO OSC L(0.41uH) C(33p) connected PIN 21 and 22.

Does anybody know which component (L and C) i can use for the
144-148 MHZ or how do i calculate value of L and C.

73's

mailto:suleyman@netas.com.tr

--------------62006A7E4831
Content-Type: image/gif; name="3362.gif"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="3362.gif"

<encoded_portion_removed>
cA33cBE3cRV3cRm3cR33cSE3ciV3cim3ci33cu2jAAAAOw==
--------------62006A7E4831--
```

# 4418. Essay Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: "Edward, III Dickinson" <eddick@worldnet.att.net>
Message-ID: <64cgoq$od4@bgtnsc03.worldnet.att.net>
Source record: 89202

The following table is contained in an article in October 1997 QST, 'Official Journal of The American Radio Relay League'. The article, "What's New About the FCC's New RF-Exposure Regulations?", by Ed Hare, W1RFI, is on pages 51 and 52.

Table 1
Power Thresholds for Routine Evaluation of Amateur Radio Stations

| Band (Wavelength) | Transmitter Power (W) |
|---|---|
| 160m | 500 |
| 75m | 500 |
| 80m | 500 |
| 40m | 500 |
| 30m | 425 |
| 20m | 225 |
| 17m | 125 |
| 15m | 100 |
| 12m | 75 |
| 10m | 50 |
| 6 - 1.23m | 50 |
| 70cm | 70 |
| 33cm | 150 |
| 23cm | 200 |
| 13cm and up | 250 |

ESSAY QUESTION

Compare the frequencies aligned with lower power thresholds with those which may be useful to Low Earth Orbit satellites. Include in your discussion the implications of non-structured communications verses a potential preponderance 'organizationally prepared' information. Discuss the ramifications of this with the potential dampening of freedom of communication throughout the world. Additionally, discuss the idea of vertically integrated information processing entities dominating the RF Spectrum. References to other recent restrictions on the airways, may be included.

As you see fit, please post this 'essay question' where it may be viewed by Radio Amateurs and interested others.

'Only the Paranoid Survive'
- Andrew Grove

'The price of freedom is eternal vigilance.'
- Thomas Jefferson

# 4419. Re: PS Heating Up Charging Battery - Concern?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: charles1@netcom.com
Message-ID: <charles1EJJJ1J.KrG@netcom.com>
Source record: 89203
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <01bcef0c$4dd9d9e0$0b8a92d0@bitnet.bit-net.com>,
DavidC <davidc@bit-net.com> wrote:
>I recently acquired a used gel-cell battery. It is a large (car battery
>size).
>It measured just under 9v when I got it. I connected a 2.5A 13.8v Micronta
>PS I had laying around and started the charging process. After several
>hours the battery was up to 11v.
>My concern is that the PS is getting very hot, should I have diodes in the
>charging line or something to protect the PS, or is the process of bring
>the voltage back up in the battery just unusually taxing on the PS?

You need to limit the current to 10%-20% of the batteries ammp/hour
rating (for nicad and probably most others). Heat damages batteries.

You can limit the current with a LM317 voltage regulator, as long
as you run less than 1 amp. Radio Shack has them. You can wire them
up with one additional resitor to make them a current regulator.

>Oh, and my meter is unable to measure the amperage over 600MA, what
>inexpensive metering setup would be good to monitor this battery - the goal
>is to keep a trickle charger (the Micronta?) on it.

Jerry rig a 1/10 ohm resistor (you could use coil of wire).
Put it in series with battery and charger. Measuring voltage
across it will tell you the current.

# 4420. FS: Triad TY-84 power supply transformer & pulled tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: xmoox@xmidtownx.xnetx
Message-ID: <xmoox-1211971846020001@sl7.midtown.net>
Source record: 89204

For sale: Triad TY-84 power supply transformer for 12.6 volt DC mobile power supply, DC input 12.6 volts, DC output 600 volts 200 ma, *Average Switching Frequency* 2500 cps. Commonly used in 1960s power supplies. Nice to have if you want to use an old mobile tube tx in your car/rv. $20. Also: 7 tubes pulled from junker tx, 0A2, 6DE7, 12AX7 (Mullard!), 6AU6, 6CL6, 5763, 6146. All test good except 0A2 and 5763 which couldn't be tested. $40. All obo. Remove spamblock xs to reply.

# 4421. FS: 8 henry @ 1.25 amp Filter Chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-12 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <346AB103.CF1262CC@connect.net>
Source record: 89205
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Electronic Corp. of America (Henry) filter chokes in like-new condition.

Rating above is CCS. $50 each, FOB Dallas area.

Phil, K5PC

## 4422. WTB TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh6n$fef$8@newsfeed.smartt.com>
Source record: 89120

epirtyak_at_bcinternet.com
change the "_at_" to @ to fix my email adress

Net-Tamer V 1.09.2 - Test Drive

# 4423. WTB TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh7a$fef$12@newsfeed.smartt.com>
Source record: 89121

My name is Eric and I am looking to buy some radio tubes. If you are retired

from repairing radios and have a bunch of tubes left over, I would like to talk to you so I can make an offer. You can EMAIL me or call me on the phone

at: 250-868-1182 in Kelowna BC Canada in voice or fax.
You can email me a list of what you have and we could dicker a price from that.
Thank you for your consideration. Eric Pirtyak..VE7BWP..

# 4424. WTB TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh72$fef$10@newsfeed.smartt.com>
Source record: 89122

My name is Eric and I am looking to buy some radio tubes. If you are retired

from repairing radios and have a bunch of tubes left over, I would like to
talk to you so I can make an offer. You can EMAIL me or call me on the phone

at: 250-868-1182 in Kelowna BC Canada in voice or fax.
You can email me a list of what you have and we could dicker a price from
that.
Thank you for your consideration. Eric Pirtyak..VE7BWP..

epirtyak_at_bcinternet.com
change the "_at_" to @ to fix my email adress

Net-Tamer V 1.09.2 - Test Drive

## 4425. tyrtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh6e$fef$4@newsfeed.smartt.com>
Source record: 89123

epirtyak_at_bcinternet.com
change the "_at_" to @ to fix my email adress

Net-Tamer V 1.09.2 - Test Drive

## 4426. epirtyak_at_bcinternet.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh68$fef$2@newsfeed.smartt.com>
Source record: 89124

Hi! my name is Eric,I am interested in buing your tubes inventory.
If you want to retired or you are just tired of it please contact me.
PH/FAX (250)868-1182 THANKS

epirtyak_at_bcinternet.com
change the "_at_" to @ to fix my email adress

Net-Tamer V 1.09.2 - Test Drive

# 4427. WTB TUBES.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh6g$fef$5@newsfeed.smartt.com>
Source record: 89125

rtyu
Net-Tamer V 1.09.2 - Test Drive

# 4428. WTB TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh6m$fef$7@newsfeed.smartt.com>
Source record: 89126

opoo.
Net-Tamer V 1.09.2 - Test Drive

## 4429. eeee

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh6b$fef$3@newsfeed.smartt.com>
Source record: 89127

fghgf
Net-Tamer V 1.09.2 - Test Drive

# 4430. WTB TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh6k$fef$6@newsfeed.smartt.com>
Source record: 89128

Net-Tamer V 1.09.2 - Test Drive

## 4431. epirtyak_at_bcinternet.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh65$fef$1@newsfeed.smartt.com>
Source record: 89129

Hi! my ame is Eric,I would be interested in buying your tubes surplus
or your whole inventory for whatever reason,you retired or you are
cleaning your shack,just contact me Eric. PH/FAX (250)868-1182 Thanks.

epirtyak_at_bcinternet.com
change the "_at_" to @ to fix my email adress

Net-Tamer V 1.09.2 - Test Drive

# 4432. WTB TUBES.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64fh6r$fef$9@newsfeed.smartt.com>
Source record: 89130

My name is Eric and I am looking to buy some radio tubes. If you are retired

from repairing radios and have a bunch of tubes left over, I would like to
talk to you so I can make an offer. You can EMAIL me or call me on the phone

at: 250-868-1182 in Kelowna BC Canada in voice or fax.
You can email me a list of what you have and we could dicker a price from
that.
Thank you for your consideration. Eric Pirtyak..VE7BWP..

epirtyak_at_bcinternet.com
change the "_at_" to @ to fix my email adress

Net-Tamer V 1.09.2 - Test Drive

# 4433. Re: class E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <C32C08E8383722E4.75A78C8C627312E3.3C1B056CBBD228A5@library-proxy.airnews.net>
Source record: 89131

On Thu, 6 Nov 1997 16:33:52 -0500, "Weidner" <weidner@kwiknet.net>
wrote:

>has anyone built the Class E amp described in May/June 97 issue of QST?

No, but I did do an analysis on the first amp's network values
published and found them not to be correct. In a much older post
somewhere I did publish the correct values for the 300W amplifier if
it is to be actually in Class E.

Fred, W8OY
jfriley@airmail.net

# 4434. Re: wood construction help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <64figb$in9$1@rosenews.rose.hp.com>
Source record: 89132

MailfrmPA (mailfrmpa@aol.com) wrote:
: >I am working on re-building an old crystal controlled, CW tube transmitter

: >How do you mount the tube sockets?

: I like to make the front panel from masonite: when painted it gives a very
: hansome gloss look. You can contact cement aluminum foil to the back side.
: There used to be tube sockets made for the breadboard. They mounted flat with
: the connect-lugs comming out at a right angle. I'll bet you could still find
: them at a good size hamfest, but in the meantime, I have used chassis-type
: sockets mounted to the breadboard using standoffs and wood screws. Again, if
: you begin by gluing aluminum foil to your board you will have a decent planar
: ground. In the "old days" the grounding was handled by heavy bare
: wire...called the "ground buss."
: Hope this helps some,

: K0MB

I put together a TRF broadcast radio together on a piece of pine.

I used 8-pin wafer sockets for the tubes and simply bent the pins
outward so they sit pretty. Wood screws through the mounting holes
kept them in place. If your are worried about looks, try using
the wafter sockets (cheaper) or the phenolic sockets with standoffs
(avail from radio shaft) and wood screws. The circuit grounds are
all common and you can just pick a point to which you attach a
fahnstock (sp? sheesh sorry) clip and go the the ground rod or
cold water pipe (with on pvc in line with it anywhere of course).

To mount the tuning capacitor and vol controls, just used small
pieces of aluminum angles. Of course, you could also just come
up from the bottom of the pine to secure the tuning capacitor if
it is constructed that way. For a dial, I just used a piece of
thin acrylic and used dry transfer for the markings then krylon
sprayed it clear.

I used the old shouldered 6K7G type pentodes for rf amps etc...
so my sockets were the old 8-pin type, but you can do the same
thing for 7 and 9 pin projects too!

I wound the interstage coils using enameled #24 wire on
toilet paper tubes.

I also later built a superhet using 7-pin AA5 lineup, wound my
own IF coils using #30 wire on acrylic rods (no shield) and
also the oscillator coil was done this way, bank-wound.

They both work great. The superhet was built on an aluminum
chassis with an acrylic front panel and I included an S-meter.

I hope you have as much fun as I did building your rig on pine!!!
They look cool too.

Your pal, tony

"What good is it?"
-It's coming from out there.
"Out where?"
-Space.
"Just Space?"
"You have spent thousands of dollars on
transistors...and...and...circuits and
cathode ray...what good is it?"

-Well, it's..... interesting.
~cliff robertson, Galaxy Being, THE OUTER LIMITS

# 4435. Re: class E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: dunnt@cco.caltech.edu
Message-ID: <dunnt-1311971840120001@tom-dunn.caltech.edu>
Source record: 89133

In article <63td70$681@surf.kwiknet.net>, "Weidner" <weidner@kwiknet.net> wrote:

> has anyone built the Class E amp described in May/June 97 issue of QST?

Give this a try for more info or questions. See bottom of WEB page for questions

http://www.systems.caltech.edu/EE/Faculty/rutledge/poweramp.html

73 Tom WB6IQD dunnt@cco.caltech.edu

# 4436. FS: Eimac 3CX3000A7, socket, chimney, and more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <346BCC71.9138DA74@connect.net>
Source record: 89134
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Eimac 3CX3000A7, very low time; date code 8926. Have socket, chimney,
filament transformer, blower, filament choke, plate choke, parasitic
suppressor,
and anode strap. Will sell all for $550, or any part. FOB Dallas area.

(((73)))
Phil, K5PC

# 4437. Re: Spread Spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4maff8nnmu.fsf@spinner.ecofe.com>
Source record: 89135
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

>> It is my understanding that an article about the Slovenian system was
>> submitted to QEX, but not published.

Please also see:

http://lois.kud-fp.si/hamradio/packet.html

And if you live in the greater S.F. Bay area and are interested in what
you read there, please write via at my callsign at 'qsl.net' (or remove
"nospam" from the "From:" Address).

Gary, thanks for pointing out the 1.2Mg work to me. I don't think
i've looked at this site after the 1.2Mb material was added. Their
new network map is certainly impressive!

http://lois.kud-fp.si/hamradio/prmap.html

I'm interested in whether the AD607 might be used to make a simplified
version of this, not necessarily at 1.2Mb (such as at LocalTalk speeds
(~250 Kb??), which would plug directly into a Macintosh or a PC LocalTalk
card). I'm also interested as to whether the Manchester card might be
suitable for medium-speed packet at 70cm. Or whether some of the 2.4Gb
chips might be applicable, especially the ones for the European cellular
standards (e.g. non-spread digital).

-- KD6PAG (Networking Old-Timer, RF newbie)

P.S. Gary, thank you for explaining what is my major motivation for
learning about RF design/construction.

# 4438. Re: Wanted 6-M KW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: homemade <pe1khp@pi.net>
Message-ID: <346AB708.70AD@pi.net>
Source record: 89206

Ken Gentry wrote:
>
> WHER CAN I FIND 6-M KW AMP'S? ANYTHING LET ME NOW OF ANYTHING..
> KEN KC4VAR@WORLDNET.ATT.NET

You get more DX feelings with 10 watts....

--
Cuagn, Adriaan
.oooO
( ) Oooo. VHF DX AmateurRadio Station
---\ (----( )--
_) ) / PE1KHP JO22XE
(_/
---
Ham site Apeldoorn http://home.pi.net/~adpe1khp/home.htm
Veron Afdeling Apeldoorn http://home.pi.net/~adpe1khp/v05.htm
VERON VHF-UHF commissie http://home.pi.net/~adpe1khp/vhf.htm
---
Ik wou dat ik een vulkaan was. Dan lag ik in de zon te roken
en dan zou men zeggen: "Kijk, hij werkt!"
---

# 4439. Re: Does Solar Panel Need Regulator Before Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <64dgie$s6q$1@news1.teleport.com>
Source record: 89207

In article <3469f404.925350325@news.atl.bellsouth.net>,
ke4zv@bellsouth.net (Gary Coffman) wrote:

>The reason you can do this is that the 1 amp rating is the *short
>circuit* current rating of the cells. It won't be able to deliver that
>much current at 12 volts. In bright sunshine, a 12 volt panel will
>produce about 18 volts *no load*, but even a light load will drop
>the voltage down near 12 volts. So it is inherently self-limiting when
>connected to a large gell cell.
>
>Note that a 12 volt 1 amp panel is *not* a 12 watt panel. The ratings
>on these things don't work that way. You don't get *both* 12 volts
>and 1 amp at the same time. A 12 watt panel would have a much
>larger short circuit current than 1 amp. But even a 12 watt panel
>won't harm a large automotive size gell cell. If you had a 50 watt
>panel, you'd need a charge controller.

Sorry I didn't respond to the original posting -- it hasn't arrived here
yet.

Solar panels typically do deliver a sizeable fraction of their
short-circuit current into a battery. They're essentially constant-current
sources, although a bit sloppy.

One small panel I have, apparently intended for charging "12 volt"
batteries, is probably typical:

Open-circuit voltage 20.7 V.
Short-circuit current 0.3 A.
Current into 14.2 V. = 0.24 A.

Roy Lewallen, W7EL

# 4440. FS- Shortwave/Scanner owners/service manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: bush143@postoffice.worldnet.att.net
Message-ID: <346a5baf.4033276@netnews.worldnet.att.net>
Source record: 89208
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amatuer.misc,rec.radio.amateur.homebrew

>>>>>I have a bunch of excess radio manuals for sale. Some are originals
>>>>>and some are photocopies. All of the original manuals are in MINT
>>>>>condition. All photocopies were professionally made copies purchased
>>>>>from the manufacturer, and are either bound or in binders. ALL
>>>>>MANUALS INCLUDE SCHEMATICS AS INCLUDED FROM THE MANUFACTURER!
>>>>>
>>>>>These manuals are being sold to clear out my radio shelf. Shipping is
>>>>>extra. Some manuals are thick and some are thin, but it should not
>>>>>take more than a few bucks to ship any of these manuals to the lower
>>>>>48 States. Please e-mail if interested and I will provide an estimate
>>>>>on shipping. Thank You!!!!!
>>>>>
>>>>>SCHEMATICS & BOARD-PARTS LAYOUTS (originals):
>>>>> Icom R-70 $10
>>>>> Icom R-71/71A $10
>>>>>
>>>>>OPERATIONS/OWNERS MANUALS:
>>>>> AOR-3000A (original) $15
>>>>> J.I.L. SX-400 and J.I.L. RF-1030 rf up converter (copy) $15
>>>>> Kenwood R-1000 (copy) $10
>>>>> Radio Shack Pro-2004 (original) $10
>>> Sony CRF-V21 (copy-two volume set) $20
>>>>> Sony 2010 (original) $10
>>>>> Sony Pro-80 (copy) $10
>>>>> Yaese FRG 8800 (original) $15
>>>>> Yaesu FRG 9600 (original0 $10
>>>>>
>>>>>SERVICE MANUALS:
>>>>> Radio Shack Pro-34 (original) $20
>>>>> Radio Shack Pro-2004 (original) $20
>>>>> Sony 2010 (copy) $10
>>>>> Sony SW-55 (original) $10
>>> Yaesu FRG-9600 (copy) $25
>>>>>
>>>>>RACAL TECHNICAL MANUAL: $25 (shipped)
>>>>> Covers model RA-6217A, 6217A-3, 6217E
>>>>> This thick manual includes parts list, circuit pictorials and
>>>>> alignment procedures. (copy)
>>>>>
>>>>>
>>>>>
>>>>>
>>>>

>>>
>>
>

# 4441. Re: help re: typ 5633 output impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971113020100.VAA15093@ladder02.news.aol.com>
Source record: 89209

Are you sure the tube is a 5633? I can't find the 5633 in any of my ARRL handbooks or RCA tube manuals (rx and tx). The 5933, however, is quite common - it's just an improved 807. The 5933 (also called 807W) has a 5 pin base and a plate cap.

To answer the output question, the equation I've always used for Class C operation is:

Zout = Vplate/(2 * Iplate)

that is, the plate voltage divided by twice the plate current. For Class B or AB, the multiplier of 2 is reduced to 1.75 or so. This gives a working Q of 12 or so.

Good luck! Rig here uses a pair of 807s at full ICAS ratings (150 watts input) and I get at least 100+ watts out.

73 de N2EY

## 4442. MC1542 pinout & specs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: provero@connix.com
Message-ID: <64dnq3$ga7@beast.connix.com>
Source record: 89210

Am repairing a Sylvania HF receiver that uses MC1542
for audio amps. Any pointers to a pin out/specs on the
net? It's not listed on several IC web search sites or
in the latest Tech America/Radio Shack catalogs.

Thanks in advance,

P.J. "Josh" Rovero email: provero@connix.com
Oceanographer work: rovero@sonalysts.com
Meteorologist web: http://www.connix.com/~provero
Curmudgeon at Large radio: KK1D

# 4443. Re: Old Transformer Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: tangerame@aol.com
Message-ID: <19971113062201.BAA13143@ladder01.news.aol.com>
Source record: 89211

Thanks to all who offered advice. 400 to 1000 cycle not 60.....
Well it was in small print....

BCNU Tony WA6LZH

# 4444. Re: AD607 Question. Info on QAM demodulation needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971113083101.DAA19559@ladder02.news.aol.com>
Source record: 89212

>Sorry, I should have checked the AD607 data sheet before sending the
>above. It is obviously intended for use with special baseband
>converters.
>
>As I read the data, for SSB you need to phase-lock your BFO to the
>internal VCO, by feeding it to the FDIN pin, instead of the IF, which
>would be used for AM demodulation. I don't think that you be able to get
>away without the phase-locking, because the internal VCO will then be
>free-running.
>
>A DSP could be used, of course, as I suggested, to do the SSB
>demodulation on the I and Q baseband outputs; you wouldn't need the
>phase-locked BFO in that case.
>
>Leo

Thanks for the info Leon, I think I will be okay by just building a simple
Crystal oscillaor BFO operating at the IF minus 1.5 kHz for USB. The output
of this oscillator will be applied to FDIN . Does this seem reasonable to you?

# 4445. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <346b12a8.998741650@news.atl.bellsouth.net>
Source record: 89213

On 12 Nov 1997 23:06:45 GMT, tomb@lsid.hp.com (Tom Bruhns) wrote:
>Gary Coffman (ke4zv@bellsouth.net) wrote:
>
>: That's the problem with the regen, unless it is fronted with a good
>: unilateral front end, it radiates madly all the time.
>
>Gee, regens have kind of passed out of my vocabulary, but my recollection
>is that a regen doesn't radiate...a superregen does. Have I just
>forgotten?? I'm thinking of a regen as an RF amplifier with positive
>feedback below the point of oscillation, with something to detect the
>RF amplitude in its tank, and a superregen as a gated oscillator, where
>the amplitude of the osillation at the end of the gate time is
>proportional to the RF (signal level) in the tank at the start of the
>gate.

If AM is your game, you're right Tom, the regen is kept at the point
just before oscillation sets in, which can be darn hard to do, and the
howling when it falls into oscillation can blow the cans right off your
ears. But if you're receiving SSB/CW, then you have to deliberately
put it into oscillation to demodulate the signal. Since you won't find a
lot of AM on the ham bands today, your regen will be operated as
an oscillating detector.

Because the regen was hard to maintain right at the edge of oscillation
(because a signal can pull it over the threshold), the superregen was
developed. It has a quench circuit which forces the oscillating stage
to quench back out of oscillation at an ultrasonic rate. That avoids
some of the pulling problems and makes adjustments less critical.
Of course it radiates like mad too.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4446. Returned mail: unknown mailer error 1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: MAILER-DAEMON@tweety.DEv.ict.NL
Message-ID: <199711131830.TAA18889@tweety.dev.ict.nl>
Source record: 89214

```
This is a MIME-encapsulated message

--TAA18889.879445805/tweety.dev.ict.nl

The original message was received at Thu, 13 Nov 1997 19:30:05 +0100
from root@cerberus.dev.ict.nl [192.168.1.5]

----- The following addresses had delivery problems -----
<jan.van.lienden@asml.ict.nl> (unrecoverable error)

----- Transcript of session follows -----
554 <jan.van.lienden@asml.ict.nl>... unknown mailer error 1

----- Original message follows -----

--TAA18889.879445805/tweety.dev.ict.nl
Content-Type: message/rfc822

Return-Path: Ham-Homebrew@ucsd.edu
Received: from ict.nl (root@cerberus.dev.ict.nl [192.168.1.5]) by tweety.dev.ict.nl
(8.6.12/8.6.12) with ESMTP id TAA18888 for <jan.van.lienden@asml.ict.nl>; Thu, 13 Nov 1997
19:30:05 +0100
From: Ham-Homebrew@ucsd.edu
Received: from duif.dev.ict.nl (duif.dev.ict.nl [192.168.1.7])
by ict.nl (8.8.5/8.8.5) with SMTP id SAA11877
for <jan.van.lienden@asml.ict.nl>; Thu, 13 Nov 1997 18:19:17 +0100
Received: by duif.dev.ict.nl(Lotus SMTP MTA v1.1 (385.6 5-6-1997)) id C125654E.005F86C6 ;
Thu, 13 Nov 1997 18:23:24 +0100
X-Lotus-FromDomain: ICT
Reply-To: Ham-Homebrew@ucsd.edu
To: Ham-Homebrew@ucsd.edu
Message-ID: <C125654E.005F85AA.00@duif.dev.ict.nl>
Date: Thu, 13 Nov 1997 04:31:12 -0800
Subject: Ham-Homebrew Digest V97 #659
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Ham-Homebrew Digest Thu, 13 Nov 97 Volume 97 : Issue 659
Today's Topics:
'Help: D-104 Microphone
6 METER SSB RIG / KIT
AD607 Question. Info on QAM demodulation needed.
Crystal Grinding
Designing Transformers
Help with Relays Please...
Homebrew frustration [was: RSGB manual for Canucks]
Need INfo on Old UTC CG-301 power transformer
```

Old Transformer Questions
Project Kits where?
PS Heating Up Charging Battery - Concern?
Regen Receivers
Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.
Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".
We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---
Date: Thu, 13 Nov 1997 03:46:09 GMT
From: jfriley@airmail.net (J. Fred Riley)
Subject: 'Help: D-104 Microphone
On Wed, 12 Nov 1997 13:57:19 GMT, "G. M. Privette"
<timeblue@bellsouth.net> wrote:
>1. What is the impedance of the D-104 element?
The output impedance of the element is well over 100KOhms. But the
amplifier has an output impedance of only a few hundred ohms, suitable
to drive the lower impedance inputs common on some rigs.

Fred, W8OY
jfriley@airmail.net
---
Date: 12 Nov 1997 14:35:17 GMT
From: ddenter@nospam.ca (Dean Denter)
Subject: 6 METER SSB RIG / KIT
In article <4m90uux5oe.fsf@spinner.ecofe.com>,
John Mock <kd6pag@nospam.mocha.ecofe.com> writes:
> Why not use the TenTec 1208 Transverter? This will allow a multimode
HF
> rig (via 20 meters) to receive and transmit 6. (It is a kit, $95.)
>
> Please don't assume everyone has HF gear. The point of the question was
> to look for ways for a Technician to get beyond FM-only operation. If
you
> *have* to suggest HF, at least choose a band with Tech Plus privileges.
> With a six meter transciever, the transverters to other UHF and above
make
> sense. Hence the request for kit/homebrew suggestions for 6 meters
(besides
> the excellent state-of-the-art R2/T2 pair).
>
There's also the TenTec 2m-6m kit (1206?), it uses whatever you've got
on 2M.
Only problem with this solution is that it's designed for HTs and it only
take 5W in, has anyone tried modifying it for use with a 10W rig?
regards,

Dean.
--
Dean Denter work -> ddenter at nortel dot ca
VA3CDD play -> ddenter at ottawa dot com
[[[[[[[[[[[[[I speak only for myself]]]]]]]]]]]]]
------------------------------
Date: 13 Nov 1997 08:31:32 GMT
From: mtnclimb@aol.com (MTNCLIMB)
Subject: AD607 Question. Info on QAM demodulation needed.
>Sorry, I should have checked the AD607 data sheet before sending the
>above. It is obviously intended for use with special baseband
>converters.
>
>As I read the data, for SSB you need to phase-lock your BFO to the
>internal VCO, by feeding it to the FDIN pin, instead of the IF, which
>would be used for AM demodulation. I don't think that you be able to get
>away without the phase-locking, because the internal VCO will then be
>free-running.
>
>A DSP could be used, of course, as I suggested, to do the SSB
>demodulation on the I and Q baseband outputs; you wouldn't need the
>phase-locked BFO in that case.
>
>Leo
Thanks for the info Leon, I think I will be okay by just building a simple
Crystal oscillaor BFO operating at the IF minus 1.5 kHz for USB. The
output
of this oscillator will be applied to FDIN . Does this seem reasonable to
you?
------------------------------
Date: 11 Nov 1997 17:53:53 GMT
From: k5kne@aol.com (K5KNE)
Subject: Crystal Grinding
It looks like you are getting plenty of responses. I used to move crystals
by
rubbing them on a piece of glass with toothpaste as the grinding compound.
I
put graphite on them with a pencil to move them down. It is almost a lost
art
nowdays.
------------------------------
Date: Tue, 11 Nov 1997 18:08:32 +0000
From: Robin Birch <robin@falstaf.demon.co.uk>
Subject: Designing Transformers
Dear All,
I am interested in building some switch mode supplies. My knowledge of
transformer designs goes as far as turns ratios and stops about there.
What would be a good source for designing such things. Basically I want
to be able to select the appropriate number of turns for a given core,
frequency, voltage change, power etc.

If this is covered by some simple ABACs or software could some one point me in the appropriate direction please. Answers both posted and Email would be appreciated.
Regards
Robin
Robin Birch robin@falstaf.demon.co.uk
M1ASU Old computers and radios always welcome
---
Date: 10 Nov 1997 19:57:28 GMT
From: tomb@lsid.hp.com (Tom Bruhns)
Subject: Help with Relays Please...
Gary Coffman (ke4zv@bellsouth.net) wrote:
(about a remote antenna-switching relay:)
: At the 1.5 kW level, you need a sustain current capability of about
: 3.33 amps for a 450 ohm system, or about 5.48 amps in a 50 ohm
: system. So the relay doesn't have to be that big at all.
(Oops, Gary, I think you forgot the sqrt on that 3.33 ... I get sqrt(1500/450) = 1.82 amps RMS.)
But...beware of voltage! 1.5kW at 450 ohms is about 1200 volts peak (821 volts RMS). And...if the antenna impedance really is higher than that, like a full-wave center fed dipole at maybe 2000 ohms, the voltage would be twice that for that power level. If an arc gets started it only needs a small voltage to keep going. Antenna switches and relays that work in systems where there may be high impedances usually have pretty wide contact spacing, from what I've seen...or operate in vacuum. If in air, they also usually have nicely rounded corners. A point of comparison is air-variable capacitors, which at the few-kilovolt level have fairly wide spacing and rounded edges on the plates.
--
Cheers,
Tom
tomb@lsid.hp.com
---
Date: Tue, 11 Nov 1997 01:15:29 GMT
From: kd9fb@xnet.com (Peter Mikalajunas)
Subject: Homebrew frustration [was: RSGB manual for Canucks]
On Tue, 11 Nov 1997 00:15:20 GMT, LA8AK@nospam.thanks (J M Noeding) wrote:
>On Sun, 9 Nov 1997 22:43:46 +0000, Simon Lewis
><pacsat@pacsat.demon.co.uk> wrote:
>
>Hi
>I got the impression that many designs in the old book was made
>"before the availability of a spectrum analyzer", and now it seems
>that the next book may be after....
>Thanks for you good advices, I will not buy it! How to send notes to
>EMN?
>I printed the november issue today but the text wasn't clear, several
>symbols seems to be unknown for netscape explorer or printer, they
>could not be printed, I got repeatedly through text =20, =91, =92,

>=3D=3D=3D... I did not try to edit it in winword
Those are hex representations of characters:
Hex Decimal Character
20 32 space
91 145 ae
92 146 AE
3D 61 =
Hope this helps a bit.

Peter Mikalajunas
kd9fb@xnet.com
http://www.xnet.com/~kd9fb
---
Date: 11 Nov 1997 22:24:27 GMT
From: n4ij@aol.com (N4ij)
Subject: Need INfo on Old UTC CG-301 power transformer
I have one that may have a shorted winding. Does anyone have an old
catalog that can give me the pin out that tells me what pins shoud
have what voltages so I can verify that it is good or bad?
Thanks, Doug N4IJ
dsnowden@ncdc.noaa.gov
---
Date: 13 Nov 1997 06:22:06 GMT
From: tangerame@aol.com (Tangerame)
Subject: Old Transformer Questions
Thanks to all who offered advice. 400 to 1000 cycle not 60.....
Well it was in small print....

BCNU Tony WA6LZH
---
Date: Tue, 11 Nov 1997 15:42:00 GMT
From: clint.bradford@atdbbs.com (Clint Bradford)
Subject: Project Kits where?
>>Other than Ramsey Electronics...
I just emailed you a 24Kb testfile with SCORES of kit manufacturers.

---
Clint Bradford 909.681.6210 Voice sysop@atdbbs.com
KE6LCS/KAF3359 909.681.6221 BBS ftp@atdbbs.com
---
Date: 12 Nov 1997 15:45:38 GMT
From: dk3410@gnc.net (eddie)
Subject: PS Heating Up Charging Battery - Concern?
I assume the batt. is 12 V so IMHO if it only came up to 11 in 2hrs at 2.5
amps, you have a bad batt.
---
Date: Wed, 12 Nov 1997 22:22:47 -0500
From: Michael Black <blackm00@CAM.ORG>
Subject: Regen Receivers
Your recollection is correct, but...
If you add positive feedback to an amplifier, to get gain and improve

selectity (such as in a q-multiplier), it's not oscillating so it doesn't
radiate.
But for demodulating something without a carrier, cw or ssb you have to
get the carrier (ie bfo) from somewhere. Regen receivers (and
q-multipliers in some designs where they acted as BFO's) get the carrier
by actually going into oscillation. Thus they can radiate.
Since regenerative receivers tended to be built without a preceding RF
stage, in effect the oscillating stage is directly connected to the
antenna. The oscillator in a superhet might not necessarily have a lower
input power than the oscillating detector, but there is a mixer between it
and the antenna, which may or may not isolate the oscillator. And the
higher the IF in a superhet, the further away from the signal frequency
the oscillator is. Thus the bandpass filtering in the front end acts
as a filter between the signal from the oscillator that makes it through
the mixer to the antenna. Of course, there probably have been many a
simple superhet in years gone by that did radiate quite a bit, considering
the simple mixers used and the 455KHz IF.
The superregenerative receiver does radiate all the time since it is
an amplifier on the verge of oscillation, and the quench oscillator (be it
built into the detector or a separate oscillator) kicks it into
oscillation.
Michael VE2BVW
On 12 Nov 1997, Tom Bruhns wrote:
> Gary Coffman (ke4zv@bellsouth.net) wrote:
>
> : That's the problem with the regen, unless it is fronted with a good
> : unilateral front end, it radiates madly all the time.
>
> Gee, regens have kind of passed out of my vocabulary, but my recollection
> is that a regen doesn't radiate...a superregen does. Have I just
> forgotten?? I'm thinking of a regen as an RF amplifier with positive
> feedback below the point of oscillation, with something to detect the
> RF amplitude in its tank, and a superregen as a gated oscillator, where
> the amplitude of the osillation at the end of the gate time is
> proportional to the RF (signal level) in the tank at the start of the
> gate.
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com
>
>
------------------------------
End of Ham-Homebrew Digest V97 #659
******************************

--TAA18889.879445805/tweety.dev.ict.nl--

# 4447. HP 5245L frequency counter circuit diagram.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: johnoz@indy.net
Message-ID: <346b428e.4371454@news>
Source record: 89215

I would like to obtain a circuit diagram for the Hewlett Packard 5245L frequency counter. If you can supply one I will pay copying and postage expenses.

Thanks. John KB9MIE.

# 4448. Re: wood construction help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: kd9fb@xnet.com
Message-ID: <346c8938.6770856@flood.xnet.com>
Source record: 89216

On Mon, 10 Nov 1997 09:45:13 -0800, "Jeff W. Hockert" <hockerj@ece.orst.edu>
wrote:

>I am working on re-building an old crystal controlled, CW tube transmitter
>my grandfather and I started a number of years ago. I would like to build
>this transmitter up on wood, but I'm not familiar with the construction
>techniques (I missed that era of radio by quite a few years ;)
>
>I have several questions. How do you mount the tube sockets? In a sheet
>metal chasis, it's pretty straight forward so the tube is above the metal
>plane and the pins below; I'm not sure how that works with wood.
>
>How do you mount the front panel controls? My thought is to use the same
>heavier wood I plan for the base (1/2"), and to router out "tracks" behind
>the panel controls to make a thinner mounting area.
>
>How do you create a ground? In the original metal chasis, this was no
>problem... the chasis made short ground leads simple and straightforward.
>I have thought about putting a piece of copper on top of the wood base, or
>possibly running several copper strips on the base and connecting them
>together as my ground.
>
>Any suggestions to attractively mount the tubes? I didn't pay a lot of
>attention to this project when I was a kid, but now I am impressed by the
>beautiful simplicity of the tubes and would like to mount them in a 'show
>off" position.

In the very early days of radio, all radios where board mounted. Perhaps the
most famous maker of such radios (AM Receivers) was Atwater Kent.

For a site that is loaded with pictures of the breadboard AK's take a look at:
http://ourworld.compuserve.com/homepages/johnj_Radios/Breadbd.htm

To see how these evolved into beautiful pieces of furniture that a look at:
http://web2.airmail.net/vanew/

Some radio buffs would buy radios with chrome chasis's and have wooden cases
custom built for them. As companies realized there was a broader market for the
radio, they began to bring out radio's at affordable prices for family use.

For a starting point to find these sort of parts:
http://www.antiqueradios.com/resources.shtml#parts

However, I must say, I have not seen these type of tube mounts for sale.
Your best bet is to email the owner of the first site I mention above. He might
be able to direct you to a source for such sockets.

You are only limited by your imagination with this type of project. If you really wanted, you could "manufacture" the tube mounts yourself.

Hope this helps,

Peter Mikalajunas
kd9fb@xnet.com
http://www.xnet.com/~kd9fb

# 4449. 2.5GHz 300Watt Circulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: Jabran Soubeih <soubeih@expert.cc.purdue.edu>
Message-ID: <Pine.SOL.3.91.971113123744.12350B-100000@expert.cc.purdue.edu>
Source record: 89217

Hello everyone,
I need a circulator to operate at 2.5Ghz capable of 300Watts.

thanks,
Jabran

# 4450. HAM RADIOS FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-13 00:00:00 UTC
From: WHAT A DOLL !!!! <restar@idir.net>
Message-ID: <01bcf060$27f18e80$6df3efcf@restar.idir.net>
Source record: 89218
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
-- Amateur Radios
FOR SALE
FT 757GXI I= $900
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net
```

# 4451. New Radio Communications Mailing Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: jpoulin@honk.orgNOSPAM
Message-ID: <346babf3.122625876@news.on.rogers.wave.ca>
Source record: 89136

New HAM/Amateur Radio, Antenna, & Scanner mail lists !

I have created 3 new mailing lists for anyone who is
interested in radio communications. They are brand new.

If you are interested in joining any of the above mailing
lists, please visit http://www.honk.org/ham/lists

All lists are free for your enjoyment.

Thanks,

73's

James Poulin
VA3JPX

# 4452. F.S. - NOS tubes - much more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971114060600.BAA27310@ladder02.news.aol.com>
Source record: 89137

FOR SALE: NOS Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco, and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1650 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #1010-T.

# 4453. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <Dpi$PNAbpAb0EwTz@ifwtech.demon.co.uk>
Source record: 89138

Rob wrote:
>
>The book needs a decent index. I believe that word processors now exist.
>My $50 Nisus writer will cross index every word of a text.

That isn't an index - it's a list prepared by a brainless computer.
Professional indexers do use computers, of course, but they use
specialist software. The so-called "indexing" features of word-
processors don't give them what they need.

A good index needs a lot of creative human input to identify which key-
words readers will want to look for. The key-words often don't exist in
the main text at all (eg condensers - see capacitors) so only the
indexer can think to include them. Only a real, human indexer can find
the optimum balance between length and detail.

>If you want a good example, see
>the Radiotron Handbook, fourth edition. Back then they did it manually.
>
Exactly my point!

>I can seldom find what I am looking for by looking in the ARRL Handbook
>index.

That can happen, when the reader and the indexer have totally different
ways of your way of thinking about the subject. It usually indicates
that the reader has an individualistic, original and quirky turn of mind
:-)

> Plus index listings for the References section frequently list the
>wrong page.

At last we agree - there's no excuse for that.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 4454. For Sale Kenwood Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: Bob Churchray <churchrr@home.com>
Message-ID: <64hnpv$ca3$1@ha2.rdc1.pa.home.com>
Source record: 89139

For sale
Kenwood TR-751A 2 meter allmode transciever
usb/lsb/cw/fsk 10w low pwr 25w high pwr
comes with mobile bracket, service manual, tone board, dtmf mic
Great Condition!!
$500.00

Also:

Kenwood TM-733A Dual Band Mobile 2meters 70cm
5/10/50 w 2m-- 5/10/40 w 70 cm
Boxes, Manuals, mobile bracket, DTMF Mic, 6 months old, still under
warranty.
Mint Condition!!!
$425.00

N3MQP Bob
215-830-8775
churchrr@home.com

# 4455. Re: Does Solar Panel Need Regulator Before Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: aswNS@hamp.hampshire.edu
Message-ID: <346c75be.0@192.33.12.30>
Source record: 89140

On 11 Nov 1997 18:43:17 GMT DavidC (davidc@bit-net.com) wrote in rec.radio.amateur.homebrew:

: I have acquired a gel-cell 12v battery (big one, similar in size to deep
: cycle marine battery).
: I have also acquired a 12V 1A solar panel. If I want to trickle charge the
: gel-cell, do I need to protect the battery with a regulator of some sort?

Solar arrays have a voltage-current characteristic which allows them to be short-circited at one extreme. At the other extreme of no load the voltage soars. Typically a panel designed to charge a 12 volt battery will have an open circuit voltage of 18 to 20 volts. But a relatively small current drain will drag this down a lot.

To decide if a regulator is necessary you need to measure the current the cell delivers into your battery at its fully charged voltage (from 13.6 to 14 volts). If this is greater than the permissible trickle charge you should arrange a high voltage cutoff circuit, as mentioned in other replies. Alternatively, see if the voltage soars unacceptably when the array in full sun is connected to a fully charged battery. At the other end, excessive battery discharge is bad for lead-acid cells, although the type of battery you are using is not as vulnerable as an automotive starting battery. If there is danger of your equipment discharging the battery below an acceptable level you should also have a low-voltage cutoff.

The exact details of acceptable discharge level and maximum voltage under trickle charge conditions vary a lot between different types of batteries, you would do well to try to get technical specs for your particular battery.

All solar cells put out between 0.45 to 0.5 volts per cell under no load in full sun, but how they are connected in arrays varies. I am using an array with 33 cells, and feel a controller is needed because the voltage will soar to well over 15 volts when my battery is fully charged without a controller. Other arrays are made with fewer cells, and are sometimes designated as self-regulated, meaning they are designed to be unable to overcharge the particular type of battery they are intended to be used with. Some arrays have a diode built in. This is intended to prevent arrays in parallel wasting energy if one panel is partially shading, but a diode will also prevent a battery from back-discharging through a panel in the dark. (Solar cells are diodes themselves, but not very good ones). A built-in diode or an external diode will also result in about 0.5 volts less than the full output being applied to the load. You might be able to make an array with somewhat high output effectively self-regulating just by

putting several diodes in series with it and your battery.

73, Al N1AW

+----------------------------------+
| Albert S. Woodhull |
| Hampshire College, Amherst, MA |
| awoodhull@hamp.hampshire.edu |
| http://minix1.hampshire.edu/asw/ |
+----------------------------------+

## 4456. Master Equip Inventory.doc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: havecomm@usit.net
Message-ID: <347c69af.6003657@news>
Source record: 89141
Body handling: Inline uuencoded payload not displayed: Master Equip Inventory.doc

[Inline uuencoded payload not displayed: Master Equip Inventory.doc]

# 4457. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: mrainey@kear.tdsnet.com
Message-ID: <64hr45$oel@news2.tds.net>
Source record: 89142

Hello,

The Fall 1995 issue of Communications Quarterly has an in depth and
most excellent article on the design of regenerative receivers.

BTW, the Fall 1994 issue of the same magazine had an equally good
article concerning super regenerative receiver design.

73's

Michael Rainey
KB0YY

"Kraig D. Brumbaughj" <ua666@aiusa.com> wrote:

>Hi All,

>Does anyone have a schematic for a simple transistor regen receiver that
>is capable of covering 80 and 40 meter CW ?

>Thanks........

>73,

>Kraig

# 4458. Re: Does Solar Panel Need Regulator Before Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <64i0bq$9io@hpcvsnz.cv.hp.com>
Source record: 89143

Al Woodhull (aswNS@hamp.hampshire.edu) wrote:

: Solar arrays have a voltage-current characteristic which allows them
: to be short-circited at one extreme. At the other extreme of no load
: the voltage soars. Typically a panel designed to charge a 12 volt
: battery will have an open circuit voltage of 18 to 20 volts. But a
: relatively small current drain will drag this down a lot.

Thanks to Al (and others) for the good practical advice. For those who like models, I'd like to add at least a starting point for a model... someone recently asked me about solar cells and battery charging, and I became interested in how you find the "maximum power" operating point for a solar panel. At least a first-order model for a solar cell is a (silicon) diode which is shunted by a current source. The current source is, of course, the result of the light shining on the cell. So, as some have noted, the open-circuit voltage of the cell won't be more than a "diode drop." In fact, the open-circuit voltage is just the diode voltage for whatever current is being generated from photons. There's an interesting result from this... if you have a panel with a number of cells with a load on it, if one of the cells is blocked from light, the current thru the load will be trying to flow in reverse thru that cell...and the current therefore drops to a very low value. Also, this model explains why you want a diode in series with the array when it's put across a battery to charge it: when there's no light, you have a series string of diodes across the battery, and they will likely be forward biased enough to cause a significant drain on the battery.

I'm sure people who worry about building controllers which maximize the power taken from a solar panel have more exact models than this. Maybe someone reading this can shine some more light on the subject. But if the diode model is accurate, then the max power point will be at a voltage not very far below the open-circuit voltage; much below that, they will look a lot like a constant current source.

--
Cheers,
Tom
tomb@lsid.hp.com

# 4459. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: cliffkot@interaccess.com
Message-ID: <cliffkot.187.009C933C@interaccess.com>
Source record: 89144

In article <346c783f.0@192.33.12.30> aswNS@hamp.hampshire.edu (Al Woodhull) writes:
>From: aswNS@hamp.hampshire.edu (Al Woodhull)
>Subject: Rechargeable Alkaline Battery?
>Date: 14 Nov 97 16:11:43 GMT

>I have noticed that Ray-O-Vac makes rechargeable alkaline batteries.
>I wonder if these are useful as substiutes for NiCds in ham gear?

>The packages I have seen in K-Mart give no technical info, and i
>don't recall seeing any discussion in the ham magazines I read (I don't
>read them all). Can anyone summarize the characteristics of these
>batteries or point to other sources of info? I would like
>to know the effective Amp-hr ratings of different sizes, the voltage
>versus time curve during discharge, whether these characteristics
>change during the life of a cell, and of course what kind of life can
>be expected. I would also like information on charging characteristics
>and charger circuits.

The advantage of the rechargeable, Renewall battery is that since it is
alkaline it has a long shelf life and a higher terminal voltage. A typical
nicad puts out about 1.2v while the alkaline outputs 1.5 v. This might not
sound like a big difference, but in low voltage applications it might mean the
difference between a circuit working properly or not. In a series connection,
5 alkalines will do the job of 6 nicads.

# 4460. Toroid search

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: pga@correio.cc.fc.ul.pt
Message-ID: <64i8hh$305@master.di.fc.ul.pt>
Source record: 89145

Hi!
I need a T200-2 toroid for a coil, unfortunately I can't find it here in .pt can someone please point me where to buy it by mail, or internet?
Thanks in advance!
Best 73's
de CT2FYW
Pedro
p.s. can mail directly to CT2FYW@amsat.org

--
+--------------------------------------------------------------------------+
| Pedro Gabriel Almeida |
|--------------------------------------------------------------------------|
| e-mail : pga@cc.fc.ul.pt |
| fax+data+voice : +351 1 938 88 60 28800/14400 8N1 |
| CB : CALIMERO (CQS8351) CH26 |
| HAM : CT2FYW 145.55 434.55 R4 R2X |
|--------------------------------------------------------------------------|
| ... e sempre que o Homem sonha, |
| o mundo pula e avanca ... |
| Antonio Gedeao |
|__________________________________________________________________________|

# 4461. SWR Meter with external sensor capability: can I add 440 mhz capability

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: fakeaddress@spambuster.com
Message-ID: <64icvs$rh8$1@kali.ziplink.net>
Source record: 89146

I just bought a 440 mhz FM transceiver, and wanted to check the SWR of a couple of 440 antennas that were cluttering the junk box. I own a Daiwa NS 660A, which is a 1.6 - 150 mhz SWR meter. It has the capability to add an external sensor.

Can I build a sensor that will work on 440? Someone suggested that the UHF SWR meters have a shorter piece of wire between the two coax connectors.

Any ideas?

Thanks

SPAMBUSTING
Please respond to

n1AUP@amsat.org

# 4462. Re: Yaesu FT411E question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: Dave Burr <dtburr@mcs.com>
Message-ID: <01bcf141$61fa67a0$693f5fcc@dtburr.mcs.com>
Source record: 89147
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Bogdan:

It sounds like you got a USA circuit board in a European rig. That is the way the US models work.

BTW, please report this to NF4W (nf4w@mindspring.com) in this newsgroup so he can do a posting regarding Yaesu being junk. Anytime there is ever a problem, all equipment made by that manufacturur is junk.

Dave
K9XK

Bogdan Sosnowski <sp8ufn@priv.onet.pl> wrote in article
<01bcf131$85cfa240$LocalHost@ppp>...
Hi over there

Does anybody know something about Yaesu ft411e transceiver?
I have this model and it has three buttons on the left side: Lamp,
Tone, and PTT. The problem I have is that the Tone button does'n make the
trx
transmitting repeater opening tone (about 1700hz) but it acts as short
openning for squelsh. Is there away to make the button act the Tone role ?

many thanks
Bogdan sp8ufn

---

# 4463. Re: class E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mzpn7nqca.fsf@spinner.ecofe.com>
Source record: 89148

Where did you get the idea that Class E amplifiers are linear?

They aren't. That's why you don't see them in general use.
Note that the QST Class E project was for CW only.

Presumably, a Class E amplifier (not this specific project) should be fine
for FM as well. Of course, i would wonder if something that switches at
50 MHz (not to mention 145 MHz) might not spend enough time fully saturated
to make it worth the difference in complexity.

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4464. Re: Toroid search

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: cmoore@sedona.intel.com
Message-ID: <346CC472.1EFA@sedona.intel.com>
Source record: 89149

Pedro Gabriel F. L. B. Almeida wrote:
> I need a T200-2 toroid for a coil, unfortunately I can't find it
> here in .pt can someone please point me where to buy it by mail,
> or internet?

Hi Pedro, try: http://www.bytemark.com/amidon/
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 4465. New Web Site Locations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: Erv <kb8tnq@voyager.net>
Message-ID: <346C902A.45BAA724@voyager.net>
Source record: 89150

Hi all:

Just a quick note to let you know we've moved! We maintain a
redirector, so the old URL will still work, but you can find us on
QSL.net now. A link is at the bottom of this post. Stop and give us a
look and we'll be adding more goodies in the coming weeks.

You can also find the Central Michigan Amateur Radio Club at QSL.net.
This Site will also be adding more goodies, so check in
http://www.qsl.net/cmarc

Thanks and 7-3,
Erv KB8TNQ

--
Please visit our Web Site at:
http://www.qsl.net/kb8tnq
---
"Dare to Dream, It Sets Your
Spirit Free!"
---

# 4466. grounded collector 2N3055 in +12V PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <346cc4c6.6530252@news.online.no>
Source record: 89151
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi

I received some emails requesting this note. This is a repost, perhaps I chosed a bad subject the first time. The great advantage is that it is easy mount transistors without any collector voltage potential on the outside of a box (without mica insulation, but still thermal compound should be used). I have built 3-4 similar power supplies for different projects, with 1-3 transistors for current up to 10A. Only problem is that it is no good way to make current protection, voltage regulator overcurrent drop-out may vary dependent on case temperature - up to 2.5Ampere!

+12VDC from grounded collector 2N3055, this uses LM320T12 or MC7912CT - negative voltage regulator.

```
R (+)--|-------|------------|---------|-----(+12V out
E | | |MC |
C 4700uF 0u1 MYLAR |7912 |
T | | -----|----- |
I | | | gnd | 1000uF
F |- 22R--|------ |IN out | |
E | B -----|----- | LA8AK
R (-)--|-----E C----------| | 1976
| |
simplified circuit diagram ---gnd ----gnd
will work as shown, should be saved and read using EDIT
```

DO NOT CONNECT "negative side of rectifier" to GROUND!!!!! The voltage is floating.
+ side from rectifier carries +12V .
LM320T12/MC7912CT: "input" to 2N3055 base, "gnd" to +12V, "OUT" to ground
0.1uF between regulator "IN" and "GND" is important, otherwise bad oscillation in mediumwaveband will occur
Add 1N4002 diodes in series between regulator-GND and +12V to increase the output voltage.

---
Email: LA8AK at online dot no

# 4467. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <64iou8$or9@zeppo.cs.ubc.ca>
Source record: 89152

aswNS@hamp.hampshire.edu (Al Woodhull) writes:
>I have noticed that Ray-O-Vac makes rechargeable alkaline batteries.
>I wonder if these are useful as substiutes for NiCds in ham gear?

Sometimes. They are like regular alkalines with slightly lower capacity.
They won't put out the current of NiCd or NiMH or LiIon batteries, but
they have the long shelf life of alkalines. Also, the Renewal chargers
are all intelligent fast chargers.

For more details, try http://www.bti.ca, the web site of the people
who developed the technology, and Ray-O-Vac's own web site. Lots
of technical details in both places.

Dave

# 4468. Re: class E

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf110$52d39520$0b8a92d0@bitnet.bit-net.com>
Source record: 89153

OOOps, sorry, improper use of the term "linear". Was using it in the
generic. Should have just said "multiband amplifier". :-)
73, DavidC AA1FA

> Where did you get the idea that Class E amplifiers are linear?
>
> They aren't. That's why you don't see them in general use.
> Note that the QST Class E project was for CW only.
>
> Rick Karlquist N6RK

## 4469. Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: aswNS@hamp.hampshire.edu
Message-ID: <346c783f.0@192.33.12.30>
Source record: 89154

I have noticed that Ray-O-Vac makes rechargeable alkaline batteries.
I wonder if these are useful as substiutes for NiCds in ham gear?

The packages I have seen in K-Mart give no technical info, and i
don't recall seeing any discussion in the ham magazines I read (I don't
read them all). Can anyone summarize the characteristics of these
batteries or point to other sources of info? I would like
to know the effective Amp-hr ratings of different sizes, the voltage
versus time curve during discharge, whether these characteristics
change during the life of a cell, and of course what kind of life can
be expected. I would also like information on charging characteristics
and charger circuits.

73, Al N1AW

+----------------------------------+
| Albert S. Woodhull |
| Hampshire College, Amherst, MA |
| awoodhull@hamp.hampshire.edu |
| http://minix1.hampshire.edu/asw/ |
+----------------------------------+

# 4470. Yaesu FT411E question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: Bogdan Sosnowski <sp8ufn@priv.onet.pl>
Message-ID: <01bcf131$85cfa240$LocalHost@ppp>
Source record: 89155
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc
Body handling: HTML body converted to readable text

To jest wielocz&#65533;ciowa wiadomo&#65533;&#65533; w formacie MIME.

```
------=_NextPart_000_01BCF139.E7940A40

Hi over there

Does anybody know something about Yaesu ft411e transceiver?
I have this model and it has three buttons on the left side: Lamp,
Tone, and PTT. The problem I have is that the Tone button does'n make the
trx
transmitting repeater opening tone (about 1700hz) but it acts as short
openning for squelsh. Is there away to make the button act the Tone role ?

many thanks
Bogdan sp8ufn

------=_NextPart_000_01BCF139.E7940A40

Hi over there

Does anybody know =
something about Yaesu ft411e transceiver?
I have this model and it =
has three buttons on the left side: Lamp,
Tone, and PTT. The problem =
I have is that the Tone button does'n make the trx
transmitting =
repeater opening tone (about 1700hz) but it acts as short openning for =
squelsh. Is there away to make the button act the Tone role ?

=
&=
nbsp; &n=
bsp; many thanks
=
&=
nbsp; &n=
bsp; Bogdan sp8ufn

------=_NextPart_000_01BCF139.E7940A40--
```

## 4471. Hi-level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <346CC09F.6A2F@northwest.com>
Source record: 89156

I'm evaluating a hi-level balanced tube mixer for a hi-dynamic range receiver to be designed. I'd like to use the 7360. Circuits abound but has anyone actually built and checked them out? Suggetions and comments appreciated...

# 4472. Re: Need help finding Hewlett Packard Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971114214434.2509A-100000@Stratus.CAM.ORG>
Source record: 89157

Interestingly, the ECG guide has entries for parts in the 1820-xxxx sequence, some of which cross to 74xx ttl parts, but these two are not listed.

I recall a post about this in sci.electronics.repair at some point. Someone wanted to know if there were replacement parts, and someone else provided some information. I did not save it, but if nothing turns up here, you might try posting the question over there.

Michael VE2BVW

On 15 Nov 1997, Charlie Thompson wrote:

> I'm looking for two chips that I think are ECL counters...
> they have the following HP part numbers marked on them:
>
>
> Hewlett-Packard part numbers:
>
> 1820-0101 14-pin dip
> 1820-0102 14-pin dip
>
> Is there a cross to a standard part number for these chips?
> Any HELP appreciated.☐
>
> -Charlie
>
>
>
>
> PS Remove the x's from my email address before using
>
>

# 4473. Re: 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Mike <NoSpam@Today.Thanks>
Message-ID: <346DC173.3219@Today.Thanks>
Source record: 89070

Dennis Erwin Thurlow wrote:

> This thing is so common I'm having trouble finding
> the specs for it. Specifically the pull up/down bias for the base,
> for 9v, for a colpitts or hartley oscillator.

> geosynq@trader.com
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM

You won't find the bias current you need from the spec sheets. You need to find the exact value for your own circuit, perhaps by putting a pot in and finding the optimum value over the range of temperature and supply voltage you expect.

Both oscillators are very vigorous, so you won't need much bias. The transistor conducts for a very short part of the cycle, and the currents are much higher than the value measured with a dc milliammeter. You run a risk of overdriving the oscillator with that much supply voltage, so I'd first try values that just get the oscillator started.

I have successfully used a Colpitts at UHF with less than 1 volt supply voltage. With a 9 volt supply (I assume a battery), you have plenty to work with. You might try fixing the base voltage at some convenient value, and using a value of emitter resistance that will set the desired operating current. This will give you operation over a much broader range of supply voltage, temperature, and transistor parameters.

What frequency are you running? A 2N2222 is great for HF and lower frequencies, but if you are trying to reach VHF or above, you need a much faster transistor.

You might try modeling the circuit in SPICE. This can show how minor parasitic effects, such as stray capacity or inductance, can have a surprisingly large effect on the circuit performance. Try adding some inductance in series with the emitter and collector. For UHF and microwave, a nanohenry or so can have a dominating effect on the results.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4474. Re: grounded collector 2N3055 in +12V PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: rfwilson@intergate.bc.ca
Message-ID: <64jbis$prl$1@discovery.intergate.bc.ca>
Source record: 89071
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <346cc4c6.6530252@news.online.no>, LA8AK@nospam.thanks writes...
>
>
>Hi
>
>I received some emails requesting this note. This is a repost, perhaps
>I chosed a bad subject the first time. The great advantage is that it
>is easy mount transistors without any collector voltage potential on
>the outside of a box (without mica insulation, but still thermal
>compound should be used). I have built 3-4 similar power supplies for
>different projects, with 1-3 transistors for current up to 10A. Only
>problem is that it is no good way to make current protection, voltage
>regulator overcurrent drop-out may vary dependent on case temperature
>- up to 2.5Ampere!
>
>+12VDC from grounded collector 2N3055, this uses LM320T12 or MC7912CT
>- negative voltage regulator.
>
>
>R (+)--|-------|------------|---------|-----(+12V out
>E | | |MC |
>C 4700uF 0u1 MYLAR |7912 |
>T | | -----|----- |
>I | | | gnd | 1000uF
>F |- 22R--|------ |IN out | |
>E | B -----|----- | LA8AK
>R (-)--|-----E C----------| | 1976
> | |
>simplified circuit diagram ---gnd ----gnd
>will work as shown, should be saved and read using EDIT
>
>DO NOT CONNECT "negative side of rectifier" to GROUND!!!!! The voltage
>is floating.
>+ side from rectifier carries +12V .
>LM320T12/MC7912CT: "input" to 2N3055 base, "gnd" to +12V,
>"OUT" to ground
>0.1uF between regulator "IN" and "GND" is important,
>otherwise bad oscillation in mediumwaveband will occur
>Add 1N4002 diodes in series between regulator-GND and +12V to increase
>the output voltage.

This is pretty basic regulator design, but the reason it is very seldom used
is exactly as you indicate: The input (-) side MUST be floating with respect

to the output ground. Therefore this circuit is useless in many applications, and from a practical point of view, it is only useful if the input comes directly from the rectified output of a transformer (which is naturally completely floating).

Bob.

# 4475. Re: VLF radio or Converter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971115020637.8432A-100000@Stratus.CAM.ORG>
Source record: 89072

The simplest wzy to do it, as long as you already have a shortwave receiver, is a upconverter. A low pass filter with a cut off below the broadcast band (so those strong local signals won't overload the mixer), a mixer of some kind and a crystal oscillator. Find a segment that your shortwave receiver can tune where there aren't any strong signals (so you won't have to worry about them feeding through), and get a crystal for the oscillator that is the same as the start of that segment. Or take a crystal you have and use the tuning tange that matches.

Thus, if you had a 3MHz oscillator, you would tune the receiver from 3.018 to 3.150 MHz.

The antenna feeds through the low pass filter to the mixer, with the crystal oscillator feeding the other input to the mixer. The output of the mixer feeds into the antenna jack of the receiver.

The actual details can be found in all kinds of places, and it's just a matter of putting them together.

I believe that this is pretty much the way most low frequency converters work. If you were to go to a tuneable front end, you'd have to have a lot of switching and a lot of coils, because while 3.018 to 3.150 is really a very small change compared to the 3 MHz, 18KHz to 150KHz is almost a 10:1 frequency range. A 2:1 frequency range is what you can expect, so you'd need a lot of switching to cover the full range.

Michael VE2BVW

On 15 Nov 1997, R. Wise wrote:

> Does anyone have schematics to build either a receiver or converter to
> cover 18 - 150 kHz or know where I can get them?
>
> Thanks
> rweis@sympatico.ca
>
>

# 4476. Hard line spool for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: gtr86@aol.com
Message-ID: <19971115145001.JAA04322@ladder02.news.aol.com>
Source record: 89073

Spool of hardline for sale: have large spool of hardline that I want sell or trade for 2 meter equipment or hf amp.
In Central Illinios , meet half way or you pick up....too large to ship I think .

# 4477. Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: REX EMERSON <emerson5@lightspeed.net>
Message-ID: <01bcf1d2$d5f8a680$8b5fd8cc@emerson5.lightspeed.net>
Source record: 89074

I had to move my web page......The new location is:

http://userzweb.lightspeed.net/~emerson

73 Rex

# 4478. Re: Hard line spool for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Steve Smith <kc6wrd@jps.net>
Message-ID: <346DC031.628F@jps.net>
Source record: 89075

What brand, size, and part number. How much do you have and how much
cash do you want for it?

GT R 86 wrote:
>
> Spool of hardline for sale: have large spool of hardline that I want sell or
> trade for 2 meter equipment or hf amp.
> In Central Illinios , meet half way or you pick up....too large to ship I think
> .

# 4479. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <346db338.1170943622@news.atl.bellsouth.net>
Source record: 89076

On Fri, 14 Nov 1997 21:50:57 -0500, Michael Black <blackm00@CAM.ORG> wrote:
>A lot of the time, things get built on what has come before. So you start
>with a certain point, and the idea follows along a path that gets further
>away from the origin point. Years later, that origin point is lost or
>mostly forgotten. But other things have changed, and a return to the
>starting point with new devices or new points of view may start a new path
>that can go other places.

This is an interesting thought. It got me to musing about the ways we look at feedback in amplifiers. When active devices were rare, expensive, and marginal in performance, we used positive feedback to get the most gain out of them we could. Of course positive feedback makes a circuit potentially unstable, and has us tweaking each circuit to accomodate component tolerances. That's a pain in a production environment, and is even a pain for a reproducible homebrew project. And component aging means we need operator adjustable controls to continue tweaking after the circuit is in use. That's usually undesirable, and can rapidly get out of hand as system complexity increases.

When active devices became more common, cheaper, and somewhat more capable, we turned our emphasis to negative feedback to try to tame and linearize them. A negative feedback system can be designed to be unconditionally stable, can be very tolerant of component variations, and thus can reduce the need for operator controls and production tweaks. We can plug almost any old active device into the circuit and get reproducible results. This is good when active device lifetimes are still measured in hours. The operator can replace the device and get back to operating without having to fuss with the circuit to get it to work correctly again.

And today when active devices are extremely common and cheap, thousands or millions to the package, are quite capable and linear, have extremely tight and reproducible tolerances, and have a reliability factor measured in decades instead of hours, we tend to ignore feedback altogether except as an undesirable stray we want to avoid in our projects.

Of course we still use feedback, but we use it at a different level than we did back in the days when active devices were rare, expensive, unreliable, and of loose tolerance. Today we tend to use feedback *systems* rather than feedback paths in individual circuits. Our level of abstraction has moved up the scale a notch as we concentrate on system function and system design rather than on circuit details addressed for us at the silicon foundry on a commodity basis.

This progression from art to engineering seems to me to be typical as basic technologies mature. We can build on this base to a higher level. Now the gain block, the filter block, etc become our components, and the system becomes our circuit.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4480. Re: Need help finding Hewlett Packard Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Jeff Anderson <jeffa@ix.netcom.com>
Message-ID: <64kg4q$q3e@sjx-ixn2.ix.netcom.com>
Source record: 89077

In article <64iqcp$pr$3@mari.onr.com>,
xctx@onr.com (Charlie Thompson) wrote:
>I'm looking for two chips that I think are ECL counters...
>they have the following HP part numbers marked on them:
>
>
> Hewlett-Packard part numbers:
>
> 1820-0101 14-pin dip
> 1820-0102 14-pin dip
>
>Is there a cross to a standard part number for these chips?
>Any HELP appreciated.☐
>
>-Charlie
>

```
The 1820-0101 crosses to an MC1034P
The 1820-0102 crosses to an MC1013P

- Jeff, WA6AHL
```

# 4481. WTB Bauman GROTH Counter TC-35

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: "Dennis B. Griffin" <w4dg@ibm.net>
Message-ID: <346ddac7.0@news2.ibm.net>
Source record: 89078
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

WANTED:

Robert BAUMAN GROTH COUNTER model TC-35 with 3" spinner knob.

This counter is approximately 2"x4" in black plastic and mounts with a center 1/2" hole. The body mounts with 4 small screws, 2 each at top & bottom. PREFER with 3" matching spinner knob. (trying to match one that is already on amp.)

Contact either by e-mail: w4dg@ibm.net or telephone A/C 813/391-9912.

73... de W4DG...Dennis Griffin

# 4482. Re: BLW77 gain factor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: hans <hansh@iaehv.nl>
Message-ID: <64knet$n7d$1@news.IAEhv.nl>
Source record: 89079

Frank R. Oppedijk wrote in message <3464DB95.4BC8@xs4all.nl>...
>Hi all!
>
>Does anyone of you know the gain of a BLW77 power amp?
>
>TIA es 73,
>
>Frank PA3FLV
>fro@xs4all.nl

ssb (class -AB) volt 28 ---- Ic (zs) a 0,1 ----- f (MHz) 1,6-28 ----- pl (watt) pep 15-130 ------gain >12 db ------% 37,5 ------

GRX hans

# 4483. WTB: Early Kilobaud, Byte, Interface Age magazines

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: ChipsNDips <ChipsNDips@snet.net>
Message-ID: <346DF146.3AC8@snet.net>
Source record: 89080
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I'd like to acquire a few copies of some early PC magazines. Kilobaud,
Byte, Interface Age, etc. Looking for some issues dated around
1976-1979. Bound issues of Byte magazine also.

Alan

# 4484. Re: tube screen bias help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <347905a8.4829009@eskinews.eskimo.com>
Source record: 89081

"Jeff W. Hockert" <hockerj@ece.orst.edu> wrote:

>
>I am working on a xtal controlled, CW tube transmitter using a 12BY7A as
>the oscillator, coupled to the grid of a 5933 as the PA. The existing
>circuit on both tubes uses the same supply voltage for both the plate and
>the screen (isolating the plate with a RF choke). Typical circuit
>examples usually show a biasing resistor dropping the screen supply below
>the plate. I am only using 175v supply (that was the regulator tube I had
>available), which puts me well below rated supply voltage (plate or screen
>on either tube).
>
>My question is, do I need to drop the screen voltage below the plate for
>proper operation? Or can I get away with using the same voltage for both
>because of my low supply voltage?
>

---
You could probably use the same supply for both as long as everything
works ok, but there is a problem if the plate supply should disappear
for some reason and the screen supply were still connected. Excessive
screen current would flow and probably damage the tube. It would be
better to put a resistor in the screen lead to limit the current.

73, Bill W7TI

# 4485. Re: wood construction help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <347804c7.4604208@eskinews.eskimo.com>
Source record: 89082

Original writer unknown:

>>
>>I have several questions. How do you mount the tube sockets? In a sheet
>>metal chasis, it's pretty straight forward so the tube is above the metal
>>plane and the pins below; I'm not sure how that works with wood.
>>

---

If you are using octal tubes, you can use the same sockets that are used for industrial plug-in relays. They mount on a flat surface and the only holes needed are two small ones for mounting. They are available from Allied, Newark, etc, and probably from your local electrical supply house. They look good and work good.

73, Bill W7TI

# 4486. FOR SALE VACUUM CAPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Norman Hockler <norsan@bright.net>
Message-ID: <64l5bm$61h$1@cletus.bright.net>
Source record: 89083

Hi All,

I have some Jennings ceramin vacuum caps for sale.
Part number CACAN-125-0205. These are 5-125 pf 5KV.
Need $85 each

Norman Hockler

# 4487. FS: Optoelectronics SB-220 HF-VHF 9 digit counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: n4xy@bellsouth.net
Message-ID: <347009a5.11474789@news.atl.bellsouth.net>
Source record: 89084

For Sale: Optoelectronics SB-220 HF-VHF (> 230MHz) 9 digit counter w/
ext. PS.... reads freq of actual SSB sideband in use;, and indicates
SB w/LED... bright blue florescent 9 digit display/USB/LSB LEDs/
filtering for correct sideband indication; HI-STAB TXCO adj timebase;
virtually unused; reason for sale: have HP 5328 counter w/ ultra-stab.
timebase opt. Original owner. Price: $150ppd CONUS
72/73 ZUT!!!

---

Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX

---

# 4488. Re: AD607 Question. Info on QAM demodulation needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mzpn5srll.fsf@spinner.ecofe.com>
Source record: 89085

Yes, it sounds OK. I'll see if I can get one of those AD607s to play with. Someone gave me some fast ADCs I can use with my SHARC EZ-Kit DSP system for the IF processing and demodulation.

As you probably know, they have an evaluation board for the AD607. But if you do your own PC card, i'd be very interested. The EZ-KIP for the ADSP2181 ($90 last i heard) already has CODECs on it (and can operate stand-alone if you do your own PROMs). Would that be a good approach?
-- KD6PAG (Networking Old-Timer, RF newbie)

# 4489. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4myb2psqhc.fsf@spinner.ecofe.com>
Source record: 89086

>Please don't assume everyone has HF gear. The point of the question was
=> >to look for ways for a Technician to get beyond FM-only operation. If you
>*have* to suggest HF, at least choose a band with Tech Plus privileges.
>With a six meter transciever, the transverters to other UHF and above make
>sense. Hence the request for kit/homebrew suggestions for 6 meters (besides
>the excellent state-of-the-art R2/T2 pair).

Ten-Tec also offers a transverter from 2m to 6m. So if you have a 2m multimode, this is a good way to get on 6m.

But Gary, the point of the question was to find some modest way for a non-HF operator to go towards all-mode operation. If i had a 2 meter all-mode, or could afford one, then i wouldn't be asking all these questions.

So i'm looking for something to minimal or basic to build to get beyond FM-only operation. The QRP community has lots of designs like that, i want to see similar quality reproducible projects for VHF or above. If my computer can decode it for me, i wouldn't even object to CW.

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4490. Re: Need to build 929MHz Receiver. . .

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: jlcmas <jlcmas@phoenix.net.nospam>
Message-ID: <01bcf1ee$96e91760$7379f1cd@default>
Source record: 89087

George Viaud <geo69@concentric.net> wrote in article
<3468F025.4EFA8AD3@concentric.net>...
> I am presently looking into building a 929MHz receiver
> to be used in conjunction with my PC to decode POCSAG . .
>
You might want to consider building a converter for an old scanner instead of a complete rcvr unless you have special needs. (I confess I'm not aware of what POCSAG is). You could probably get an old scanner at a real decent price as a lot of people seem to be unloading their old 16 channel 400MHZ units and buying new gear. If this is a single freq, one of the xtal rigs would work. Ramsey sells a converter kit for about $50 and I think this was written up in either Popular Electronics or Radio Electronics a few years ago.

# 4491. Re: New Radio Communications Mailing Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: normanmo@miavx1.acs.muohio.edu
Message-ID: <346E1B57.197@miavx1.acs.muohio.edu>
Source record: 89088

Can't seem to get honk to work. ham/lists doesn't seem to be there

# 4492. Re: Is Glass OK for Dummy Load Container?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <64m7u4$iti@redgreen.cs.ubc.ca>
Source record: 89089

"DavidC" <davidc@bit-net.com> writes:
>Would it be OK to put a KW dummy load in a large glass pickle jar?
>Other than the risk of it being broken by contact and the glass and oil
>making a mess, any other concerns?
>I have a 250 watt 12" resistor I want to use.

It won't conduct heat from the oil to the outside air very well, so the
long-term continuous power it could absorb would be greatly reduced.
Short-term power dissipation (in the oil) wouldn't change.

The metal can also provides RF shielding, while the pickle jar would
not. If the ground return for the resistor surrounds it well enough,
this may not matter.

>BTW: I may just hang a few neon bulbs in the jar to watch them glow!
>(Assuming the oil I use is clear enough - will they glow in oil, or will
>the oil absorb too much of the RF, or short the neon bulbs before they can
>charge?)

The oil shouldn't absorb the RF or short the bulbs - it ought to be a
very good insulator. However, if the resistor is completely surrounded
by its ground, there may be little signal to activate the neon.

Dave

# 4493. Re: VLF Radio or Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEJr50I.46I@netcom.com>
Source record: 89090

In article <01bcf178$df783d60$94ebacce@sympatico.sympatico.ca>,
R. Wise <rweis@sympatico.ca> wrote:
>Could someone please forward either the plans or tell me where I can find
>the schematics to build either a receiver or converter to cover 18 - 150
>KHZ.

Get a hold of Radio-Electronics for 1983. R. W. Burhans had a series
of articles on antennas, converters, and using Loran C as a calibration
source.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 4494. Re: Need help finding Hewlett Packard Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEJr50D.45C@netcom.com>
Source record: 89091

In article <Pine.GSO.3.94.971114214434.2509A-100000@Stratus.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:
>On 15 Nov 1997, Charlie Thompson wrote:
>
>> I'm looking for two chips that I think are ECL counters...
>> they have the following HP part numbers marked on them:
>>
>>
>> Hewlett-Packard part numbers:
>>
>> 1820-0101 14-pin dip
>> 1820-0102 14-pin dip

>I recall a post about this in sci.electronics.repair at some point.
>Someone wanted to know if there were replacement parts, and someone
>else provided some information. I did not save it, but if nothing
>turns up here, you might try posting the question over there.

There's a used equipment dealer in British Columbia that has a
web site with a cross reference list.

Try http://www.sphere.bc.ca/test

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 4495. Re: PS Heating Up Charging Battery - Concern?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Jim Harvey <wb8nbs@ameritech.net>
Message-ID: <346D9567.6A424574@ameritech.net>
Source record: 89092
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

DavidC wrote:
>
> I recently acquired a used gel-cell battery. It is a large (car battery
> size).
> It measured just under 9v when I got it. I connected a 2.5A 13.8v Micronta
> PS I had laying around and started the charging process. After several
> hours the battery was up to 11v.
> My concern is that the PS is getting very hot, should I have diodes in the
> charging line or something to protect the PS, or is the process of bring
> the voltage back up in the battery just unusually taxing on the PS?
> Oh, and my meter is unable to measure the amperage over 600MA, what
> inexpensive metering setup would be good to monitor this battery - the goal
> is to keep a trickle charger (the Micronta?) on it.
> Thanks in advance for your help!
> --
Put a 12 volt light bulb in series with the power supply to limit the
charging current. When the light bulb goes out or gets real dim you
know
it's close to full charge.

--
Jim Harvey, Redford, Mich. Amiga person - Linux person - WB8NBS
This message came from Netscape running on a LINUX Laptop!
He who dies with the most software wins.

# 4496. Re: PS Heating Up Charging Battery - Concern?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <346DBE16.286D@one.net>
Source record: 89093
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

DavidC wrote:
>
> I recently acquired a used gel-cell battery. It is a large (car battery
> size).
> It measured just under 9v when I got it. I connected a 2.5A 13.8v Micronta
> PS I had laying around and started the charging process. After several
> hours the battery was up to 11v.
> My concern is that the PS is getting very hot, should I have diodes in the
> charging line or something to protect the PS, or is the process of bring
> the voltage back up in the battery just unusually taxing on the PS?
> Oh, and my meter is unable to measure the amperage over 600MA, what
> inexpensive metering setup would be good to monitor this battery - the goal
> is to keep a trickle charger (the Micronta?) on it.
> Thanks in advance for your help!
> --

The battery is probably shot. A regular lead-acid battery is usually a goner if the voltage falls below 10 to 11 volts. I would expect the same of the gel-cell.

It's worth a try running it on the charger for a while, but don't be surprised if it doesn't revive.

I wouldn't put diodes in the lines. The voltage drop may prevent you from bringing the battery up to proper voltage even if it is still good. A low-value resistor or 12-V light bulb will moderate the current, and you can make rough current measurements by measuring the voltage drop across it (Ohm's Law: I = E/R). The resistance of the light bulb will go up if the current is very high (bright bulb), so the measurements won't be accurate, but they're cheap and easy, and they give you a rough value.

Rich W2RG

# 4497. Need help finding Hewlett Packard Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: xctx@onr.com
Message-ID: <64iqcp$pr$3@mari.onr.com>
Source record: 89158

I'm looking for two chips that I think are ECL counters...
they have the following HP part numbers marked on them:

Hewlett-Packard part numbers:

1820-0101 14-pin dip
1820-0102 14-pin dip

Is there a cross to a standard part number for these chips?
Any HELP appreciated.☐

-Charlie

PS Remove the x's from my email address before using

# 4498. WTB: Damaged Ant. Tuner Needing Inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf17a$0b0f7dc0$0b8a92d0@bitnet.bit-net.com>
Source record: 89159

I am looking for a tuner, preferably with metering, that needs the inductor replaced and is thus low in price. It needs to be large enough to house the inductor described below.

Rotary inductor on 3.5" X 7" porcelain form. Coil is 23 turns of 0.125" dia. silver plated wire. Inductor is supported by a 4.5" wide X 5.5" high X 9.5" deep frame that is designed for chassis mounting. Shaft is 0.125" diameter.

Failing this, I am either going to try to hack my Dentron Super Tuner with this inductor (not sure it will fit), or (perish the thought) actually build a tuner from scratch ... if I can figure out the impedance range, get the correct variable cap(s), and find the right circuit .... hmmm.

--
73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit."
Romans 15:13

# 4499. VLF Radio or Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: "R. Wise" <rweis@sympatico.ca>
Message-ID: <01bcf178$df783d60$94ebacce@sympatico.sympatico.ca>
Source record: 89160

Could someone please forward either the plans or tell me where I can find the schematics to build either a receiver or converter to cover 18 - 150 KHZ.

Thanks

rwise@sympatico.ca

## 4500. *Ham Radio/Hacking Web Page*

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: eugened@aol.com
Message-ID: <19971115005900.TAA11164@ladder01.news.aol.com>
Source record: 89161

Hello There.

I am a somewhat new ham, my call sign is N3ZVM, and I have now finally made
a decent web page. The address is below....

http://members.aol.com/EugeneD

Thanks for visiting,
73's,
N3ZVM <---------"November Three, Zero Voice Modulation"

# 4501. VLF radio or Converter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: "R. Wise" <rweis@sympatico.ca>
Message-ID: <01bcf183$332c91e0$23e0acce@sympatico.sympatico.ca>
Source record: 89162

Does anyone have schematics to build either a receiver or converter to cover 18 - 150 kHz or know where I can get them?

Thanks
rweis@sympatico.ca

# 4502. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: "User Rdkeys Robert D. Keys" <rdkeys@seedlab1.cropsci.ncsu.edu>
Message-ID: <64j35b$mh5$2@uni00nw.unity.ncsu.edu>
Source record: 89163

> >: That's the problem with the regen, unless it is fronted with a good
> >: unilateral front end, it radiates madly all the time.

It may, depending upon whether or not it is receiving am or cw/ssb
signals. Properly set up it is NEVER radiating madly all the time
because it is set on the very edge of oscillation, where the actual
circuit current is quite low (weakly oscillating).

> >Gee, regens have kind of passed out of my vocabulary, but my recollection
> >is that a regen doesn't radiate...a superregen does. Have I just
> >forgotten?? I'm thinking of a regen as an RF amplifier with positive
> >feedback below the point of oscillation, with something to detect the
> >RF amplitude in its tank, and a superregen as a gated oscillator, where
> >the amplitude of the osillation at the end of the gate time is
> >proportional to the RF (signal level) in the tank at the start of the
> >gate.

Both regenerative and superregenerative detectors will oscillate and
radiate, if improperly designed. Superregens are oscillating more
heavily and with more power than a simple straight regenerative detector.

> If AM is your game, you're right Tom, the regen is kept at the point
> just before oscillation sets in, which can be darn hard to do, and the
> howling when it falls into oscillation can blow the cans right off your
> ears. But if you're receiving SSB/CW, then you have to deliberately
> put it into oscillation to demodulate the signal. Since you won't find a
> lot of AM on the ham bands today, your regen will be operated as
> an oscillating detector.

A proper regen detector will not howl.

A proper regen detector will transition into oscillation as smoothly
as a hot knife through butter, with no howls, pops or squeels. If it
doesn't, it is not set up or designed correctly.

> Because the regen was hard to maintain right at the edge of oscillation
> (because a signal can pull it over the threshold), the superregen was
> developed. It has a quench circuit which forces the oscillating stage
> to quench back out of oscillation at an ultrasonic rate. That avoids
> some of the pulling problems and makes adjustments less critical.
> Of course it radiates like mad too.

A proper regenerative detector will be quite easy to maintain on the
critical edge of oscillation. It will also pull extremely little,
or none at all if the input coupling is correct. ANY pulling or squegging
of the oscillating detector in and out of oscillation is the mark of an
improperly designed or excessively overcoupled regenerative detector.

DE NA4G/Bob UP

# 4503. Re: PS Heating Up Charging Battery - Concern?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971115070501.CAA16532@ladder01.news.aol.com>
Source record: 89164

I agree about the battery probably being bad if it doesn't come up to 12V. I assume that you need a 12V battery. Some of the little garden tractor, motorcycle batteries, etc. really do work good to run radios. Of course, you have to be careful about the acid and gas. They sure are a cheap source of lots of power. Good Luck.

# 4504. Re: Morse in the 21st century

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971115070801.CAA15475@ladder02.news.aol.com>
Source record: 89165

I have faith that they will come up with something to gripe about. 73

# 4505. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: "User Rdkeys Robert D. Keys" <rdkeys@seedlab1.cropsci.ncsu.edu>
Message-ID: <64j2gf$mh5$1@uni00nw.unity.ncsu.edu>
Source record: 89166

[Names and addresses withheld from the following mailings:]

> >: You might consider some of the little direct conversion receivers that
> >: are popular with QRP people. They work pretty good and are quieter
> >: than regen receivers.
> >
> >On the other hand, with a regen, you could send CW using the same unit
> >:-)

Actually, you can, quite effectively, if the set is overcoupled into the antenna system. It was common practice in the 1910's and 1920's to use a regenerative detector in heavily oscillating condition as a transceiver. Such a set is described in Radio Broadcasting (1922 or 1923 issues), using a 5 watt J tube as the detector and oscillator in a small portable transceiver. The Japanese did this quite effectively in their low vhf field pack sets of the 30's and WWII era. Hams used the technique in qrpp sets of the era, also. Recent experiments using transmitting tubes, by myself (6L6, 801, 807 and 211 tubes), and by a ham in Texas (833 tube) demonstrated that the transmitting tubes make fairly decent regenerative detectors, in addition to low power oscillators on 80M. It just takes some working with the circuits to get them to function effectively, without unnecessary stray radiation, safely.

As to relative quietness, a good regen set is as quiet as the best of the DC sets, and infinitely less noisy than the average late-model synthesized sets, which are abominable hash generators, quite often.

> Noting the smiley, if you must send CW, you can do it with the DC
> receivers too since their LOs are on frequency, but only when you want
> to, and not all the time. That's the problem with the regen, unless it
> is fronted with a good unilateral front end, it radiates madly all the
> time. (DC receivers can radiate too, if they aren't designed properly,
> but a good DBM does offer some isolation not present in the simple
> regens.)

I will have to take some issue on this one, since I do build and use exotic regen sets on a par with the best, and have for almost 30 years.

Simple sets of all kinds are generally not that good. But, a simple, yet properly built regen detector set without audio amplifiers will outperform its DC counterpart, anytime, even if the DC recevier has one stage of AF incuded of reasonable gain. The DC receivers often provide more gain, in the audio, but are rather poor in selectivity, by comparison, to a good regenerative detector. A detector and one-step audio vacuum tube regenrative set, typical of the simple sets, still will have sufficient gain to make headphone reception uncomfortable on, for example,

W1AW broadcasts. A 3 stage set will provide small loudspeaker volume, equivalent to a good IC audio stage on a DC mixer.

The average power out of a properly designed regen, properly coupled into the antenna system is of the order of a microwatt or two. Locals with top of the line antennae and receivers can barely pick up (on occasion) a regen signal from a few hundred feet away. Receivers in the shack will pick up the local radiation in unshielded sets, but little in properly shielded ones, even without an rf stage, if the antenna system is properly coupled into the detector.

If it is more than that, you don't have a properly designed regen receiver. Almost all of the traditional amateur designs seen in post-WWII and much of the pre-WWII literature are woefully overcoupled, and hence radiate more than they should. Many are unshielded or partially shielded, and running plate voltage of the order of 150-250 volts, which increases radiation, unnecessarily. A proper regenerative detector works best with vacuum tubes at around 15-24 volts on the plates. Commercial practice in RCA receivers of the best quality, rarely uses more than 20 volts. The typical feedback circuit current should be a ma or less. Grid coupling to the detector from the secodary circuit is best done with a grid bias resistor (grid leak) of 10 or more meg ohms coupled with a grid input capacitor of about 10-20 pf, maximally. That further will serve to isolate the antenna circuits from the plate section of the tube. Usual practice in poor sets is to use a 1 meg ohm grid leak and a coupling capacitance of up to 250 pf, which is much too high. With properly uncoupled primary/secondary coupling and good shielding, the thing will not be heard much even in the shack. The uncoupling and the high grid impedance will significantly increase the selectivity over that of a DC front end.

Direct conversion receivers, without isolating rf stages, are usually orders of magnitude greater in antenna radiation than a proper regen set. Good DBM ``detectors'' help to reduce such radiation due to conversion oscillator leakage into the antenna, agreed. Direct conversion receivers usually use a much higher level of oscillator injection than do any proper regenerative receivers. That also increases the magnitude of the oscillator leakage.

When both have rf stages for isolation, the radiation is basically nil on both, if properly shielded.

If one has not built and used properly designed homebrew and commercial regen receivers (and I am inferring marine service quality), one does not have a proper comparative basis. Everyone puts regens down, it seems, until they have actually used a good one in commercial or amateur service. Properly built and run, they are extremely sensitive, and will slice the sideband off an SSB signal, down into mush. DC receivers, in general, can't even come close.

DE NA4G/Bob UP

## 4506. DC rcvr kits(?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Roger McCarty <rmccarty@deltanet.com>
Message-ID: <64jmao$35n$1@news01.deltanet.com>
Source record: 89167

I am looking for a specific Direct Conversion receiver kit, for an educational project. It must be of a discreet transistor design, no Ic's and not a regen. Can anyone help point me to a source?

Thanks

Roger KD6CC

## 4507. 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-15 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <346DB928.24C@trader.com>
Source record: 89168

This thing is _so_ common I'm having trouble finding
the specs for it. Specifically the pull up/down bias for the base,
for 9v, for a colpitts or hartley oscillator.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 4508. Want Old JW Miller Slug Tuned Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: n4ij@aol.com
Message-ID: <19971116003501.TAA28321@ladder02.news.aol.com>
Source record: 89094

21A686RBI
21A156RBI
21A106RBI
42A336CBI
46A826CPC

Can use more than one of all these if you have them. Please look in your junque box for me. I've been trying to duplicate a couple of projects for a long time and have not found these yet.

Thanks Doug N4IJ
N4ij@aol.com

preferred:
dsnowden@ncdc.noaa.gov

# 4509. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: david <david@gypd.demon.co.uk>
Message-ID: <PCy$oAA3fkb0EwQB@gypd.demon.co.uk>
Source record: 89095

In article <4myb2psqhc.fsf@spinner.ecofe.com>, John Mock <kd6pag@nospam.
mocha.ecofe.com> writes
> >Please don't assume everyone has HF gear. The point of the question was
>=> >to look for ways for a Technician to get beyond FM-only operation. If you
> >*have* to suggest HF, at least choose a band with Tech Plus privileges.
> >With a six meter transciever, the transverters to other UHF and above make
> >sense. Hence the request for kit/homebrew suggestions for 6 meters (besides
> >the excellent state-of-the-art R2/T2 pair).
>
> Ten-Tec also offers a transverter from 2m to 6m. So if you have a 2m
> multimode, this is a good way to get on 6m.
>
>But Gary, the point of the question was to find some modest way for a
>non-HF operator to go towards all-mode operation. If i had a 2 meter
>all-mode, or could afford one, then i wouldn't be asking all these
>questions.
>
>So i'm looking for something to minimal or basic to build to get beyond
>FM-only operation. The QRP community has lots of designs like that, i
>want to see similar quality reproducible projects for VHF or above. If
>my computer can decode it for me, i wouldn't even object to CW.
>
> -- KD6PAG (Networking Old-Timer, RF newbie)

I transvert from 2m to 6m I use a FT480r with the pa disabled just
running of the rigs driver in to a spectrum transverter at 1/4 wat in
and out and into a external Pa at 15wats and then in to a home brew 4ele
beam and I have worked across pond and down to Brazil on 1/2 a wat.
David G1YPD City of Plymouth England.

--
david

# 4510. Re: Hi-level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971116013200.UAA04134@ladder02.news.aol.com>
Source record: 89096

>
>I'm evaluating a hi-level balanced tube mixer for a hi-dynamic range
>receiver to be designed. I'd like to use the 7360. Circuits abound but
>has anyone actually built and checked them out? Suggetions and comments
>appreciated..

Well, Squires Sanders tried them out, and they work just fine if you keep them away from magnetic fields. (They will not live in the presence of a flourescent tube ballast) They're also pretty hard to find anymore.

You can probably not do better than Colin Horrabin's "H"-Mode mixer built around the SD-5000 Siliconix (Now Temic) chip. Driven with square wave LO, I'm getting +55 Ip3. Those kinds of numbers put your problems elsewhere than the mixer. Like LO noise and Ip3 of the filters themselves.

W4ZCB

# 4511. Re: 80/40m 2x BUZ21 SIPMOS Linear amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <346e18d2.6939663@news.online.no>
Source record: 89097

On 8 Nov 1997 03:19:36 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>>With 0dBm /1mW drive the output is 60W on 80m and 50W on 40m.
>>
>>
>
>I'll bet he had a lot of fun taming 47 dB of gain.
>
>W4ZCB
why?
it is 3.5-7MHz! I have almost the same gain after the TX mixer in my
6M transverter....and still, no problems, no spurs.. 2N6083 (or
2N6084) has 19-20dB gain on 50MHz, but it is only one of the stages.
47dB in two stage PA on 80m is easier to tame than 20dB in one stage
on 50 and 144MHz.

---
Email: LA8AK at online dot no

# 4512. Is Glass OK for Dummy Load Container?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf24c$2f19fd80$0f8a92d0@bitnet.bit-net.com>
Source record: 89098

Would it be OK to put a KW dummy load in a large glass pickle jar?
Other than the risk of it being broken by contact and the glass and oil making a mess, any other concerns?
I have a 250 watt 12" resistor I want to use.

BTW: I may just hang a few neon bulbs in the jar to watch them glow!
(Assuming the oil I use is clear enough - will they glow in oil, or will the oil absorb too much of the RF, or short the neon bulbs before they can charge?)
Thanks!
--
73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

# 4513. Re: Hi-level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <346E9CE0.406C5D17@berlin.snafu.de>
Source record: 89099

JohnsonHE wrote:
> 
> > 
> > >I'm evaluating a hi-level balanced tube mixer for a hi-dynamic range
> > >receiver to be designed. I'd like to use the 7360. Circuits abound but
> > >has anyone actually built and checked them out? Suggetions and comments
> > >appreciated..
> 
> Well, Squires Sanders tried them out, and they work just fine if you keep them
> away from magnetic fields. (They will not live in the presence of a
> flourescent tube ballast) They're also pretty hard to find anymore.
> 
> You can probably not do better than Colin Horrabin's "H"-Mode mixer built
> around the SD-5000 Siliconix (Now Temic) chip. Driven with square wave LO, I'm
> getting +55 Ip3. Those kinds of numbers put your problems elsewhere than the
> mixer. Like LO noise and Ip3 of the filters themselves.

Yeasu had the 7360 in their FT400/401/500/505 shortwave transceivers
some 20 years ago. The tube was not in the receiver but in the
SSB balance modulator. I never understood this design decision.
An exotic part for a trivial job. (ok, it works.)

I still have a FT505 and one spare tube. (still qrv!)
Prices for the 7360 are outrageous if you can get them at all.

SD210/SD5000 is definitely the way to go.

Gerhard, dk4xp

# 4514. Re: grounded collector 2N3055 in +12V PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <346eeff9.4322267@news.online.no>
Source record: 89100
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 15 Nov 1997 05:22:36 GMT, rfwilson@intergate.bc.ca (Bob Wilson)
wrote:

>In article <346cc4c6.6530252@news.online.no>, LA8AK@nospam.thanks writes...
>>
>>
>>Hi
>>
>>I received some emails requesting this note. This is a repost, perhaps
>>I chosed a bad subject the first time. The great advantage is that it
>>is easy mount transistors without any collector voltage potential on
>>the outside of a box (without mica insulation, but still thermal
>>compound should be used). I have built 3-4 similar power supplies for
>>different projects, with 1-3 transistors for current up to 10A. Only
>>problem is that it is no good way to make current protection, voltage
>>regulator overcurrent drop-out may vary dependent on case temperature
>>- up to 2.5Ampere!
>>
>>+12VDC from grounded collector 2N3055, this uses LM320T12 or MC7912CT
>>- negative voltage regulator.
>>
>>
>>R (+)--|-------|------------|---------|-----(+12V out
>>E | | |MC |
>>C 4700uF 0u1 MYLAR |7912 |
>>T | | -----|----- |
>>I | | | gnd | 1000uF
>>F |- 22R--|------ |IN out | |
>>E | B -----|----- | LA8AK
>>R (-)--|-----E C----------| | 1976
>> | |
>>simplified circuit diagram ---gnd ----gnd
>>will work as shown, should be saved and read using EDIT
>>
>>DO NOT CONNECT "negative side of rectifier" to GROUND!!!!! The voltage
>>is floating.
>>+ side from rectifier carries +12V .
>>LM320T12/MC7912CT: "input" to 2N3055 base, "gnd" to +12V,
>>"OUT" to ground
>>0.1uF between regulator "IN" and "GND" is important,
>>otherwise bad oscillation in mediumwaveband will occur
>>Add 1N4002 diodes in series between regulator-GND and +12V to increase
>>the output voltage.

>
>
>This is pretty basic regulator design, but the reason it is very seldom used
>is exactly as you indicate: The input (-) side MUST be floating with respect
>to the output ground. Therefore this circuit is useless in many applications,
>and from a practical point of view, it is only useful if the input comes
>directly from the rectified output of a transformer (which is
>naturally completely floating).
>
>Bob.
>
Fair enough! This was meant to be a separate mains operated power
supply. One should of course bear in mind that almost every circuit
has its advantages and disadvantages, I don't see any reasons not to
use a circuit when the disadvantage does not make sense for the
particular application, or......?
---
Email: LA8AK at online dot no

# 4515. Bogus Hi Power Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: kf2ti@planet.net
Message-ID: <MPG.ed8d6befe4d09059898df@news.planet.net>
Source record: 89101
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.swap

Reprinted from from The ARRL Letter Vol 16 No 45

* Bogus bulbs? Merit Arnold, W6NQ, of RF Parts in San Marcos, California, asks in an Internet posting if anyone has encountered counterfeit high-power transmitting tubes (eg, 3-500Z, 3-500ZG, 4-400 series) at flea markets or through overseas suppliers. He says that since Eimac left the glass tube business, he's learned of instances where Eimac and Amperex logos and cleverly copied markings or labels have been applied to tubes manufactured in China which are then packaged in yellow Eimac-style or Amperex boxes. Arnold says that recent-issue Eimac 3-500Z/ZG tubes will have the Eimac logo imprinted on the grid shroud. Also, he says, Eimac will usually have the serial number engraved with vibrating pencil on the shroud. On the other hand, the counterfeit overseas tubes will have the date code and serial number stamped along the edge or on top of shroud (first two digits indicating year of manufacture). Counterfeit 4-400 series "Amperex" tubes use a "slip-on" anode terminal with a set screw. Genuine Amperex tubes have the terminal fused through the glass. W6NQ would like to hear from anyone who has run into these bogus tubes. E-mail him at rfp@rfparts.com.--thanks to Marv Gonsior, W6FR

--
Steve KF2TI
KF2TI@planet.net
http://www.planet.net/adell

Live from Panarama Land 2000

# 4516. Re: Hi-level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <346eebc8.3250022@news.online.no>
Source record: 89102

On Sun, 16 Nov 1997 08:12:49 +0100, Gerhard Hoffmann
<ghf@berlin.snafu.de> wrote:

>JohnsonHE wrote:
>>
>> >
>> >I'm evaluating a hi-level balanced tube mixer for a hi-dynamic range
>> >receiver to be designed. I'd like to use the 7360. Circuits abound but
>> >has anyone actually built and checked them out? Suggetions and comments
>> >appreciated..
>>
>> Well, Squires Sanders tried them out, and they work just fine if you keep them
>> away from magnetic fields. (They will not live in the presence of a
>> flourescent tube ballast) They're also pretty hard to find anymore.
>>
>> You can probably not do better than Colin Horrabin's "H"-Mode mixer built
>> around the SD-5000 Siliconix (Now Temic) chip. Driven with square wave LO, I'm
>> getting +55 Ip3. Those kinds of numbers put your problems elsewhere than the
>> mixer. Like LO noise and Ip3 of the filters themselves.
>
>Yeasu had the 7360 in their FT400/401/500/505 shortwave transceivers
>some 20 years ago. The tube was not in the receiver but in the
>SSB balance modulator. I never understood this design decision.
>An exotic part for a trivial job. (ok, it works.)
>
>I still have a FT505 and one spare tube. (still qrv!)
>Prices for the 7360 are outrageous if you can get them at all.
>
>SD210/SD5000 is definitely the way to go.
>
>Gerhard, dk4xp

Later Yaesu models had a solid state replacement board for the 7360
balanced modulator, was described in the Dutch 'Electron' magazine
some years ago.

---
Email: LA8AK at online dot no

# 4517. Re: 2n2222

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971116152601.KAA28597@ladder01.news.aol.com>
Source record: 89103

>
>> This thing is so common I'm having trouble finding
>> the specs for it. Specifically the pull up/down bias for the base,
>> for 9v, for a colpitts or hartley oscillator.

Rule of thumb that works

Emitter resistor 1K to ground
Base, 10K to ground and 47K to Vcc

W4ZCB

# 4518. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <346f4764.0@newshost.pcug.org.au>
Source record: 89104

wdr@world.std.com wrote:

> There's some activity -- in Cuba and elsewhere -- in homebrewing HF
>DSB-SC , which should be applicable to VHF too. I think the NE-612
>would work in that applicatoin.
>

I've used the NE602 successfully in DSB transceivers at HF, though they should work on 50 MHz but I haven't tried it. I still think the best starting point is to use a VXO (which should give 50-100kHz shift on 50 MHz) and build a direct conversion DSB/CW transceiver. I would suggest the following:-

VXO
---

VXO: any dual gate mosfet
buffer: 2N2222A, etc

Receiver
--------

RX preamp: BF981
Rx detector: NE602
AF preamplifier: LM301, 308, 741, etc
AF filter LPF 3kHz (optional) 741, etc
AF amp CD4007 (biased to linear operation) or LM386.

Transmitter
-----------

Speech amplifier: 741
Balanced modulator: NE602
RF amp stages: 2N2222A
Driver: 2N3866/2N4427
PA: 2N3553

You might be able to get up to 1-2 watts out of this arrangement, though I haven't tried it.

73,

Peter VK1PK

--
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

---

# 4519. Re: VLF Radio or Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <346f4874.0@newshost.pcug.org.au>
Source record: 89105

"R. Wise" <rweis@sympatico.ca> wrote:
>Could someone please forward either the plans or tell me where I can find
>the schematics to build either a receiver or converter to cover 18 - 150
>KHZ.

An NE602 oscillator/mixer chip (preceded by a 200kHz LPF) and a crystal
of appropriate frequency for the receiver being used should do it. The
NE602 data sheet should provide enough info.

73,

--

Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home
Page and the STWG Web Site.

# 4520. Re: Latest 10 Meter Beacon List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: frog207lillypads@juno.com
Message-ID: <64nm7n$se9$1@news.ncal.verio.com>
Source record: 89106
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.swap

In article <346F6670.4A6B@bigfoot.com>, Stanley <so@bigfoot.com> wrote:
>The Latest KC4DPC 10 Meter Beacon List Is now available at:
>http://localsonly.wilmington.net/~stanley/bcn/htm

The above URL is incorrect. Note the last part should be /bcn.htm
NOT the bcn/htm that was listed.

Ed

REPLY INFO:
==========
Return address modified to prevent automatic SPAM response.
TO REPLY: remove the "lillypads" from my return address.
==========

# 4521. RF Matching Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: pat@orrell.prestel.co.uk
Message-ID: <346f28e0.5623589@news.prestel.co.uk>
Source record: 89107

Hi All

Does anyone know of any shareware program for RF matching that has
smith chart display. Motorola did one I think and there is one called
EEZ Match

Thanks

Pat@Orrell.prestel.co.uk

# 4522. Re: Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: nick@stonea.demon.co.uk
Message-ID: <346f6770.2751549@news.demon.co.uk>
Source record: 89108
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanch,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipmen,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,sci.astro.amateur,tnn.radio.amateur,uk.radio.amateur,uwarwick.societie.amateur-,de.comm.ham,fj.rec.ham,relcom.radio.ham,rpi.union.ham-radi,su.org.ham-radi,in.ham-radi.,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.scanner

On Thu, 06 Nov 1997 19:19:59 GMT, I believe bobjr@rdgsons.com
wrote:

>A friend of mine has designed a web site and is in
>a contest to see how many hits he can get.
>

Simple, just put the word "sex" in white on white in the top
left hand corner of the web page. Apparently it's the most
searched word on the internet.

Nick.

# 4523. Attn: Radio club leadership

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: n9vjg@aol.com
Message-ID: <19971116222900.RAA09776@ladder01.news.aol.com>
Source record: 89109

Dear radio hobby club volunteer:

FBOM Magazine Online, the interactive version of FBOM Magazine, is offering to post information about your non-profit radio club's hamfests, jamborees and other large radio hobby-related events free of charge on our web site (http://n-lemma.com/FBOM/).

The only strings attatched are that your club is a non-profit organization and you can use some extra publicity.

These listings will be continously updated. As an added incentive for others to rely on the listings, we will contact you 2 weeks prior to your event and put a "Confirmed or not confirmed by FBOM" stamp on the listing.

Please send us information about your club's fundraising events as soon as possible. You can also use a form on the our web site. Simply click any references to "Hamfest listings."

For any questions, email the Publisher, Eric Bond, N9VJG (n9vjg@n-lemma.com) or the Webitor, Chuck Brown, N9UPO (n9upo@n-lemma.com).

Feel free to spread the word to other radio hobby-related clubs and organizations--especially those who do not have internet access.

Thank you and 73s

Eric Bond, N9VJG W.C./NCI-1099
Janitor and Publisher
FBOM Magazine Online
http://n-lemma.com/FBOM/

# 4524. Re: Is Glass OK for Dummy Load Container?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19971116222500.RAA08332@ladder02.news.aol.com>
Source record: 89110

>DavidC AA1FA wrote:>Would it be OK to put a KW dummy load in a large glass pickle jar?

>I have a 250 watt 12" resistor I want to use.
>
>

I can see at least two problems:

1. It would be nice if your dummy load was SHIELDED to prevent (or at least lessen the possibility of) interference to other stations nearby (and maybe not so nearby)

2. It is usual practice to have a dummy load kinda close to 50 ohms since you want all the impedances to match: Rig, feedline and load. Is this a special case where you don't need a 50 ohm load?

I double-checked the calendar and this ain't the first (of April or any other month), but there was a full moon recently. Sometimes I get a little too serious. Is this one of them?

Regards,

Bill

# 4525. WTB: Yeasu FC-107

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: Vincent Charron <charv@istar.ca>
Message-ID: <346F6337.5415@istar.ca>
Source record: 89111

I'm looking for the matching tuner FC-107 for the FT-107M. If you have one and would be willing to part with it please let me know.

'73...Vince/VE2IFR

E-Mail or call: 1-800-851-0017

## 4526. HR 2510

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: MC Turner <C_Turner@ix.netcom.com>
Message-ID: <346F985A.5F5@ix.netcom.com>
Source record: 89112

I would like to ADD talkback to my 2510. Can you help? I have searched
High and low for info on how to add talkback. I have a power mic with
talkback but it still does not work. Please help me.

MC Turner

# 4527. Re: RF Matching Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <346FA03C.3F15@lakeweb.com>
Source record: 89113

Pat Orrell wrote:
>
> Hi All
>
> Does anyone know of any shareware program for RF matching that has
> smith chart display. Motorola did one I think and there is one called
> EEZ Match
>
Here it is:

http://sss-mag.com/smith.html

I have used it and it really is a nice application. It takes
a little getting use to but once you do, you can mess around
with you parameters very quickly and see them move through
your band of interest. Remember, the lower the Q the broader
the bandwidth, stay away from the outside of the circle.

Best, Dan. http://www.lakeweb.com/dbLabs/

# 4528. Re: RF Matching Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <346f5e81.0@news.imaxx.net>
Source record: 89114

Pat,

Look over the references on my reference page at;

http://www.imaxx.net/~kd9jq/reference.html#T7

EEZ Match is commercial, they do/did have a student version.

Chuck KD9JQ

Pat Orrell wrote in message <346f28e0.5623589@news.prestel.co.uk>...
>Hi All
>
>Does anyone know of any shareware program for RF matching that has
>smith chart display. Motorola did one I think and there is one called
>EEZ Match
>
>Thanks
>
>Pat@Orrell.prestel.co.uk

# 4529. FS: New Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: The Thomas Family <k6kc@lightspeed.net>
Message-ID: <346FF1DD.3F6C@lightspeed.net>
Source record: 89115

For Sale: Computer grade electrolytic caps.: Philips 550 mfd./450 wvdc, date codes of 1990, '91-$6.00 each. Computamite 1200 mfd./450 wvdc, date code of 1982-$8.00 each. All UNUSED, in sealed pkgs. Jennings CVCJ-1000-205 ceramic vac. var. cap.,7-1000 pF., 5 kV. with drive assy inc. 5" x 1/4" shaft. NEW, IN FACTORY SEALED BOX-$175.00. Shipping additional. Satisfaction guaranteed. 73, Lowell

# 4530. QRP-Bausatz "The Oner" von Kanga US

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-16 00:00:00 UTC
From: Reinhard.Vogel@t-online.de
Message-ID: <64mpmq$hr$1@news02.btx.dtag.de>
Source record: 89116
Cross-posted to: rec.radio.amateur.homebrew,z-netz.telecom.amateurfunk

Ich habe vor, mich ﷿berwiegend mit QRP zu besch﷿ftigen. Das St﷿bern im Internet brachte auch einige Baus﷿tze ans Tageslicht, unter anderem das Kit "The Oner" aus den USA zum Preis von 70 Dollar. Hat jemand Erfahrungen mit dem Bausatz und kann mir diese mitteilen.

73 und vielen Dank
Reinhard, DL5SEL
Reinhard.Vogel@t-online.de

# 4531. TEST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: "R. Wise" <rweis@sympatico.ca>
Message-ID: <01bcf304$dde4a820$3febacce@sympatico.sympatico.ca>
Source record: 89020

Testing cannot seem to get messages from group

# 4532. Re: TO-3 case zeners needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: thomas.g.booth@den.mmc.com
Message-ID: <thomas.g.booth-161197204933@ls-bootht-c.ast.lmco.com>
Source record: 89021

In article <19971116025900.VAA13093@ladder02.news.aol.com>, k9sqg@aol.com (K9SQG) wrote:

> Helping a friend trying to locate 1N2806, 7, 8 zeners that are 50 watt TO-3 > case.

> Thanks.

> Evan
> K9SQG@AOL.com

Evan, have your friend contact New England Semiconductor; my '96 catalog from them indicates they make just what your friend needs. They should at least be able to point your friend to a local distributor.

New England Semiconductor
6 Lake St.
Lawrence, Mass. 01841
(800) 446-1158
(508) 794-1666
(508) 689-0803 [FAX]

TGB

\\ The opinions expressed herein are my own. //

## 4533. high level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <346FCC53.C8C29A5F@tri.net>
Source record: 89022

The 6JH8 is a better tube than the 7360 in some respects and is still found on some tube order sites and at hamfests for reasonable money. Both are microphonic to some extent also, but the conversion from one to the other shouldn't be a major problem.

One advantage of the tubes is the the NF of the tubes should be lower than other mixers if that is a consideration. The downside is that the tubes can put out a watt or so into the following filter if things go wrong. I still use one in a homebrew 160 rx and can't see much (unmeasured) difference between it and a MCL SAY mixer.

N0UU

# 4534. BC band converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: cdyson@usa.net
Message-ID: <3470ff7e.8681943@news.redshift.com>
Source record: 89023

I'm looking for a LB / BC band converter. Like to hook it to my
FR-101. Actually, something that tunes from 10kc to 1.5kc in 500kc
increments would be nice.

Clarence - wa6stx

# 4535. Matching sweep tube for use in RF applications.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19971117084601.DAA06233@ladder01.news.aol.com>
Source record: 89024

Does anyone have experience at matching sweep tubes for use in parallell RF amps. I have read a couple articles saying the proper method is to place a single tube in the amp at a time and observe parameters to pick a matched pair. Others have advised that they were matched using transconductance/mutual conductance using tube testers. Anyone out there having used either or both methods advise their results.

Thanks
Bob, W4RLC

# 4536. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <3470256C.60F2@hp.com>
Source record: 89025

Simon Lewis wrote:
> 
> As its been published yet again this leads me to two possible
> conclusions:
> 
> 1. That no new designs or equipment has been produced since last
> issue.
> 
> 2. People are hacked off with the RSGB and its publications and
> cannot be bothered to write and get them published!
> 
> 73 Simon GM4PLM

1) There is a general lack of good design work across the world and across the whole range of amateur radio. Editors of every periodical I know in the US, UK, and everywhere else, are actively seeking anything even vaguely publishable. There may be no alternative but to decide on a few deeply needed projects and to commission some good quality design work. Perhaps some design competitions could help to stir up activity? The amount of homebrewing seems to have both shrunk and focussed on the really easy things. There are still some outstanding things being done, but they has become much rarer.

2) I've met a number of past-authors of RSGB publications. Some of them were voluably unhappy with the experience, and this has contributed to a suspicion that the RSGB might not be a good publisher to deal with. I contributed a chapter to the 1995 ARRL handbook and found the ARRL very friendly and easy to deal with. I have since been approached by the RSGB about writing a chapter for a book of theirs. I would have had no qualms had a similar request come from the ARRL, because of my pleasant experience with them, but the reputation of the RSGB worried me. I worried too about whether I was over-reacting and if it was just due to a few people who were suffering some bouts of sour grapes about something real or imagined.

It seems that effort is being expended at Potters Bar about making the RSGB more attractive to authors, to attract some new ones, and to win back some old ones. Without a supply of material, their publishing activities will cease, and a significant source of income will end. Since the recruitment of Perer Kirby there seems to have been an outbreak of pragmatism in Potters Bar, and things have started to appear more open. Ian White, G3SEK has been involved in pointing out the changes needed to be competitive in attracting technical articles. Good technical articles, especially projects, are in very short supply, world-wide, and it's a highly competitive global market.

From conversations with some past authors, I can say that there is some truth in your second statement. From personal experience I can say that things seem to have gone well for me, so far.

Cheers
David GM4ZNX

# 4537. Re: Hi-level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971117113701.GAA08833@ladder02.news.aol.com>
Source record: 89026

>>LarryC wrote:

>I'm evaluating a hi-level balanced tube mixer for a hi-dynamic range
>receiver to be designed. I'd like to use the 7360. Circuits abound but
>has anyone actually built and checked them out?

I've been using a homebrew 12 tube receiver using the 7360 in a single ended mixer for several years now. Only trouble is, don't have the necessary test gear to evaluate and optimize the design, so have to depend on operating experience. I want to try a balanced design in my next receiver project, and I'm very interested in anything you uncover.

The 7360 is actually considered a TRANSMITTING tube by RCA, who developed it. They were popular in SSB rigs of the '60s because one bottle could serve as carrier oscillator, balanced modulator, and receiver BFO.

As a mixer, the 7360 has very good overload characteristics - it takes over a volt to overload, and you can get 20 dB conversion gain and a low (5db) noise figure. In severe contest conditions it really stands up well. If you haven't seen them already, I recommend the following articles:

"A New Approach to Receiver Front End Design" William Squires, W2PUL QST, September 1963

"Some Thoughts on Home Receiver Design" By Goodman, W1DX QST, May 1965

"An Advanced General Coverage Amateur Receiver" John Pitts, W6BD QST, November 1970

"An Experimental Receiver for 75 Meter DX Work" Doug Blakeslee, W1KLK QST, February 1972

To my knowledge the only commercial receiver to use the 7360 as a receiving mixer is the Squires Sanders SS-1R. There was an article about it in Electric Radio about a year ago, but no circuits or construction data. By all accounts this was a truly fantastic receiver, but it was doomed by its high price tag and lack of a matching transmitter - it could not compete in the amateur market with the Collins S line.

Although Imay be killing the goose that laid the golden egg, there is another beam deflection tube you may wish to investigate. The 6JH8 is a later design, and its price is reasonable.

Will send more as I dig it up

73 de N2EY

# 4538. -FS- 432Mhz GaAs Preamp - Never Used

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Ron Sibbitt <pigeon@usa.net>
Message-ID: <64pl6o$95r@news.avci.net>
Source record: 89027
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

For Sale:
432 GaAs FET Pre-amp built by Microwave
Componants of Michigan. Rated Gain 20.37 Noise
Figure .43 ,Tuned on 432MHZ. Uses a MGF1202 GaAsFet.
Mounted in 1.25 x 1 x 3.5 inch diecast box, and has
SMA female connectors.
This preamp was purchased new, and never used..has all
instructions, 4foot of RG-188 teflon coax, 2 male SMA
connectors. All in brand new condition.
$40. I will pay shipping in USA48

Email me...pigeon@usa.net

Ron Sibbitt N8LMT Croswell, MI

# 4539. -FS- Kansas City Keyer - New in Box !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Ron Sibbitt <pigeon@usa.net>
Message-ID: <64pl6q$95r@news.avci.net>
Source record: 89028
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

For Sale:
Two Kansas City Keyers, by Lance
Johnson Engineering. Serial # 633 is still in a
factory sealed box, Serial # 506 has been taken
out of the box and examined, never used.
$200. each.

E-Mail me pigeon@usa.net

Ron Sibbitt N8LMT Croswell, MI

# 4540. DSP & FPGA QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: John Wiseman <johnw@dmsl.hitachi.com>
Message-ID: <64plqt$q6n$1@newsreader.jvnc.net>
Source record: 89029
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

After receiving many requests for faxes, emails, copies, etc. of articles, I have
finally dragged myself into the late 90's and posted them to a webpage.
So if anybody is interested, you can find "A Complete DSP Design Example Using FIR Filters", as well as a new one entitled "Modern Digital Design for the Radio Amateur" at http://members.aol.com/johnw39038/index.htm
Look for John's page...

73, JW
KE3QG

==========
John Wiseman
Senior Researcher
Hitachi America, Ltd., Digital Media Systems Laboratory
Princeton, NJ
Email: johnw@dmsl.hitachi.com
Voice: (609)-520-0071 ext. 18 Fax: (609)-520-8953
Amateur Radio: KE3QG
==========

# 4541. Re: **PLEASE HELP WITH RS HTX-100 MOD****

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Thomas E Baumann <tntbaumann@fuse.net>
Message-ID: <34705298.6C54@fuse.net>
Source record: 89030

HamUser wrote:
> 
> Hi there.
> 
> I found a mod for the Realistic HTX-100 which allowes 26-30 MHz, but when I
> did the mod, it did not work. Here are the details. But first, here's the
> mod I got:
> 
> >Remove bottom cover. With the radio upside down and display facing you remove
> >the synthesizer board with the four screws, this is near the front of the
> radio.
> 
> >This gives access to the small board underneath with the surface mount
> >components on it. Locate the processor chip IC401 (UC-1208).Locate pins 28
> >and
> >29 which are on the right hand side of the chip and are 4th and 5th from the
> >top. Note they are bridged with solder.
> >CAREFULLY cut the copper track NEXT to the pins. DO NOT attempt to >unsolder
> the two pins form the board. Use a GROUNDED soldering iron. Locate >the two
> rows
> >of connector pins above the chip. On the bottom row locate the last pin on the
> >right. Verify with a VOM that this
> >pin has + five volts. Solder a 10k (1/4 w) resistor between this pin and pins
> >28 and 29 on IC401.The synthesizer will now tune from 26.00 Mhz to 30 Mhz.
> 
> Ok, here's what I did: I found pins 28 and 29 on the IC401 (UC-1208), they
> were bridged together with solder, as it said. I took a 10k resistor and
> soldered it between pins 28 and 29 and the last pin on the right lower
> connecter row. I powered the radio up, and it works as usual. I don't get
> the expanded range, it just covers 28.000 - 29.699 MHz as it does normally.
> There was absolutly no change at all. Should I reset the radio after the
> modification? It seems like nothing changed! I am also looking for the
> schematic for this radio. If anyone can help with either problem, PLEASE
> HELP. I would REALLY APRICIATE any ideas that you might have on what may be
> wrong. Please email me. Thank you very much.
> 
> 73's,
> N3ZVM

You didn't mention whether you cut the trace like the mod indicated. I
am not familiar with that particular mod or radio but have been
successful with other mods and radios. Check and re-check your work. My
experience has usually shown that is where the problem is.

Good Luck, Tom KE4DSK

# 4542. Re: VLF Radio or Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <346f7e07.2756466@news.online.no>
Source record: 89031

On 16 Nov 97 19:24:36 GMT, Peter Parker <parkerp@pcug.org.au> wrote:

>"R. Wise" <rweis@sympatico.ca> wrote:
>>Could someone please forward either the plans or tell me where I can find
>>the schematics to build either a receiver or converter to cover 18 - 150
>>KHZ.
>
>An NE602 oscillator/mixer chip (preceded by a 200kHz LPF) and a crystal
>of appropriate frequency for the receiver being used should do it. The
>NE602 data sheet should provide enough info.
>
>_____
>
Perhaps the easiest is to use SBL-1 with 3.5MHz xtal oscillator
feeding LO input..
input on pin 3-4 and output on pin 1
a coupling capacitor and a 200kHz lowpassfilter is an advantage
between antenna and SBL-1 input, it is 50 ohm on all ports so you
don't need any matching circuits

Join the G QRP Club, the magazine has several circuits for 73kHz and
similar frequencies. www.gqrp.demon.co.uk

G QRP club member 9862

---
Email: LA8AK at online dot no

# 4543. Re: VHF/UHF oscillators [Was "Re: 2n2222"]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34708c11.113860711@news.atl.bellsouth.net>
Source record: 89032

On Mon, 17 Nov 1997 11:51:49 -0800, Mike <NoSpam@Today.Thanks> wrote:
>John Mock wrote:
>> Also, how about a VXO to cover the 2 meter satellite
>> sub-band (145.80-146.00)?
>
>Again, you would need a PLL. Change the feedback caps in the
>circuit in the above URL to back-to-back varactors.

Not necessarily. A VXO can do just fine. The old IC202 and IC402
covered the 2m and 70cm sat bands with a VXO. Sufficient range
can be achieved. Sufficient stability can be achieved. And there are
no synthesizer artifacts to suppress.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

# 4544. Re: Need help finding Hewlett Packard Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: CJ <cj@boi.hp.com>
Message-ID: <34707780.46B3@boi.hp.com>
Source record: 89033

Michael Black wrote:
>
> Interestingly, the ECG guide has entries for parts in the 1820-xxxx
> sequence, some of which cross to 74xx ttl parts, but these two are not
> listed.
>
> I recall a post about this in sci.electronics.repair at some point.
> Someone wanted to know if there were replacement parts, and someone
> else provided some information. I did not save it, but if nothing
> turns up here, you might try posting the question over there.
>
> Michael VE2BVW
>
> On 15 Nov 1997, Charlie Thompson wrote:
>
> > I'm looking for two chips that I think are ECL counters...
> > they have the following HP part numbers marked on them:
> >
> >
> > Hewlett-Packard part numbers:
> >
> > 1820-0101 14-pin dip
> > 1820-0102 14-pin dip
> >
> > Is there a cross to a standard part number for these chips?
> > Any HELP appreciated.☐
> >
> > -Charlie
> >
> >
> >
> >
> > PS Remove the x's from my email address before using
> >
> >

```
I looked up these parts in our database:
1820-0101 Not listed
1820-0102 ECL J-K Flip-Flop, Motorola MC1013P
Well, that's half of what you wanted...

-cj
```

# 4545. Re: VHF/UHF oscillators [Was "Re: 2n2222"]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4md8jzffos.fsf@spinner.ecofe.com>
Source record: 89034

> Also, the 74AS161 counter is spec'ed at 75 MHz. Could a
> 74AS04 be made into a 6 meter VXO and/or QRP CW transmitter?

Probably not. For one thing, a ring oscillator is very noisy.

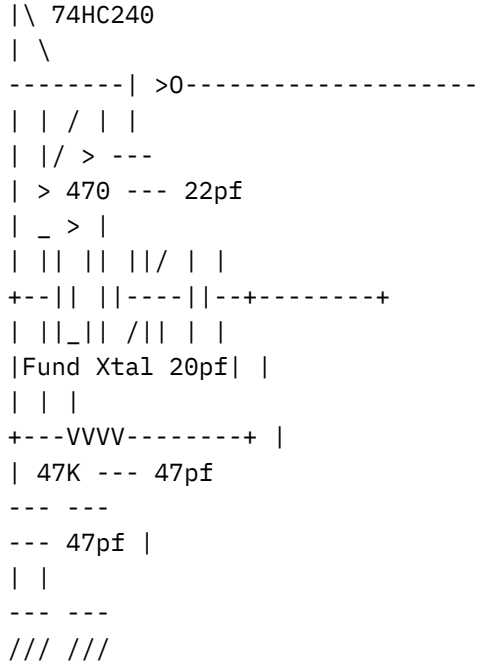
For another, you are constrained to an odd number of
inverters, starting at three.

If the prop delay of a single inverter is 2 ns, you can
generate oscillations with a period of 2ns * 3 = 6 ns (166
MHz), 2ns * 5 = 10 ns (100 MHZ), and so on. You would have a
hard time finding a particular ic that had the right
propagation delay to generate the desired frequency.

You also have to find some way of adjusting the frequency.

This is usually done with an rc network between inverters,
perhaps controlled with a varactor. It can be done, but the
results are terrible due to poor frequency stability and
excessive jitter. It would be better to use a Colpitts.

OK, i guess you don't follow what i was suggesting. In the 1996
ARRL Handbook, p. 17.100, "An Experimental 1/2-W CW transmitter",
a 74HC04 is used on 10m, 15m, and 20m:




It uses three sections in parallel, nominally 150 ohms, to get 50 ohm
match. It is keyed by slowly enabling the three drivers, the oscillator

is left running when the transmitter is enabled (no QSK??).

Does this function as a VXO, and can it run faster the 10m with a different driver IC?

74AS240: t : 2 - 6.5 ns, t : 2 - 5.7 ns.
PLH PHL

Thanks,
-- KD6PAG (Networking Old-Timer, RF newbie)

# 4546. Need SPICE Models for AF/RF Transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971117215800.QAA21762@ladder02.news.aol.com>
Source record: 89035

Howdy,
I am doing some design work here and would very much like to model my circuits on Microsim's PSPICE. I am searching for good SPICE models of the following Transistors:

2N5179
MPF102
2N2857
2N5031
IRF-511
MTP3055
2N3053
2N3866

If you can help me out with any of these transistors, I would greatly appreciate it.

73's de aa7yq

mtnclimb@aol.com

Kevin Ames
Bozeman, MT

# 4547. Re: VHF/UHF oscillators [Was "Re: 2n2222"]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Laura HALLIDAY <ve7ldh@direct.ca>
Message-ID: <3470CAF3.656D4175@direct.ca>
Source record: 89036

Gary Coffman wrote:

> Not necessarily. A VXO can do just fine. The old IC202 and IC402
> covered the 2m and 70cm sat bands with a VXO. Sufficient range
> can be achieved. Sufficient stability can be achieved. And there are
> no synthesizer artifacts to suppress.

KK7B describes a cute VHF VXO in the May 1993 QST - this is the
R1/R2/T2 follow-up/integration article, reprinted in QRP Power.
It works well; I've built both ugly and SMD versions and they
seem idiot proof. They're stable, too.

The key components are a 74HC04, a MAV-11, several Toko MC-122
inductors and a crystal (parallel resonant, 10 pF load capacitance,
1/7 of the output frequency). Expect 50 kHz or so tuning range.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

# 4548. 1 KW Automatic HF Antenna Tuner Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Roger Palmer <rpalmer@islandnet.com>
Message-ID: <01bcf3b0$bc6bb420$3fac35c6@Roger.islandnet.com>
Source record: 89037

I am looking for an automatic antenna tuner for my boat. It will be driving a non-resonant inverted L antenna with a total length of about 35 feet. Ground will be directly to the hull of my steel boat. My Icom AH-2 works beautifully, but it cannot handle more than 100 Watts. I am adding a 1 KW linear amplifier, and I need something that can accomodate this power level.

I have been spoiled by the AH-2, and want a truly automatic unit. SGC makes a tuner, but it can only handle 500 Watts. A surplus unit is the most likely candidate. I have come across a naval surplus tuner using motor driven roller inductor and vacuum variables - this would be perfect, but the current owner doesn't want to sell.

Operating voltage can be 12 or 24 VDC, or 120 VAC. The unit will be mounted outside.

I would prefer not to have to build it myself, but this may be the ultimate solution. Any ideas?

73

Roger Palmer
VE7FGL / AA7AB
Victoria, BC
rpalmer@islandnet.com

# 4549. Re: tube screen bias help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <34708bed.2212928@news.online.no>
Source record: 89038

On Sat, 15 Nov 1997 20:29:28 GMT, wrt@eskimo.com (Bill Turner) wrote:

>"Jeff W. Hockert" <hockerj@ece.orst.edu> wrote:
>
>>
>>I am working on a xtal controlled, CW tube transmitter using a 12BY7A as
>>the oscillator, coupled to the grid of a 5933 as the PA. The existing
>>circuit on both tubes uses the same supply voltage for both the plate and
>>the screen (isolating the plate with a RF choke). Typical circuit
>>examples usually show a biasing resistor dropping the screen supply below
>>the plate. I am only using 175v supply (that was the regulator tube I had
>>available), which puts me well below rated supply voltage (plate or screen
>>on either tube).
>>
>>My question is, do I need to drop the screen voltage below the plate for
>>proper operation? Or can I get away with using the same voltage for both
>>because of my low supply voltage?
>>
>_____________________________________________________________
>You could probably use the same supply for both as long as everything
>works ok, but there is a problem if the plate supply should disappear
>for some reason and the screen supply were still connected. Excessive
>screen current would flow and probably damage the tube. It would be
>better to put a resistor in the screen lead to limit the current.
>
>73, Bill W7TI
>
you need to connect a diode (or some in series) between anode- and
screen supply voltages.

---
Email: LA8AK at online dot no

# 4550. DRAKE TR7 MOD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: slimg29@webtv.net
Message-ID: <64qjr7$btp$1@newsd-103.bryant.webtv.net>
Source record: 89039

I NEED THE 11 METER MODS FOR THE DRAKE TR7..ANYONE WHO CAN HELP PLEASE
E-MAIL ME ANYTIME! THANKS,<ART>

# 4551. Re: Modeling Crystal Filters in PSPICE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Linley F Gumm <Linley.F.Gumm@$nospam$.tek.com>
Message-ID: <64qqqn$sk3$1@bvadm.bv.tek.com>
Source record: 89040

MTNCLIMB wrote:
>
> I am using Microsim's PSPICE to do some design work. I would like to model a
> Quartz Crystal Ladder filter. I used a subcircuit for my crystal model that
> contained Lm, Cm, Rs, and Cp. The problem I am having is that PSPICE is
> seeing the node from one side of the crystal through a cap to ground as
> floating. It has the same problem if two caps are put in series. It will see
> the node connecting the caps as floating and give an error message. Has
> anyone done any Crystal Lattice Filter Modeling using PSPICE? If so, how did
> you get around the Floating node problems? Is there a better model for a
> Quartz Crystal that is immune from this problem?
>
> -Kevin Ames
> mtnclimb@aol.com

SPICE has its problems. One of them is that it does not like nodes without DC connection to the rest of the circuit. The usual solution to this is to add high valued resisters to the schematic to tie the floating nodes to something, usually ground. I normaly call these (for obvious reasons) RDUMB1, RDUMB2, etc. The resister value is chosen is to be a very high value (like 10^15 Ohms) so it otherwise acts like an open circuit. One of the nice things about computers is that they don't know that this is an impraticical value.

You will find that the AC analysis mode in SPICE workes well. However, most SPICE programs do not do well when trying to perform transient analysis on narrow band or very high Q circuits. I am not an expert as to why, but it apparently is due to the fact that in narrow band circuits, the small matrix errors remaining at the end of each time step are significant.

Linley Gumm
K7HFD

# 4552. Need help with Lithium Ion Battery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Allan <doblera@cadvision.com>
Message-ID: <347112B5.23BA@cadvision.com>
Source record: 89041

Hi there, I recently purchased a radio with Lithium Ion rechargeable batteries.
I am familiar with Ni-Cd and Ni-Mh batteries. Can someone help me with the care and feeding of Li-Ion batteries. Do they like to be cycled? Can they be damaged by temperature extremes? Can they be floated for long periods without damage? What type of charging do they like(constant voltage, constant current, neither)?

Does anyone have some good bookmarks to point me to?

Thanks
Allan VE6XK

# 4553. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mk9e6hl0a.fsf@spinner.ecofe.com>
Source record: 89042

I have the regen article, but missed the superregen one. It was interesting that people complained in the letters column about one or both of them, on the basis that it was "outdated technology".

Actually, the 1996 ARRL Handbook has a project called "A Regenerative Receiver for Beginners" (pp. 17.68-17.72), but it doesn't seem to me to be that much of a beginner's project, as it involves nearly 50 parts with no PC board or even a suggested layout. It does have two JFETs between the antenna and the oscillator, so the customary complaint about potential RFI has been addressed. It's frequency range is 1.6 - 25 MHz (with the three plug-in coils).

My complaint is:

Space limitations do not permit us to show a companion super regener-
ative receiver for VHF and UHF bands. If you're interested, look at
"The Lost Technology of Super Regeneration" by Charles Kitchin in the
Fall 1994 _Communications Quarterly_.
[1996 ARRL Handbook, p. 17.72]

Alas, it appears that the vast majority of projects in the 1993 ARRL Handbook are either HF or CW oriented.

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4554. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Jerry or Thor <thor.jerry@worldnet.att.net>
Message-ID: <64r19q$7ka@bgtnsc02.worldnet.att.net>
Source record: 89043
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

David,

First, you won't get a *stable* oscillator (as in crystal) at that
frequency.
An LC oscillator probably won't be stable enough.
You could use a SAW element in place of a crystal in that frequency
range (if you can find one and afford it).
You could use a multiplier chain. You could design a simple PLL.
Or, if you have a little more money than time, you could just
buy one from MicroNetworks. They make lots of low jitter, stable
oscillators in that frequency range. They have ECL output levels.

Jerry

David Copperhead wrote in message <64qurt$cq8@mtinsc02.worldnet.att.net>...
>Howdy,
>
>I am looking for a stable 885.25MHz oscillator circuit,
>(maybe a Colpitts oscillator?)

(snipped the rest)

# 4555. Re: Need help with Lithium Ion Battery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <64rdms$29q@redgreen.cs.ubc.ca>
Source record: 89044

Allan <doblera@cadvision.com> writes:
>I am familiar with Ni-Cd and Ni-Mh batteries. Can someone help me with
>the care and feeding of Li-Ion batteries. Do they like to be cycled?
>Can they be damaged by temperature extremes? Can they be floated for
>long periods without damage? What type of charging do they
>like(constant voltage, constant current, neither)?

The only thing I've read is that LiIon cells are fussy, and require
supporting circuitry specially designed for use with them. They don't
like being overcharged, and they don't like being discharged too much
either. Apparently it's normal to have electronic monitoring of both
charge and discharge to keep the cells out of trouble. Since the things
can catch fire if abused, this is a serious issue.

Dave

## 4556. Sylbolic squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: wb4lzq@atl.mindspring.com
Message-ID: <64noc1$a1k@camel20.mindspring.com>
Source record: 89117

Anyone have info on building sybolic squelch circuit for use with ssb recievers? 73.

Kim WB4LZQ

# 4557. TRW PT5741 Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: Fred Allen <FAllen-IDC@worldnet.att.net>
Message-ID: <64o4i2$pth@bgtnsc02.worldnet.att.net>
Source record: 89118

Hi,
I picked up some TRW PT5741 transistors at a local Surplus store here in Minneapolis, MN; does anyone out there have any data on these? Any help would be appreciated.

Thanks,
Fred
fallen-idc@worldnet.att.net

# 4558. **PLEASE HELP WITH RS HTX-100 MOD****

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-17 00:00:00 UTC
From: hamuser@aol.com
Message-ID: <19971117024200.VAA06249@ladder02.news.aol.com>
Source record: 89119

Hi there.

I found a mod for the Realistic HTX-100 which allowes 26-30 MHz, but when I did the mod, it did not work. Here are the details. But first, here's the mod I got:

>Remove bottom cover. With the radio upside down and display facing you remove >the synthesizer board with the four screws, this is near the front of the radio.

>This gives access to the small board underneath with the surface mount >components on it. Locate the processor chip IC401 (UC-1208).Locate pins 28 >and
>29 which are on the right hand side of the chip and are 4th and 5th from the >top. Note they are bridged with solder.
>CAREFULLY cut the copper track NEXT to the pins. DO NOT attempt to >unsolder the two pins form the board. Use a GROUNDED soldering iron. Locate >the two rows
>of connector pins above the chip. On the bottom row locate the last pin on the >right. Verify with a VOM that this
>pin has + five volts. Solder a 10k (1/4 w) resistor between this pin and pins >28 and 29 on IC401.The synthesizer will now tune from 26.00 Mhz to 30 Mhz.

Ok, here's what I did: I found pins 28 and 29 on the IC401 (UC-1208), they were bridged together with solder, as it said. I took a 10k resistor and soldered it between pins 28 and 29 and the last pin on the right lower connecter row. I powered the radio up, and it works as usual. I don't get the expanded range, it just covers 28.000 - 29.699 MHz as it does normally. There was absolutly no change at all. Should I reset the radio after the modification? It seems like nothing changed! I am also looking for the schematic for this radio. If anyone can help with either problem, PLEASE HELP. I would REALLY APRICIATE any ideas that you might have on what may be wrong. Please email me. Thank you very much.

73's,
N3ZVM

## 4559. IBM 3191 for packet radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: rexstout@ptld.uswest.net
Message-ID: <rexstout-1811971946220001@adialup176.ptld.uswest.net>
Source record: 88970
Cross-posted to: comp.terminals,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have an unused 3191 terminal sitting around, and since I hope to get my ham license soon, I decided to try to find a use for it. What I want to do is make a harware converter for ASCII<->EBCDIC that would allow me to use the 3191 as a packet terminal. It may also be necessary<sp?> to make the converter/TNC appear to be an IBM mainframe to the 3191. What I need to know is how to make the ASCII-EBCDIC converter, where to buy/how to make a cheap EPROM programmer, what TNC to use with the 3191/converter and then how to make it all work without exploding. Any ideas?

-JR http://members.tripod.com/~jrollins/index.html
http://www.geocities.com/Area51/Lair/1681/

# 4560. WTB: NOS TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: BlueStrat <mikekro@erols.com>
Message-ID: <347258D7.2146@erols.com>
Source record: 88971

Looking for the following NOS (preferably in
original boxes) tubes.

6V6GT, 6L6GC, 5AR4, 6CA7/EL34, 6BQ5/EL84, 7591, 7581,
12AX7, 12AT7, 7199.

Please list brand, price, qty available, and whether in
orignal box.

Thanks,
Mike
bluestat@erols.com

# 4561. Diode Specification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: "CarlC." <ccleve@tenforward.com>
Message-ID: <01bcf3ef$c853ce00$9f69d5ce@carl>
Source record: 88972

I'm looking for the specifications on an FDH5004, silicon diode.
I'm particularly interested in the reverse leakage spec. I believe
the device is/was made by Fairchild and is used in the DC
restorer circuit of Tektronix o'scope.

W6CUV

# 4562. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: "Amor Powers, Radio" <power@radio.net>
Message-ID: <3472416F.72B7@radio.net>
Source record: 88973
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Steve (KF2TI - Landing, NJ) wrote:
>
> FCC Enacts Internet Morse Code Requirement

LOL. :-)

Will posting to internet newsgroups need 5 WPM?
Anyone else wish to contribute comments to the next hearing?

Amor Powers

# 4563. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEJwLEo.Foq@netcom.com>
Source record: 88974
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <64qurt$cq8@mtinsc02.worldnet.att.net>,
David Copperhead <davidcopperhead@usa.net> wrote:
>I am looking for a stable 885.25MHz oscillator circuit,
>(maybe a Colpitts oscillator?)
...
>This is an attempting to design a low-power video transmitter for UHF Channel
>83.

There's no channel 83. That's part of the cell-phone allocation
now, and they would have no sense of humor after tracking down an
interference complaint. Even if they didn't notice, it's in the base
station side of things, so you'd be dealing, in any urban area, with a
ton of interference to your signal. (Beyond the fact that it's against
FCC regulations to have low power transmitters in the TV broadcast bands.
The legal stuff runs in 902-928 MHz).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 4564. Re: Hi-level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971118001101.TAA07564@ladder01.news.aol.com>
Source record: 89045

>tube from flourescent ballasts. the suggestion for
>the SD5000 device is good. is this a quad fet device? i'm not terribly current
on recent devices.
>
>
Yes, it's a quad dmos switch, identical to the SI/SD-8901 except in a 16 pin
DIP package and the mask was such that it does not have the VHF response that
the 8901 has. At HF, there's nothing that will touch it. Cost about 2 bucks,
and in passive transmit mixer will deliver +10 dBM with carrier and IMD 60 dB
down from EACH tone. In receive, in Horrabins circuit where the signal is not
in the switched path and with square wave drive, about 8-9 dB insertion loss,
+56 dB Ip3 and 50 ohms everywhere.

W4ZCB
(Help stamp out vacuum tubes.)

# 4565. Re: Modeling Crystal Filters in PSPICE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bcf3c3$0d2daa00$0100005a@wa6vse>
Source record: 89046

MTNCLIMB <mtnclimb@aol.com> wrote in article
<19971117220400.RAA22392@ladder02.news.aol.com>...
> I am using Microsim's PSPICE to do some design work. I would like to model a
> Quartz Crystal Ladder filter. I used a subcircuit for my crystal model that
> contained Lm, Cm, Rs, and Cp. The problem I am having is that PSPICE is
> seeing the node from one side of the crystal through a cap to ground as
> floating. It has the same problem if two caps are put in series. It will
see
> the node connecting the caps as floating and give an error message. Has
> anyone done any Crystal Lattice Filter Modeling using PSPICE? If so, how
did
> you get around the Floating node problems? Is there a better model for a
> Quartz Crystal that is immune from this problem?
>
> -Kevin Ames
> mtnclimb@aol.com
>

Try using dummy resistors of a 10^12 Ohms or something like that
so that no nodes are without a DC path to ground (spice doesn't
care how little current flows, just that there is a "DC path to
ground" from every node.)

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

## 4566. Matching Sweep Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19971118023501.VAA23484@ladder02.news.aol.com>
Source record: 89047

Does anyone have any experience at matching sweep tubes. Can you describe the procedure that you have successfully used?

Thanks;
Bob W4RLC

# 4567. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: norman@pcseng.com
Message-ID: <34710f30.22501343@jolt.pagesat.net>
Source record: 89048
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

You might try the siemens TDA 6060XS IC.It does it all on one chip.

50 to 950Mhs oscillator, Audio and viseo midulator, multistandard.

Norman

On Tue, 18 Nov 1997 02:34:37 GMT, davidcopperhead@usa.net (David
Copperhead) wrote:

>Howdy,
>
>I am looking for a stable 885.25MHz oscillator circuit,
>(maybe a Colpitts oscillator?)
>The output must be at a minimum of +7dBm, or I suppose
>I could use a cheap Minicircuits amp like a MAR-6 to get
>that level.
>The output will go into the LO port of a Minicircuits ZLW-2 Mixer, the reason
>for the +7dBm level.
>a camera video signal will go into the IF port. The output of the
>RF port of the mixer will go into an Avantek UTO-546 RF amp and BPF then to an
>antenna.
>
>This is an attempting to design a low-power video transmitter for UHF Channel
>83.
>
>Any help is greatly appreciated.
>
>

# 4568. RECEIVING TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64r4co$8rm$2@newsfeed.smartt.com>
Source record: 89049

Hi!,I do have for sale a lot of receiving tubes,for a fair price.
For any of your need,just contact me with the numbers you need
and I will do the best to help you out.....thanks

Eric By email or PH/FAX (250)868-1182
Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

## 4569. Installation Accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: fstsnap@aol.com
Message-ID: <19971118043200.XAA07583@ladder02.news.aol.com>
Source record: 89050

If your in need for installation accessories for your car or vehicle...drop us a line, we carry all types of connectors, tools and other accessories..fst.inc@mci2000.com

# 4570. WANTED: 10m xtal rig schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: jhetheri@freenet.npiec.on.ca
Message-ID: <64r7n8$3mb$1@brain.npiec.on.ca>
Source record: 89051

As I search thru my small library of schematics, handbooks and the like, I cannot find a schematic for a simple, minimalistic type 10 metre xceiver. 40m circuits abound, but 10m seems hard to find. Anybody have any suggestions? With 10m's best days ahead, a simple 1/2 watt CW xceiver could have a little fun!

Tnx es 73/72
Jeff - VA3JFF

--
==========
L. JEFFREY HETHERINGTON
Niagara Falls, Ontario, Canada
E-mail: L.Jeffrey.Hetherington@InternetAddress.com

# 4571. Re: TRW PT5741 Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Burt Lang <burt@rocler.qc.ca>
Message-ID: <34713FA5.6C7F@rocler.qc.ca>
Source record: 89052

Fred Allen wrote:

> I picked up some TRW PT5741 transistors at a local Surplus store here in Minneapolis, MN; does anyone out there have any data on these? Any help would be appreciated.

> Thanks,
> Fred

They are HF SSB rated UltraLinear transistors.

ratings 30 wts PEP 12.5v supply gain at 15 MHz=17 and at 30 MHz=14
Pkg=TO-128

Hope that helps..

Burt VE2BMQ>>>>

# 4572. Re: Modeling Crystal Filters in PSPICE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <kho9eXAUyUc0EwP0@lfheller.demon.co.uk>
Source record: 89053

```
In article <64qqqn$sk3$1@bvadm.bv.tek.com>, Linley F Gumm <"Linley.F.Gum
m"@$nospam$.tek.com> writes
>MTNCLIMB wrote:
>>
>> I am using Microsim's PSPICE to do some design work. I would like to model a
>> Quartz Crystal Ladder filter. I used a subcircuit for my crystal model that
>> contained Lm, Cm, Rs, and Cp. The problem I am having is that PSPICE is
>> seeing the node from one side of the crystal through a cap to ground as
>> floating. It has the same problem if two caps are put in series. It will
>see
>> the node connecting the caps as floating and give an error message. Has
>> anyone done any Crystal Lattice Filter Modeling using PSPICE? If so, how did
>> you get around the Floating node problems? Is there a better model for a
>> Quartz Crystal that is immune from this problem?
>>
>> -Kevin Ames
>> mtnclimb@aol.com
>

Someone posted this a couple of years ago, which should help:

SIX XTAL LADDER FILTER - NARROWBAND RF - 9.834 MHZ
.ac lin 1001 9.700meg 10.000meg

.SUBCKT CRYSTAL 1 2
L1 1 3 6.9813E-3
R1 4 2 4.53
CA 3 4 37.5995E-15
CB 1 2 8.34134E-12
R2 1 0 100E6
R3 2 0 100E6
.ENDS

VGEN 0 1 AC 1
RGEN 1 2 360
RLOAD 12 0 360
R1 7 0 100E6
C1 2 3 66E-12
C2 4 0 49.7E-12
C3 5 0 68E-12
C4 6 7 180E-12
C5 7 0 66E-12
C6 7 8 180E-12
C7 9 0 68E-12
C8 10 0 49.7E-12
```

```
C9 11 12 66E-12
XTAL1 3 4 CRYSTAL
XTAL2 4 5 CRYSTAL
XTAL3 5 6 CRYSTAL
XTAL4 8 9 CRYSTAL
XTAL5 9 10 CRYSTAL
XTAL6 10 11 CRYSTAL
.END
```

It was originally written for PSPICE, I had to modify it slightly for Berkeley SPICE.

73, Leon

--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a low-cost reconfigurable computing module using the XC6216 FPGA

## 4573. Huge End of the Year Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: jparker@fix.net
Message-ID: <64rjkn$1os$4@zinger.callamer.com>
Source record: 89054

Dan's Small Parts and Kits has just added some new items to the

"Huge End of the Year Sale"

Check it out:

http://www.fix.net/dans.html

Enjoy,,,72,,,Jerry...WA6OWR...K

# 4574. RECEIVING TUBES SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <64r4c8$8rm$1@newsfeed.smartt.com>
Source record: 89055

Hi!,I do have for sale a lot of receiving tubes,for a fair price.
For any of your need,just contact me with the numbers you need
and I will do the best to help you out.....thanks

Eric By email or PH/FAX (250)868-1182

# 4575. Looking for a shop in London (UK)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Bjoern.Fritsche@t-online.de
Message-ID: <64rf49$jua$1@news01.btx.dtag.de>
Source record: 89056

Hi,
I will travel to London (UK) in December and I�m lookin for shops in London-Central where I can buy some equipment for homebrewing with brewing-kits.
If you know a shop, send me a mail.
Tnx
Bjoern

# 4576. Re: VHF/UHF oscillators [Was "Re: 2n2222"]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Mike <internal@short.net>
Message-ID: <34717E35.3CD6@short.net>
Source record: 89057

Gary Coffman wrote:

> On Mon, 17 Nov 1997 11:51:49 -0800, Mike <NoSpam@Today.Thanks> wrote:
> >John Mock wrote:
> >> Also, how about a VXO to cover the 2 meter satellite
> >> sub-band (145.80-146.00)?

> >Again, you would need a PLL. Change the feedback caps in the
> >circuit in the above URL to back-to-back varactors.

> Not necessarily. A VXO can do just fine. The old IC202 and IC402
> covered the 2m and 70cm sat bands with a VXO. Sufficient range
> can be achieved. Sufficient stability can be achieved. And there are
> no synthesizer artifacts to suppress.

> Gary
> Gary Coffman KE4ZV | You Make It | Email:
> Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
> 534 Shannon Way | Guaranteed | or
> Lawrenceville, GA 30244 | | ke4zv@radio.org

You are correct - I didn't notice the original post only needed 200 KHz.

Also, I am more familiar with the commercial term "VCXO". These are Voltage-Controlled Crystal Oscillators, where the frequency control is a DC voltage, rather than a tuning shaft on a variable capacitor. They are usually spec'd for +/- 100 ppm, but some may go as high as +/- 200 ppm.

The frequency stability is considerably poorer than standard crystal oscillators, but they may be usable for ham work. They are certainly better than a free-running LC oscillator, and you are right about the spurs from a PLL.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4577. Re: DRAKE TR7 MOD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: geoffm@cs1.cs.huji.ac.il
Message-ID: <64rmki$cn6$1@news.huji.ac.il>
Source record: 89058

Arthur Clark (slimg29@webtv.net) wrote:
> I NEED THE 11 METER MODS FOR THE DRAKE TR7..ANYONE WHO CAN HELP PLEASE
> E-MAIL ME ANYTIME! THANKS,<ART>

Very simple, you just buy an AUX-7 board (now a rare item), get the little diode array IC's from Mouser or similar, cut off exactly the right pins, install them in the board, open the TR7, and plug the AUX-7 in under the display board.

Or if you can't get an AUX-7, you can build one from the QST article from around 1980.

If you plan to use it on AM, you need to get the 6khz filter, also a rare item.

BTW, it is illegal to use it on CB in the US.

73,

Geoff.

--
Geoffrey S. Mendelson (4X1GM,N3OWJ), Senior Programmer
Computer Science Institute, Hebrew University, Jerusalem, Israel
geoffm@cs.huji.ac.il (02) 65 85692 Fax (02) 561 7723
To get pgp public key: "finger geoffm@cs.huji.ac.il"

# 4578. Re: VHF/UHF oscillators [Was "Re: 2n2222"]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Mike <internal@short.net>
Message-ID: <34718254.6173@short.net>
Source record: 89059

Good - now I can fix a major goof in my previous post!

John Mock wrote:

> > Also, the 74AS161 counter is spec'ed at 75 MHz. Could a
> > 74AS04 be made into a 6 meter VXO and/or QRP CW transmitter?

> Probably not. For one thing, a ring oscillator is very noisy.

> For another, you are constrained to an odd number of
> inverters, starting at three.

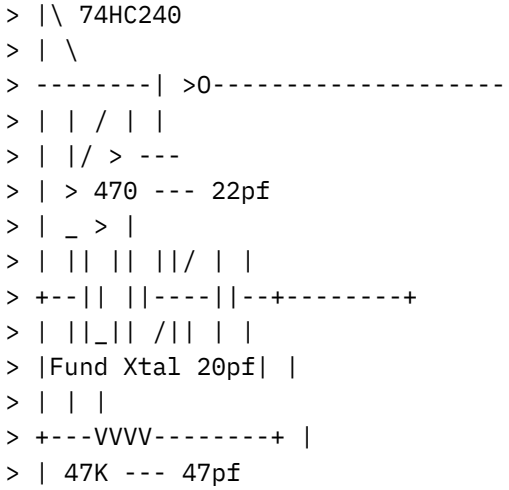
> If the prop delay of a single inverter is 2 ns, you can
> generate oscillations with a period of 2ns * 3 = 6 ns (166
> MHz), 2ns * 5 = 10 ns (100 MHZ), and so on. You would have a
> hard time finding a particular ic that had the right
> propagation delay to generate the desired frequency.

Sorry - the calculations above are for one-half period. The actual
frequency should be divided by two. Of course, I was way off
understanding what you were talking about, so the point is moot anyway.

> You also have to find some way of adjusting the frequency.

> This is usually done with an rc network between inverters,
> perhaps controlled with a varactor. It can be done, but the
> results are terrible due to poor frequency stability and
> excessive jitter. It would be better to use a Colpitts.

> OK, i guess you don't follow what i was suggesting. In the 1996
> ARRL Handbook, p. 17.100, "An Experimental 1/2-W CW transmitter",
> a 74HC04 is used on 10m, 15m, and 20m:



> --- ---
> --- 47pf |
> | |
> --- ---
> /// ///

> It uses three sections in parallel, nominally 150 ohms, to get 50 ohm
> match. It is keyed by slowly enabling the three drivers, the oscillator
> is left running when the transmitter is enabled (no QSK??).

> Does this function as a VXO, and can it run faster the 10m with a different
> driver IC?

> 74AS240: t : 2 - 6.5 ns, t : 2 - 5.7 ns.
> PLH PHL

> Thanks,
> -- KD6PAG (Networking Old-Timer, RF newbie)

I guess you could put just about anything together and get some kind of result :)

I don't have access to the ARRL and QST articles mentioned in your post and other replies to this thread. But I assume one of the reasons for leaving the oscillator running is to reduce the frequency drift while transmitting code. The crystal is being driven quite hard, and at 6 meters and above, the self-heating may cause quite a large frequency shift. This is difficult to copy.

In this day and age, where frequency stability is good enough to use SSB at 1.8 GHz, people may not want to put in the effort to listen, especially when you are running QRP. Probably, any contacts would be very short!

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4579. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971118130701.IAA03942@ladder01.news.aol.com>
Source record: 89060

>
>
> 1) There is a general lack of good design work across the world and
across the whole range of amateur radio. Editors of every periodical I know in
the US, UK, and everywhere else, are actively seeking anything even vaguely
publishable. There may be no alternative but to decide on a few deeply needed
projects and to commission some good quality design work. Perhaps some design
competitions could help to stir up activity?
>The amount of homebrewing seems to have both shrunk and focussed on the really
easy things. There are still some outstanding things being done, but they has
become much rarer.
>
>
I doubt that in it's entirety. There's plenty of good design work being done,
some very esoteric. The non-authors have become much wiser and realized that
the fame and fortune of being an author for either RSGB or the League
(addressing the un-repeated part of this thread) is neither worth the pain and
agony of dealing with the editors and sub-editors and sub-sub editors and the
draftspersons who have no idea how they're screwing up the offering, nor the
meager financial rewards.

HAH! I can just see either of the little publishing houses mentioned
"commissioning" an research project and article. Much too interested in trying
to keep their respective heads above water after years of poor management and
poorer decision making have ruined their market.

Homebrewing hasn't shrunk, we've just found out how to communicate our thoughts
and experiments with neither the need of a "National Rag" nor of consuming
large chunks of a magazine that doesn't have anything of interest. Both of
these entities and a couple of others not mentioned are obsolete. Your "design
competition" had better have something in it besides the "privelege" of being
published, or you'll throw a party and no one will come.

W4ZCB

# 4580. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <34719F43.54C2@pop.valley.net>
Source record: 89061

JohnsonHE wrote:
>
> >
> >
> > 1) There is a general lack of good design work across the world and
> across the whole range of amateur radio. Editors of every periodical I know in
> the US, UK, and everywhere else, are actively seeking anything even vaguely
> publishable.

<snip>

> I doubt that in it's entirety. There's plenty of good design work being done,
> some very esoteric. The non-authors have become much wiser and realized that
> the fame and fortune of being an author for either RSGB or the League
> (addressing the un-repeated part of this thread) is neither worth the pain and
> agony of dealing with the editors and sub-editors and sub-sub editors and the
> draftspersons who have no idea how they're screwing up the offering, nor the
> meager financial rewards.

Speaking as a free-lance writer, I can attest that the amateur radio
market doesn't
pay well for project-based manuscripts-- $50.00 per page appears
typical. That's
not much of a payback when you consider the amount of work that goes
into creation of a
well-designed and well-documented technical project.

Also, one major amateur radio publisher pays its writers from six to
nine months after
publication-- and then only after the writer pleads for payment. This
attitude
discourages professional and semiprofessional writers from sinking time
and effort
into elaborate projects.

From the publisher's viewpoint, amateur radio doesn't offer the payback
from advertisers
that computer systems/hardware/software categories do. Today, most
magazines subsist
on ad revenues-- not subscribers-- hence the failures of interesting
mags like our late
and much-lamented "Ham Radio" and "Hambrew" magazines.

My guess is that amateur radio will continue as a niche market for
publishers unless
or until some event sparks greater public recognition and participation,

followed
by more demand for equipment, more ad revenues, and more competition
among publishers.

Until then, if you decide to design and write about your latest
amateur-radio project, do so because you want to contribute your ideas
to the
amateur radio community and advancement of the state of the art.

# 4581. For Sale RADIO'S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: JP <restar@idir.net>
Message-ID: <01bcf450$f417e920$cff3efcf@restar.idir.net>
Source record: 89062
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.packet,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.

FOR SALE,AMATEUR (HAM) RADIO'S
FT 757GXII= $900
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net

# 4582. Re: repost:VLF receiver or converter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: ws1k@rocketmail.com
Message-ID: <3471aa8f.3687078@news.idt.net>
Source record: 89063

On Thu, 11 Sep 1997 18:43:42 GMT, mvdamme@xs4all.nl (Maarten van Damme) wrote:

>I did not get a single reply although I am certain that there are VLF
>enthousiasts out there, so here I go again:
>
>Are there, apart from McGreevy's WR-3E VLF/ELF receiver, other radio's
>available that target this range?
>
>Which converters are there currently available and what is their
>quality and price?
>
>Website addresses are also very welcome
>
>Maarten van Damme
>mvdamme@xs4all.nl

How about building one of your own?
Here's what I did while I was messing around in the shack today, I built up a real simple and easy VLF converter.
I went through my junk box and found a Mini Circuits Lab SBL-1 mixer. Then I went through some old junk 386 motherboards. I found a TTL clock oscillator on 50MHZ. I hooked up the two components to make a receive convertor. I have a 6mtr all mode so I used that for my I.F. radio. After soldering the mess up, I hooked it up to the all mode and threw a hunk of wire out on the ground.
Did it work? Sure did, just as I knew it was supposed to.
Was it as sensitive as my Kenwood TS440s on VLF? No but I didn't expect it to either. The converter has NO RF amplification, it's just "brute force" conversion. I did have some interference from the broadcast band but don't forget there was no filtering either. The 50mhz oscillator puts out square waves so there was some (not much) "hash" on the signals. Tuning around I could hear LORAN C and I heard numerous navigation beacons. The 6mtr all mode has a 4 MHZ bandwidth so I was also able to copy the AM broadcast band, 160mtrs, 75mtrs and everything in between. 0-4 mhz!
So add some filtering and some amplification and it don't come any easier than that. You can even use the same basic setup, turn it around and use it for transmit. Good use for that 10 meter all mode sitting around. Just pick the proper oscillator freq for the radio you're going to use.
None of this is my own idea but I thought I'd pass it along. I just put it together to see how good it would be.

73 and good luck,
Jon...WS1K...
>

# 4583. adults and animation research

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Cuppens <Rene.Cuppens@ping.be>
Message-ID: <01bcf45c$93319500$72c879c1@cuppens>
Source record: 89064
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.b

hello there,
Yes yes, it's the wrong newsgroup, but please hear me out before you start to write someting.
I'm an animation student and I am writing a paper on "adults and animation". At the moment I am trying to do some research and that's why I need your answer on these small questions.
Please e-mail me the answer because this message was posted to really a lot of newsgroups. You will find my e-mail adress at the bottom of the page.
Thank you very much for answering, and please don't even think about sending me something else than the answers, I won't take the time to read it anyway.
Brecht Cuppens

1 Which factors do you find most important in an animated movie, series, short,.....(choose three and rate, 1 being the most important, 3 the least)

1humor
2story
3visual style
4music
5Technique (3-d, cells, computer...)
6atmosphere (dark, heavy, comic, weird,....)
7dialogue
8quality of animation
9"adult content"(violence, sex, drugs,...)
10suspence
11realism
12subjects
13other (fill in)

2Which is your favourite animated movie, series, short,.....(only one please) and why?(choose from the above list)

3some personal info: age, sex , education, country

My answer would look like this:
1visual style
2storie
3humor
The Nightmare before christmas: visual style, quality of animation
20/m/university equal education(not finished yet)/Belgium

This shouldn't take too long and I kept it as short as I could,
so if you feel like it, you know what to do
thanks
Rene.Cuppens@ping.be

# 4584. If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: kf2ti@planet.net
Message-ID: <MPG.edbda89f3719b2e9898e3@news.planet.net>
Source record: 89065
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

```
FCC Enacts Internet Morse Code Requirement
--- ------ -------- ----- ---- -----------

The FCC, under pressure to clean up the Internet, especially after the
Communications Decency Act provisions regarding Internet content
regulation were stricken as violating the U.S. Constitution, has
decided instead to require a Morse code requirement for Internet
users. Citing the success of the Amateur Radio Service and the general
belief that its requirement for operators to pass a Morse code
proficiency exam and other technical requirements, has kept the A.R.S.
"clean", the FCC will enact a 5 word-per-minute requirement for all
Internet users. They are leaving open the issue of whether there
should be a "codeless" class of Internet user and are soliciting
comments on this proposal.

Persons wishing to develop a web site having only links to other web
sites having links to other web sites, and so forth, must pass a 13
word-per-minute test and demonstrate proficiency in HTML, the Internet
authoring language.

Persons wishing to develop web sites that have actual content, as
compared to just links to other web sites, must pass a 20
word-per-minute Morse proficiency test, demonstrate proficiency in
HTML and the Java programming language, and show that they have
mastery of at least one human language, such as English.

The FCC, which lacks budgetary authority to implement the testing
program, has stated that it intends to create Volunteer Examiner
programs for Internet applicants.

Copyright @ 1996 Virtual Publishing Co.

---------------------------------------------------------------------

Note for the humor-impaired: this is satire. Please do not read this
if you are not properly trained and certified in satire.

---------------------------------------------------------------------
```

## 4585. Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Tim <Hynde@flash.net>
Message-ID: <3472710F.5A19@flash.net>
Source record: 89066

I see schematics now and then calling for lets say a 8uh coil,
X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
the circuit is truly 8uh does it matter if I use the torroid?

The equivallent coil would be wound on a pencil or something handy using
the standard coil formulas.

Tim

# 4586. Re: Designing Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: "Mark E. Zaleski" <mezaleski@att.net>
Message-ID: <64tl0u$p7b@bgtnsc02.worldnet.att.net>
Source record: 89067

I have a book titled "Practical Transformer Design Handbook 2nd Edition" by Eric Lowdon. It was published by TAB Professional and Reference Books, a division of TAB Books in Blue Ridge Summit, PA. This number may help you find it: ISBN 0-8306-3212-3.

Lots of info on winding your own transformers. I have used it successfully several times but it has been a while.

73,

Mark (WE8L)

# 4587. Re: DRAKE TR7 MOD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <64tonb$al0@bgtnsc02.worldnet.att.net>
Source record: 89068

Geoffrey S. Mendelson wrote:
><snip>
> BTW, it is illegal to use it on CB in the US.
>
> 73,
> Geoff.
> --
> Geoffrey S. Mendelson (4X1GM,N3OWJ), Senior Programmer
> Computer Science Institute, Hebrew University, Jerusalem, Israel
> geoffm@cs.huji.ac.il (02) 65 85692 Fax (02) 561 7723
> To get pgp public key: "finger geoffm@cs.huji.ac.il"

I do not promote using the TR7 on 11M. For those hams who don't have AUX7, and want the WARC bands, clipping one wire will do it. The Tx will be enabled 1.8 - 30 Mhz.
73
--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing stuff.
http://www.geocities.com/capecanaveral/3722
.

# 4588. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-18 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34724DFE.26CC@pop.removethistomailme.net>
Source record: 89069

Tim wrote:
>
> I see schematics now and then calling for lets say a 8uh coil,
> X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
> the circuit is truly 8uh does it matter if I use the torroid?
>
> The equivallent coil would be wound on a pencil or something handy using
> the standard coil formulas.
>
> Tim

I don't think that a pencil will give you quite the same Q as a nice
Amidon toroid core. :-)

The other key advantage a toroid gives you is the fact that it's
self-shielding to a large extent. That can simplify circuit layout
quite a bit.

I wouldn't recommend substituting a non-toroidal inductor for a toroidal
one.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 4589. Re: Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: "Robert W. Cunningham" <rcunning@acm.org>
Message-ID: <34730A75.3CA3E0E@acm.org>
Source record: 88920
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanch,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipmen,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,sci.astro.amateur,tnn.radio.amateur,uk.radio.amateur,uwarwick.societie.amateur-,de.comm.ham,fj.rec.ham,relcom.radio.ham,rpi.union.ham-radi,su.org.ham-radi,alt.radio.scanner,alt.radio.scanner.uk

Ron Long wrote:
>
> In article <o$3lmLAmojc0Ew$W@devans.demon.co.uk>, Dave Evans
> <Dave@devans.demon.co.uk> wrote:
>
> > Does a perspective ham work a lot of DX?
> >
> Try prospective.

Well, maybe he wants to be a ham, but only from one point of view?

-BobC
KE6RGA

## 4590. Weston 301 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971119192815Z-5092@whpost.wh.lucent.com>
Source record: 88921

Looking for any Weston 301 3" nominal (2 25/32 mtg hole) type meters
with the following values:

0-1 ma with any scale (0-1ma preferred)
0-250 or 300 ma
0-15 VAC
0-300 VAC

or anything close. Also, 4 megohm meter multiplier for 4KV service.

Seth KC2WE

# 4591. Re: DRAKE TR7 MOD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <34724c38.9912314@news.azstarnet.com>
Source record: 88922

On 18 Nov 1997 09:20:18 GMT, geoffm@cs1.cs.huji.ac.il (Geoffrey S. Mendelson) wrote:

>Arthur Clark (slimg29@webtv.net) wrote:
>> I NEED THE 11 METER MODS FOR THE DRAKE TR7..ANYONE WHO CAN HELP PLEASE
>> E-MAIL ME ANYTIME! THANKS,<ART>

>Very simple, you just buy an AUX-7 board (now a rare item), get the little
>diode array IC's from Mouser or similar, cut off exactly the right
>pins, install them in the board, open the TR7, and plug the AUX-7 in
>under the display board.

>Or if you can't get an AUX-7, you can build one from the QST article from
>around 1980.

Or you can cut one trace on the motherboard and transmit anywhere.

>If you plan to use it on AM, you need to get the 6khz filter, also
>a rare item.

>BTW, it is illegal to use it on CB in the US.

Which is why I'm not saying which trace to cut

N7WS

# 4592. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: "G.Ray" <gpray@gte.net>
Message-ID: <64tck5$mk0$1@gte2.gte.net>
Source record: 88975
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

> . Citing the success of the Amateur Radio Service and the general
> belief that its requirement for operators to pass a Morse code
> proficiency exam and other technical requirements, has kept the A.R.S.
> "clean", the FCC will enact a 5 word-per-minute requirement for all
> Internet users

Whoa! One of the best gags in years!!!!
Lesseee,the Amateur Radio Service is "clean,and a success??" GARBAGE!
This is not an idle claim,let's fire up our radios and listen.What do we have here? Ummmmmm,Twenty meters during the weekend.....Gee,sounds a whole lot like what I hear on cb 19.....Lets spin the dial down to Eighty meters.Listen to some of these guys say F*ck this,S*it that...Hey! thats not allowed!!! I don't understand,they are using their callsigns! Why does this happen? Why does this continue?Because the "clean and success" line is is bogus.

GRay

# 4593. Re: Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Dave Evans <Dave@devans.demon.co.uk>
Message-ID: <o$3lmLAmojc0Ew$W@devans.demon.co.uk>
Source record: 88976
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanch,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipmen,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,sci.astro.amateur,tnn.radio.amateur,uk.radio.amateur,uwarwick.societie.amateur-,de.comm.ham,fj.rec.ham,relcom.radio.ham,rpi.union.ham-radi,su.org.ham-radi,alt.radio.scanner,alt.radio.scanner.uk

Does a perspective ham work a lot of DX?

# 4594. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Gary - KJ6Q <gdavidson@deletecwnet.com>
Message-ID: <01bcf49d$f470b080$166ba2cd@default>
Source record: 88977

Tom Bruhns <tomb@lsid.hp.com> wrote in article
<64dcq5$mre@hpcvsnz.cv.hp.com>...
> Gary Coffman (ke4zv@bellsouth.net) wrote:
>
> : That's the problem with the regen, unless it is fronted with a good
> : unilateral front end, it radiates madly all the time.
>
> Gee, regens have kind of passed out of my vocabulary, but my recollection
> is that a regen doesn't radiate...a superregen does. Have I just
> forgotten?? I'm thinking of a regen as an RF amplifier with positive
> feedback below the point of oscillation, with something to detect the
> RF amplitude in its tank, and a superregen as a gated oscillator, where
> the amplitude of the osillation at the end of the gate time is
> proportional to the RF (signal level) in the tank at the start of the
> gate.
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com
>

HEH HEH HEH, you win the prize this time - good 'ol Gary activated keypad
before engaging brain, something he usually avoids...

# 4595. Re: TEST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: mailfrmpa@aol.com
Message-ID: <19971119034601.WAA22030@ladder01.news.aol.com>
Source record: 88978

>Testing cannot seem to get messages from group

We haven't sent any; been busy earning that $1000/week!

## 4596. Idea for coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <64tub3$cd8@news.Hawaii.Edu>
Source record: 88979
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

For the homebrewers out there (or restorers):
I think I might have run across the perfect coil form to wind coils on: Plastic hair curlers. They come in a variety of diameters (as small as 3/16 inch), and are quite "airy" (they remind me of the minimal Air Dux forms).

The ones I have passed the microwave test (didn't heat up when bombarded with microwave oven RF).

Best of all, they're free for many of us... ("Honey, I'm missing some hair curlers!" "Oh, the cat was chewing on a few of them so I threw them out...")

73,
Jeff KH2PZ / KH6

P.S. ("Honey, we don't own a cat.")

# 4597. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3472872e.40375504@news.crosslink.net>
Source record: 88980

On Tue, 18 Nov 1997 20:25:02 -0600, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>> I see schematics now and then calling for lets say a 8uh coil,
>> X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
>> the circuit is truly 8uh does it matter if I use the torroid?
>>
>> The equivallent coil would be wound on a pencil or something handy using
>> the standard coil formulas.
>>
>> Tim
>
>I don't think that a pencil will give you quite the same Q as a nice
>Amidon toroid core. :-)
>
>The other key advantage a toroid gives you is the fact that it's
>self-shielding to a large extent. That can simplify circuit layout
>quite a bit.
>
>I wouldn't recommend substituting a non-toroidal inductor for a toroidal
>one.

Tim,
John has given you some basis for not trying to do it as an air core.
Here are some more things to be aware of:.

It's very difficult to get the amount of inductance you want and at
the same time keep the resistance down. The more wire and the finer it
is, the more resistance. That's what he means by the Q - you can't get
the high ratio of inductance to resistance with an air core.

If you didn't care so much about Q, you might have to worry about self
resonant frequency.. When you wind a lot of wire onto a small form,
you will likely develop some significant capacitance distributed
across the turns. This will cause the inductor to begin to look more
like a parallel resonant circuit at some frequency. If that frequency
is near or below the frequency where you are using the inductor, it
may not behave as an inductance - it might even look like a
capacitance if you get high enough in frequency.

One way to minimize that effect is to wind the inductor in separate
pi's, as is usually done with RF chokes. That kind of winding is very
specialized and is difficult to do by hand.

It may be possible to subsitute something for the toroid. Almost any
ferrite will give you a higher inductance than an air core. If you're

lucky, you might find something near to your needs by purchasing the inductor assortment kit at Radio Shack.

Quite often a designer specifies a part from the perspective of simply documenting what he used. That has the advantage of ensuring that someone else can duplicate his circuit and get the same performance. However, in many cases the designer COULD have used quite a range of components or values in a given circuit with equal or nearly equal results. Therefore, there are often cases where you can make clever substitutions. There is no guarantee as to what the designer really had in mind unless he provides a detailed circuit analysis (rare).

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4598. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: myers@fc.hp.com
Message-ID: <64u079$fpf@fcnews.fc.hp.com>
Source record: 88981
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I think that SOMEONE should point out that there IS NO channel 83 in the UHF TV allocation any more; channels 71-83 were reallocated to cellular telephones some time back. You do NOT want to put a television transmitter anywhere in this band.

Bob Myers KC0EW Hewlett-Packard Co. |Opinions expressed here are not
O- Workstations Systems Div.|those of my employer or any other
myers@fc.hp.com Fort Collins, Colorado |sentient life-form on this planet.

# 4599. Re: Kenwood & Icom 13.8VDC connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: zs6hz@global.co.za
Message-ID: <34728890.142039918@news.global.co.za>
Source record: 88982

On 3 Nov 1997 06:24:07 GMT, k5kne@aol.com (K5KNE) wrote:

>Does anyone know a source of the 6 connector rectangular plugs that is used on
> Knwd and Icom HF transceivers such as the TS-430, TS-50, IC-730? It is
> similar to a MOLEX plug but has the individual contacts surrounded in plastic.
> The brand name cables are pretty expensive.

Hello all,

I was interested in this thread and I started to do some investigation regarding these connectors. Being in the two-way radio business in South Africa, I managed to find a source of these connectors.

Unfortunately I have to purchase in lots of 100, with a minimum order of 100 units.

Each unit comprises one moulded plastic plug and six pins. There is no cable connected.

The cost of 100 units is $525-00 excluding postages to the United States.

If anyone is interested, please send me an e-mail.

Regards,

Marc ZS6HZ

---

Please visit our web site at:

http://home.global.co.za/~lieberma/

# 4600. Re: Is Glass OK for Dummy Load Container?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19971119032801.WAA19858@ladder01.news.aol.com>
Source record: 88983

>Whoops. Excuse me please. I was reading David's post while looking through a
> small pickle jar a

Bill, I think you were correct regarding the full moon! Bill

# 4601. Broadband transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Marc Vissers <mvissers@glo.be>
Message-ID: <64u8t5$a69$1@rhea.glo.be>
Source record: 88984

Hello,

Our shortwave listeners club and I are having a DX-weekend here this saturday and sunday in Belgium and since some computers are involved this time, I would like to use a broadband transformer to shield the longwire antenna's feeding line. The commercial types are too expensive in my opinion (about 70 dollars) and since I have an old Fritzel FD-3 Windom antenna balun left over, I thought I could convert this one into a 9:1 broadband transformer (unbalanced to unbalanced, 450 to 50 ohms). I have seen a schematic in an older ARRL Handbook with 4 bifilar windings and would like to use that. I don't know what type of core it is (might be Amidon T-130 or something), but would like to know how much turns I have to use or how to check this (don't have much equipment though).

Maybe better would be a 10 to 1 transformer for a longwire, but I don't have any schemes of such a circuit. Does someone here has a better or other practical scheme that he can send me (scanned copy as a jpeg ?), so that I can make this thing work before friday ;-)

Thanks very much in advance. Hope someone here can help me as quickly as possible.

73, Marc

Marc Vissers
Editor DX-Antwerp vzw.
Belgium
E-mail : mvissers@glo.be
Fax : +32-3-321 00 87

# 4602. Re: Help with FT-727R

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Alex/BG1GS <bg1gs@qsl.net>
Message-ID: <64ucfv$3os@info.bta.net.cn>
Source record: 88985
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_0001_01BCF50D.62A39940

charset="iso-8859-1"

>I want to use the external mike jack on a Yaesu FT-727R HT, but don't
>have a schematic for it, and the manual doesn't provide any information
>about using it. I need to know if it is a 2.5 mm stereo jack (looks =
like
>it), what each contact does, and what the value of the series (or =
shunt)
>resistor is for the PTT circuit (if any).

Alex,BG1GS

mailto:bg1gs@qsl.net

http://www.qsl.net/bg1gs

------=_NextPart_000_0001_01BCF50D.62A39940

charset="iso-8859-1"

>I want to use the external mike jack on a Yaesu =
FT-727R HT,=20
but don't
>have a schematic for it, and the manual doesn't provide =
any=20
information
>about using it. I need to know if it is a 2.5 =
mm stereo=20
jack (looks like
>it), what each contact does, and what the value =
of the=20
series (or shunt)
>resistor is for the PTT circuit (if =
any).

Alex,BG1GS

mailto:bg1gs@qsl.net =
;

http://www.qsl.net/bg1gs

------=_NextPart_000_0001_01BCF50D.62A39940--
```

# 4603. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <64uenj$am5$2@news1.teleport.com>
Source record: 88986

In article <3472710F.5A19@flash.net>, Tim <Hynde@flash.net> wrote:
>I see schematics now and then calling for lets say a 8uh coil,
>X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
>the circuit is truly 8uh does it matter if I use the torroid?
>
>The equivallent coil would be wound on a pencil or something handy using
>the standard coil formulas.
>
>Tim

There are several things which could make your pencil-wound coil different than the one wound on the toroid.

First, because of the shape itself, toroids have a much lower external field than solenoidal inductors. So your pencil-wound inductor will couple a lot more to nearby objects, including wires, PC board runs, and other inductors. It will also be more affected by vibration and proximity to large conductors such as shields and ground planes.

Second, the pencil-wound inductor may have a lower Q (or, it could be higher in some cases). If the application is a VFO inductor, a lower Q will cause more drift. If in a narrow filter, the filter will be broader, and have less steep skirts and more insertion loss. If in a power application, it will get warmer.

Third, the pencil-wound inductor will have a different self-resonant frequency and different stray capacitance. So when measured at any frequency, the apparent inductance will be different from the toroid.

On the good side, your air-wound inductor won't saturate if it has to stand a lot of DC current. If not designed for the current, a toroid or any other inductor wound on a magnetic material might saturate.

Any or all of these effects may be negligible. Or may be important. It depends on the application.

Of all the electrical components, a good argument can be made that inductors are farthest from being ideal. Much more than just the inductance of a real inductor is often important and has to be considered.

Roy Lewallen, W7EL

# 4604. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Jabran Soubeih <soubeih@expert.cc.purdue.edu>
Message-ID: <Pine.SOL.3.91.971119002550.652A-100000@expert.cc.purdue.edu>
Source record: 88987
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Why don't you try one of the mini-circuits VCO's? How about the POS-1000
or POS-1400.

Jabran

On Tue, 18 Nov 1997, David Copperhead wrote:

> Howdy,
>
> I am looking for a stable 885.25MHz oscillator circuit,
> (maybe a Colpitts oscillator?)
> The output must be at a minimum of +7dBm, or I suppose
> I could use a cheap Minicircuits amp like a MAR-6 to get
> that level.
> The output will go into the LO port of a Minicircuits ZLW-2 Mixer, the reason
> for the +7dBm level.
> a camera video signal will go into the IF port. The output of the
> RF port of the mixer will go into an Avantek UTO-546 RF amp and BPF then to an
> antenna.
>
> This is an attempting to design a low-power video transmitter for UHF Channel
> 83.
>
> Any help is greatly appreciated.
>
>
>
>

# 4605. Re: Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: rlong@magnus.acs.ohio-state.edu
Message-ID: <rlong-1911970741300001@ts8-7.homenet.ohio-state.edu>
Source record: 88988
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanch,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipmen,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,sci.astro.amateur,tnn.radio.amateur,uk.radio.amateur,uwarwick.societie.amateur-,de.comm.ham,fj.rec.ham,relcom.radio.ham,rpi.union.ham-radi,su.org.ham-radi,alt.radio.scanner,alt.radio.scanner.uk

In article <o$3lmLAmojc0Ew$W@devans.demon.co.uk>, Dave Evans
<Dave@devans.demon.co.uk> wrote:

> Does a perspective ham work a lot of DX?
>
Try prospective.

# 4606. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: alchazz*@ix.netcom.com
Message-ID: <3472A1B1.1F30@ix.netcom.com>
Source record: 88989

Roy Lewallen wrote:
>
> In article <3472710F.5A19@flash.net>, Tim <Hynde@flash.net> wrote:
> >I see schematics now and then calling for lets say a 8uh coil,
> >X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
> >the circuit is truly 8uh does it matter if I use the torroid?
> >
> >The equivallent coil would be wound on a pencil or something handy using
> >the standard coil formulas.
> >
> >Tim
>
> There are several things which could make your pencil-wound coil different
> than the one wound on the toroid.
>

snip

>
> Of all the electrical components, a good argument can be made that
> inductors are farthest from being ideal. Much more than just the inductance
> of a real inductor is often important and has to be considered.
>
> Roy Lewallen, W7EL

the formulas for air wound coils are easy to understand and use. Is the same
true for toroids? How do you use a box full of junk toroid forms? How do you
do the calculations?

Al

--
Remove the * from the address to reply.

# 4607. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <3472EB01.1A1D@ix.netcom.com>
Source record: 88990
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Walt Davidson wrote:
>
> On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
> Landing, NJ)) wrote:
>
> > They are leaving open the issue of whether there
> > should be a "codeless" class of Internet user and are soliciting
> > comments on this proposal.
>
> The "codeless" class should have read-only access.
>
> The same restriction should be applied to no-coders on the amateur
> radio bands. The hobby would be much the better for it.
>
> ;-)
>
> 73 de G3NYY
>

I second that. All those in favor?

Hey - if morse code is so bad, so tough to learn, so out dated and so completely useless, as many no coders continuously whine, why do I see the majority of qsl cards for CW qsos? I presort cards for the W1 QSL bureau. Better than 75% are for CW contacts. Somebody better get a clue here.

For those of you who will take exception to the "CW requirement" for the internet...Lighten up or get a life!

73 to all, even no-coders de W1AAE

# 4608. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: ns@laban.astro.uu.se
Message-ID: <3472f687.0@newsfeed.uu.se>
Source record: 88991
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Not the "code-debate" here also!
Let this be strictly a DX group!

# 4609. WTB HP8640B Sig Gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Lou de Beer <lou.de.beer@general.com>
Message-ID: <64us75$707$1@hops.adnc.com>
Source record: 88992

Iam looking for a COMMERCIAL NON-WORKING Hewlett-Packard 8640B Sig Gen..

# 4610. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: jkk@galactose.mc.duke.edu
Message-ID: <64v044$g0h$1@news.duke.edu>
Source record: 88993
Cross-posted to: in.ham-radio,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

: >Hey - if morse code is so bad,

: It's not bad, it just has no compelling reason to

You people REMOVE rec.r.a.DX from followups, dammit!

This has NOTHING to do with DX and some of us are tired
of this stupid argument after years of it.

---
Ken Kuzenski AC4RD kuzen001@acpub.duke.edu
jkk@galactose.mc.duke.edu ac4rd@juno.com
---
All standard disclaimers apply.
Close cover before striking.
Your mileage may vary.

# 4611. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: billsohl@planet.net
Message-ID: <64uups$4u9@jupiter.planet.net>
Source record: 88994
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

"Ronald D. Lucier" <optics3d@ix.netcom.com> wrote:
>Hey - if morse code is so bad,

It's not bad, it just has no compelling reason to
continue to be a license requirement.

>so tough to learn,

The degree of difficulty is not the issue at all.

>so out dated

It is certainly out dated as it's use has now down to only
a recreational aspect (QSOs, DX, contests, etc.) within the
ham ranks only. Even in the ham ranks it serves no
purpose at all in emergency preparedness and or any
actual safety or distress operations.

and so
>completely useless,

It isn't useless (procode red herring again) it has its
proponents and users, but none of the uses suffice any
longer to mandate the separate pass/fail test element that
code contines to have. Yes, there's a treaty requirement
today, but that is met completely by a 5wpm test for
now and there's no additional treaty elements that
require 13 or 20wpm testing.

>as many no coders continuously whine,

Again, many (most?) of us that are championing
the end of code testing are NOT nocoders, but rather
coded hams who have already passed various levels of
code testing.

>why do I see
>the majority of qsl cards for CW qsos? I presort cards for the W1 QSL
>bureau. Better than 75% are for CW contacts. Somebody better get a
>clue here.

What's the point? QSL cards are just the exchange of record for
a contact. It isn't the USE of CW that we oppose, it is the
mandated test requirement that is wrong for the license
testing today. If, as you note, most QSL exchanging is for
CW contacts then I see no reason to think

that continued use of CW will end IF code testing
ends. Indeed, if DX continues to be the interest area
it always has been, then there will continue to be new
devotees to CW for that reason alone. Having said that,
I'll repeat again that DXing is not a reason that justifies
mandated CW testing today.

Bill Sohl K2UNK
ARRL Local Gov't Liaison, Mt. Olive Township, NJ
No Code International, member - 1007
Visit the No-Code WEB site: http://www.nocode.org

# 4612. HELP IFR's RF Spectrum Analyzer Model A-7550

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: sortinc@geocities.com
Message-ID: <879950475.10941@dejanews.com>
Source record: 88995

Our amateur radio group has just acquired an IFR Systems spectrum analyzer model A-7550.

Unfortunately, during the self-test routine on power up, a 'Fail' appears pertaining to the RF test. We suspect the front end was overloaded with too much power while testing a transmitter. Does anyone know where we should look to repair the damage? A few helpful hints, a block diagram or even a schematic of that portion of the equipment would be helpful. We will gladly pay for any photocoping costs, postage etc. We can be reached at:

e-mail: sortinc@geocities.com
packet radio ve3flk@ve3ksq#swon.on.ca.na

Thank you in advance for any assistance you can give us!

Dan Shack - VE3FLK

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 4613. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971119153701.KAA01944@ladder02.news.aol.com>
Source record: 88996

>
>Until then, if you decide to design and write about your latest
>amateur-radio project, do so because you want to contribute your ideas to the
amateur radio community and advancement of the state of the art.

Don't hold your breath, and don't look in the rags mentioned (and unmentioned)
for advancing the state of the art.

W4ZCB

# 4614. CW Morse Decoder New URL !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Norbert Pieper <"POLAR Electric"@cww.de>
Message-ID: <347313C1.5312@cww.de>
Source record: 88997
Cross-posted to: rec.radio.amateur,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.dx, rec.radio.amateur.digital.misc

The CW Decoder MRP37 is a "Just easy to use" Software using your PC + Soundcard to decode Morse Signals even under very weak audio conditions it performs good results!

WE HAVE CHANGED our Server and went to
http://www.ProMail.com/~PEE

Please update your bookmarks!

73's N.Pieper

# 4615. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34726935.119667680@news.atl.bellsouth.net>
Source record: 88998
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Wed, 19 Nov 1997 08:34:57 -0500, "Ronald D. Lucier"
<optics3d@ix.netcom.com> wrote:
>Hey - if morse code is so bad, so tough to learn, so out dated and so
>completely useless, as many no coders continuously whine, why do I see
>the majority of qsl cards for CW qsos?

Because they had to resort to postcards to pass any real content?

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 4616. Re: IBM 3191 for packet radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34726406.118340764@news.atl.bellsouth.net>
Source record: 88999
Cross-posted to: comp.terminals,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Tue, 18 Nov 1997 19:46:21 -0800, rexstout@ptld.uswest.net (John
Rollins) wrote:
\
>I have an unused 3191 terminal sitting around, and since I hope to get my
>ham license soon, I decided to try to find a use for it. What I want to do
>is make a harware converter for ASCII<->EBCDIC that would allow me to use
>the 3191 as a packet terminal. It may also be necessary<sp?> to make the
>converter/TNC appear to be an IBM mainframe to the 3191. What I need to
>know is how to make the ASCII-EBCDIC converter, where to buy/how to make a
>cheap EPROM programmer, what TNC to use with the 3191/converter and then
>how to make it all work without exploding. Any ideas?

Well, what you propose can be done, but I seriously question whether
it is worth the effort. A regular ASCII terminal can be had virtually
for the asking, and using a computer instead of a terminal has a
number of benefits. In fact I'd suggest that a better approach would
be to discard the idea of terminal and TNC altogether and simply let
a computer handle everything in software.

But if you are bound to attempt your approach, you're going to have to
do ASCII-EBCDIC and EBCDIC-ASCII as well as dealing with a terminal
intended to operate in page mode. Probably the best way to do that is
with a single chip microcontroller rather than a pure hardware
serial-parallel-code conversion-parallel-serial lashup that will still
have to somehow fool the terminal. A micro with enough spare memory
to do page mode emulation is what's needed, and that can handle the
code conversion as well. You might be able to do it with a PIC chip,
and you can certainly do it with an 8051 or a 68HC11.

You need to set yourself up to program one of these babies, and learn
its language if you don't know it already. All three companies offer
development kits for their chips which are quite reasonably priced.
I work with the 68HC11, but lots of people like the 8051, and the
PIC family has a strong following too. You need to browse the
manufacturers' web sites and see what strikes your fancy, and
make a commitment to one of them (or to some other chip, those
aren't your only choices, though they are probably the most popular).

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 4617. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Todd Little <little@ameritech.net>
Message-ID: <64veqi$e93$1@nntp0.chicago.il.ameritech.net>
Source record: 89000
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Please take this discusssion to rec.radio.amateur.policy where it belongs.

Ronald D. Lucier wrote in message <3472EB01.1A1D@ix.netcom.com>...
>Walt Davidson wrote:
>>
>> On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
>> Landing, NJ)) wrote:
>>
>> > They are leaving open the issue of whether there
>> > should be a "codeless" class of Internet user and are soliciting
>> > comments on this proposal.
>>
>> The "codeless" class should have read-only access.
>>
>> The same restriction should be applied to no-coders on the amateur
>> radio bands. The hobby would be much the better for it.
>
>I second that. All those in favor?

Let's just modify it a tad. How about we change it from codeless
to clueless? As a result, you should turn in your newsreader
immediately.

>Hey - if morse code is so bad,

Few have said it's "so bad". It just isn't the be all end all of
communications as it was 50-70 years ago.

>so tough to learn,

So is the theory, but I don't hear anyone complaining about it
because the rationale for it as a requirement is spelled out
in Part 97.

> so out dated

Well that it is.

> and so completely useless,

Again, few if anyone has said that. It's simply no more important
than any other aspect or mode in amateur radio.

> as many no coders continuously whine,

The only whining I see is from clueless folks that can't even understand
the issue isn't about Morse Code, but the requirement for
demonstrating its knowledge at higher and higher speeds to
access portions of the amateur spectrum. You might rent a
clue and check the call signs of most of those posting in favor
of change. You'll find that they have passed as many or more
Morse Code tests than your license class indicates you have.

>why do I see
>the majority of qsl cards for CW qsos? I presort cards for the W1 QSL
>bureau. Better than 75% are for CW contacts. Somebody better get a
>clue here.

Because DX chasers haven't discovered the latter half of the
20th century? No, just kidding. As an apparent wall paper chaser
yourself, you well know that it is an amusing activity to some and
many feel it is more sporting to do it the hard way. What any of
that has to do with licensing requirements is hard to imagine.
The clue you really need to rent though, is that no one cares
whether you find manual OOK Morse Code amusing and no one
is trying to prevent you from continuing to use it. The need for
Morse Code as a licensing requirement has long since disappeared.

>For those of you who will take exception to the "CW requirement" for the
>internet...Lighten up or get a life!

Why not have it as a requirement? After all, if you are going
to make arbitrary unrelated requirements for some activity, it's
about as valid as making Morse Code knowledge a requirement
to access amateur frequencies below 30 MHz.

>73 to all, even no-coders de W1AAE

73 to all, even the clueless,
Todd
N9MWB

PS This post has had its follow up line set to rec.radio.amateur.policy
as
I'm sure the other newsgroups have had their fill of this nonsense.
Please take the discussion over there.
--
Unsolicited business offers sent to my e-mail address will be considered
a request for me to proofread the offer and in turn reimburse me $500
for my time and effort for each offer received. Receipt of said e-mail
constitutes acceptance of this offer. Let dick@durbin.senate.gov
and senator@moseley-braun.senate.gov know what you think of e-mail SPAM.
Support the anti-Spam amendment, see http://www.cauce.org/

# 4618. Re: Matching Sweep Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: res@cmprime.cis.att.com
Message-ID: <64vfu3$s6c@anchor.cis.att.com>
Source record: 89001

: Does anyone have any experience at matching sweep tubes. Can you describe the
: procedure that you have successfully used?

I am familiar with the procedure used at RL Drake to match their finals
in the '60s.

They put the tubes in a fixture that had some fixed bias on the grid
and probably proper voltage on screen and plates, and measured the
plate current. The tester marked the current reading on the
tube envelope. Typical numbers were 25 to 45. At 600 volts (if that
is what plate voltage was) of plate voltage 25 probably meant 25 ma.
of plate current, which would equate to 15 watts of dissipation.
And that is within the rating of the tube.

Then they put only tubes withthe same numbers in a rig. So, by their
definition "matched" meant within 5 ma of each other.

If you have a rig that you are matching for, why not do the same, using
one tube at a time?

Rick K2XT

# 4619. Article on putting ft101 on warc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Marty Duplissey <Mduplissey@lsbs.com>
Message-ID: <01bcf524$7b9ac6a0$2e00e6cd@desktop>
Source record: 89002
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

A couple of years ago I posted on the old fido echo ham radio and had lost
it. I have had many requests for it
Thanks to N8BLK finding the last 2 posts in his archives here it is.

Marty, I only found part 2 & 3, when I checked, however hope this helps or
brings back some memories, I'm copying it into this message.

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==
=
Date: 10-28-95 Time: 11:29p Number: 4476
From: Marty Duplissey Refer: 0
To: All Board ID: BURGERS Recvd: No
Subject: FT-101 on WARC Part 2 64: Ham Radio TE Status:
Public

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Hello all!

30 Meters transmit for the FT-101EE

The first thing is of course to unplug the rig (G). I grin at this but
I've
been bitten a few times and this mod can bite if the rig is plugged in.
You will have to remove the entire case. IE the top, bottom and wrap case.
(I call the wrap case the case that is left after both the top and bottom
are
removed). With this rig this is pretty simple. After removing the case put
the
radio on it's back all modifications are on the bottom. (All refrences will
be
frm the rig on it's back and facing you) Then remove the cover from the
tuned
circuits. It will be the large cover on your left with a bunch of holes in
it
This will expose the tuned circuits. You will notice 3 circuit boards with
mucho trimmer capicitors and the bandswitch wafers. This is where all our
mods will be made.

From the factory the WWV position shares the 20 meter tuned circuits in
the receive end. We will be removing these jumpers and adding components
to giove 30 meters it's own tuned circuit in receive and transmit.

The first thing we need to do is get oriented. We will call the first circuit
board (nearest to you) PB-1 the next one PB-2 and the last one PB-3. Yeasu calls
then PB-1188, PB-1187A and PB-1092 respectivly. I like my names for
simplicity. Also I will be refering to the band switch wafers by letters
starting with the one nearest to you as A, the next one as B etc ending with
M. I guess this would be a good time to give you a parts list.
This is the parts list from the original article. Liberal substitutions from
your junk box is allowed, as a matter of fact my parts list just vaugely
resembles this. As long as you can get close on the capicitance you will be
OK.

T1 & 2 2 79pf Trimmers rated at 250V for PB-1 and 2
T3 1 40pf Trimmer rated at 500V for PB-3
C1 1 50pf Silver Mica cap for PB-1 rated at 250V
C2 1 68pf Silver Mica cap for PB-2 rated at 250V
C3 1 68pf Silver Mica cap for PB-3 rated at 500V

Let's get to work. The first thing is to remove the jumpers connecting the
WWV setting with 20 meters. You will need to remove the jumper on wafers C and
E.
C is no problem but E is kinda tight. I would recomend removing E at the 20
meter tab and extending the wire to our new capicitors we will be
installing.

Now we need to install our new capicitors for 10mhz. On PCB-1 the only place
I could find to put T1 and C1 was between the upper right hand cap and the
mounting screw. Install the caps in parallel with one leg at ground and the
other leg going to switch wafer C at the WWV position. Install TC2 and C2
on PB-2 as close to the left edge of the PB as possible the same way
except bring the other leg to the wire you have hanging off wafer E.
Install TC3 and C3 on PB-3 on the side closest to you between the 2 mounting
points for the cover for the tuned circuits in the same way. You will have
to run a wire from them to wafer switch G. It is kinda hard to get to and
deep but it is doable (If I can do it anybody can, I promise).

Now the fun part begins (G). For some reason Yeasu left out the tab on
Wafer l and we will need one here. I scrounged my junk box for a tab
that resembled the one they had used and found one that was close.
You will have to do the same. Cut the new tab very carefully from the old
switch with wire cutters and cut away the brad on one side. Then
Super glue the new tab in the proper position on wafer switch I. After
the glue has set attach a jumper from the tab to the 40 meter tab
(the next one to the right with the cloth cover). All we need to do

now is put a tap on the final tank circuit for our new band. Go to
wafer M. We will be putting a wire from the 30 meter position tab
to the pi tank coil. Remove the 2 inductors that are in the way and
attach a wire in-between the 20 meter and 40 meter taps. (This should
be just below the nut holding the bandswitch together). Run
this wire to the tab on wafer M. Reattach the 2 inductors.
Now drill holes in the cover in order to reach the trimmers and put
the cover back on.

Now for the aligment. The new band will have to be aligned.
Put the preselector at 4 on the dial (Not 4 O'Clock). Go to 10.000 mhz
and load it up into a dummy-load as well as you can (Remember to keep
your plate current below 200 ma).Don't be fooled by the noise at 10 on
the dial. It is a spur generated by the rig and if you load up on it it
could damage the rig. Adjust TC2 and TC3 for the highest power output.
Then turn on the calibrater and tune for a S-meter reading under 10 and
adjust TC1 for the best S-meter reading.

Now you can put the cover back on. You should have as good performance
on 30 meters as you have on any othe band.

I make no warrantys for this modification. If you mess your radio up it
is not my fault. I have done this mod and It works great on my radio.
I cannot say the same about yours. You do this at your own risk.

Next week I add 12 and 17 meters

Marty Duplissey
Internet mduplissey@lsbs.com

=
Date: 10-30-95 Time: 10:19p Number: 4509
From: Marty Duplissey Refer: 0
To: All Board ID: BURGERS Recvd: No
Subject: FT-101 on Warc Part 3 64: Ham Radio TE Status:
Public

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Hello All!
Putting the FT-101EE on 17 and 12 meters

Ok folks here is the last installment of my series on adding the WARC
bands
to the Yeasu FT-101EE. The only parts you will need for this are as
follows.

1 Crystal cut for 30.520 Mhz (for 12 meters)
1 Crystal cut for 24.020 Mhz (for 17 meters)
I ordered both from International Crystal out of Oklahoma City. but there
are many sources for these.

1 DPDT 12v relays from Radio Shak
About a foot of hookup wire (22 gauge multi conductor).
A small experimenters circuit board form Radio Shack.
A good pair of wire cutters and a lot of patience. (workng room is a premium
on this mod)

Before cutting any wires I did some experimenting and found that the rig would tune up on 12 meters from the 10 meter position and tune up on 17 meters from the 15 meter position.

So how do we go about inserting 12 and 17 meters without sacrificing anything. I decide to move 28-28.8 mhz to the 10C position and use it's slot for 12 meters. Then move 28.5-29 mhz to the 10D position and use it's spot for 17 meters. Then build a switch (using the relay) to switch the 28 and 28.5 mhz crystals with the 29 and 29.5 crystals using the clarifer
switch (I like the idea of the LED and it reminds me of my old Kenwood 830).
Then replace the clarifier pot with a combination pot and pull on switch and
maybe a new LED for it. I have not completed the switch part of the mod but you
get the Idea. It will work. It is kinda involved, but this is the only way I could figure out how to do it. I'm sure someone else has done it differently.
(I thought of many different ways myself) but this is the way it worked for me.

First as in my last article have the radio on it's back and facing you with the case comepletly off. I will be reffering to the band switch (S2 in the scematic) wafers as A to M starting from the front. This is where
90% of the mod takes place.

(Note this mod assumes you have a copy of the operaters manual and scematic)

Due to Lawsuits I must make the usual disclaimer:
This mod is only garranteed to work on my radio.
I make no warranties about its usefullness on yours. If you break your radio
you own the pieces.

Locate wafer C (3rd from the front). Study it for a while and familiarize yourself as to which tab engages which bands. Isolate 10B by cutting the wires between it and the 10A tab and the 10C tab. Then using some hookup wire jumper the 10A and 10C tabs. Now due to the 15 meter tab being buried on this wafer I elected to run a wire from the 10B tab to the capicitor on the adjoing circuit board. Run a wire from the 10B tab to Capicitor TC14 (do this under the circuit board and make sure you connect to the non-ground side.)

Locate wafer E. Isolate 10B just like the wafer C. It is a major pain in the butt to do but it can be done. Connect 10B and the 15 meter tab. Now due to the fact that 10C and D are so deep I elected to run a wire from 11 meter tab to TC5 instead of trying to jumper them on this one.(Take the same precations here as above)

Locate wafer H. Jumper the 15 meter tab with the 10B tab (It has nothing attached, so this one is easy.

Locate wafer M (The final tank coil wafer). Isolate 10B as before. Jumper 10A
and 10C. Run a wire from 10B tab to the 15 meter tab(It's kinda deep but do-able).

Well that's all for this side for now. Turn the radio over. and locate the
Het crystals in the front right hand side. Remove the 10C and 10D crystals. Replace them with the 10A and 10B crystals respectively.
Put the 30.520 crystal in the 10A position and the 24.020 crystal in the 10B position. Turn the radio back over to realign the 10 and 15 meters bands.

Realign 10 and 15 meters per the users manual. Put the case back on.

That's it! Except for the loss of 29MHZ. I plan to build a switch using the
relay to switch the 28 and 29 mhz crystals. Should be easy as one leg is grounded so all you need to switch is 1 leg per crystal. As I stated before I plan to use the clarifer switch and replace it with a pot with a pull-on switch. With some nice rub on numbers you could make it look factory.
(BTW Does anybody know of a good source for these in white? All I can find around here are black)

I am in the proccess of making many more mods to this radio to bring it onto the 90's. I can't help it. I'm a tinkerer. I'd rather work on my rig than
use it (Grin). I will be posting them as I get them completed.
(If there is interest)

Marty Duplissey
N5KBP
P.O. Box 789
Longview, TX. 75606
Internet for a few weeks
Internet in a few days mduplissey@lsbs.com
10/30/95
Marty Duplissey
Internet mduplissey@lsbs.com

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# 4620. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: goobergobble <feistel@pearlink.com>
Message-ID: <01bcf528$a5b60e00$LocalHost@gooberstop>
Source record: 89003
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

G.Ray <gpray@gte.net> wrote in article <64tck5$mk0$1@gte2.gte.net>...

> > . Citing the success of the Amateur Radio Service and the general
> > belief that its requirement for operators to pass a Morse code
> > proficiency exam and other technical requirements, has kept the A.R.S.
> > "clean", the FCC will enact a 5 word-per-minute requirement for all
> > Internet users

> Whoa! One of the best gags in years!!!!
> Lesseee,the Amateur Radio Service is "clean,and a success??" GARBAGE!
> This is not an idle claim,let's fire up our radios and listen.What do we
> have here? Ummmmmm,Twenty meters during the weekend.....Gee,sounds a
> whole lot like what I hear on cb 19.....Lets spin the dial down to
> Eighty meters.Listen to some of these guys say F*ck this,S*it
> that...Hey! thats not allowed!!! I don't understand,they are using their
> callsigns! Why does this happen? Why does this continue?Because the
> "clean and success" line is is bogus.
>
> GRay

YES RIGHT YOU ARE G-Ray!!

Aye SWL the ham bands and it be real Circus of Indius complete with
critchety old 2-faced farts, cheap assed bastards who try to jew down on a
25 cent price item at a hamfest and many sexual perverts than
in the redlite district of town. Greatest collection of geek mental
patients in any place. I went to a few ham fests with CB friends from the
Raleigh-Durham NC area, never seen bigger collection of nut cases wearing
clothes looking like they have not been washed in ten Years. My faves were
the ham goofballs wearing old army and cammo type clothing with 4 or more
walkietalkies on their beer gut streech'd belts. They look and act like
they were ready to go to a McDonalds or a Lubys after the hamfest with an
assault weapon or back to work at Post Office the next day. Scary!
Be afraid as most hams seem to not be wrapped too tite in the head.

Anyway here are some frequencies where you can hear ham radio ops in their
natural enviornmental, using dirty language on a DAILY 24 HOUR
shift work. These nuts really must not need sleep, I hear them comedy all
time on my old R-1000 Kenwood which sits next to my Uniden 2510 and
Sommerkamp CB radio - Leon N.C. "Hoppy Leo"

6am all day long, till sundown --> 14.300 to 14.313 USB
After sundown or starting 8pm to midnite --> 3.894.5 & 3.901 & 3.950 LSB
Midnite to 6am --> 3.853 or sometimes 3.950 continued LSB

24 Hours a day -- 7 days a week all manner of nutcase and mentaly
derranged ham op's on the above freq's and also check 3.850 LSB
late nite when 3.853 is quiet not too often.

There are WEB PAGES put up by hams with more info on crazy
places on ham radio bands. Here are a few to go see sometime:

http://www.angelfire.com/in/w9xn
http://www.angelfire.com/nc/k4oka
http://www.netusa1.net/~jprestel/75meters.htm
http://www.dirtball.com
http://www.wf.quik.com./n5jtt/index.htm

# 4621. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m200ctw4z.fsf@spinner.ecofe.com>
Source record: 89004

True, the graphite core will make it lossy. But if you remove the pencil, the resulting air core coil is likely to have a higher Q than one wound on a toroid. It is likely to be more temperature stable too. The Q would be better if the coil were larger than pencil diameter, however.

>>The other key advantage a toroid gives you is the fact that it's
>>self-shielding to a large extent. That can simplify circuit layout
>>quite a bit.

That's the much more important advantage of the toroid.

Could one make the air core coil into a air-core toroid? Would it still be at least somewhat self-shielding?

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4622. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Laura HALLIDAY <ve7ldh@direct.ca>
Message-ID: <347384B4.5CDC425@direct.ca>
Source record: 89005

N4ij wrote:

> What are the experience building DDS circuits? Or are there PLL
> designs that are manageable out there? New chips available?
> I've read about Harris and Analog Device DDS chips, but am not
> sure if this is a practicable thing to attempt.

Go for it. They're easy, generally idiot-proof, and work well.
Bear in mind the limitations of present-day DDS (it's *not*
a panacea) and you will get very worthwhile results.

You will need a computer to tell the DDS chip what to do, but
that's easy these days - microcontrollers are cheap, easy to
use and hard to kill, and every ham shack I've seen lately has
a computer in it anyway...that XT you've been using as a door
stop is overkill for this task.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."

# 4623. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <347395CB.52F9@pop.removethistomailme.net>
Source record: 89006

N4ij wrote:
>
> What are the experience building DDS circuits? Or are there PLL
> designs that are manageable out there? New chips available?
> I've read about Harris and Analog Device DDS chips, but am not
> sure if this is a practicable thing to attempt.
>
> Doug N4IJ
> dsnowden@ncdc.noaa.gov

They are very easy to work with. I have a Qualcomm Q2334-50 running off the PC parallel port with a couple of glue chips and an outboard Harris DAC. The AD9850 from Analog Devices also seems to come highly recommended, and has the advantage of fewer pins to wire up and no requirement for a separate DAC.

DDS and PLL are two technologies that were almost made for each other. You can build a simple PLL with a DDS-based reference that gives you the best of both worlds.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 4624. Part for HTX-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Lin Vaughan <kt4jt@firstsaga.com>
Message-ID: <01bcf59b$21a79ca0$980960cf@kt4jt.firstsaga.com>
Source record: 89007

Looking for a digital PC Board for the HTX-100 or will buy broken radio for parts

e-mail: kt4jt@firstsaga.com

# 4625. Re: MC1542 pinout & specs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971119214610.20930A-100000@Stratus.CAM.ORG>
Source record: 89008

For what it's worth, I checked an old HEP replacement guide, a couple of old Motorola data books, and a couple of hobby books that did include some IC audio amplifiers of what I figure is the proper vintage, and I can't find any reference to an MC1542.

Did you get the number right? Is there a date code on it to say when it was made? I have a mental picture of it being something from the early seventies, when a lot of external components were needed to get the IC audio amplfiers going. If I'm wrong about that, then I may be looking in the wrong place.

Is the problem the audio amplfier? If so, it might be simplest to treat the section as a module, and build a simple amplifier using the LM386 (if that provides the needed output power), and patch it into the circuit.

Michael VE2BVW

On 13 Nov 1997 provero@connix.com wrote:

> Am repairing a Sylvania HF receiver that uses MC1542
> for audio amps. Any pointers to a pin out/specs on the
> net? It's not listed on several IC web search sites or
> in the latest Tech America/Radio Shack catalogs.
>
> Thanks in advance,
>
> P.J. "Josh" Rovero email: provero@connix.com
> Oceanographer work: rovero@sonalysts.com
> Meteorologist web: http://www.connix.com/~provero
> Curmudgeon at Large radio: KK1D
>
>
>

## 4626. Radio-Computer Interface -> IC706?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: kc8dmn@bright.net
Message-ID: <64vq2i$422$1@cletus.bright.net>
Source record: 89009
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Has anyone built or seen a homebrew computer interface for the IC706 that actually works? I have been searching, and have built a few, all with no luck. Any help would greatly be appriciated, Rick Ramzy - KC8DMN

## 4627. parts needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: whocares <mars@juno.com>
Message-ID: <01bcf53d$3b81be20$7793d4cd@kb8pnn>
Source record: 89010

Where can i find the following parts?
LM360
11C90
Mar-6
74S160
Please post replys in this newsgroup
Thanks

# 4628. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3473C36F.5E77@pop.removethistomailme.net>
Source record: 89011

AMDX wrote:
>
> Hey guys,
> What is DDS?
> Mike

Direct Digital Synthesis.

– – –

DDS synthesizes a sine-wave signal in the digital domain by cycling the contents of a sine lookup table through a high-speed DAC at the desired frequency.

DDS chips are fun to play with, and are exceptionally powerful. Advantages include low cost, design simplicity, high frequency switching speed, range (typically DC to 50+ MHz output for modern parts), stability and freedom from phase noise (determined solely by the fixed-frequency clock driving the DDS chip's phase accumulator), and precision (typical 32-bit parts are tunable to within a fraction of a Hz over the entire HF spectrum.)

Drawbacks include quantization noise due to the finite # of bits available on the DAC, typically 10 or 12, and phase-truncation spurs due to the incongruence of the phase accumulator's word size versus the frequency being synthesized. The latter can be especially troublesome because they often occur too close to the desired carrier to be disposed of with a passive LC filter. Frequently the output of a DDS is cleaned up with a relatively-simple PLL before being used in a receiver LO or other noise-sensitive application. For casual homebrewing the PLL cleanup loop isn't strictly necessary (cf. the number of popular "Digi-VFO" articles appearing in magazines of late).

Another aspect of DDS which some consider an advantage and others a drawback, is that they're tough to apply without having a microprocessor around to control them.

The later ARRL Handbooks have some reasonable -- if not spectacularly comprehensive -- information on DDS in them. Qualcomm has some excellent app notes at www.qualcomm.com as well.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 4629. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34727144.121730786@news.atl.bellsouth.net>
Source record: 89012

On Wed, 19 Nov 1997 06:46:15 GMT, nobody@crosslink.net (Robert Lay)
wrote:
>On Tue, 18 Nov 1997 20:25:02 -0600, John Miles
><jmiles@pop.removethistomailme.net> wrote:
>
>>> I see schematics now and then calling for lets say a 8uh coil,
>>> X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
>>> the circuit is truly 8uh does it matter if I use the torroid?
>>>
>>> The equivallent coil would be wound on a pencil or something handy using
>>> the standard coil formulas.
>>>
>>> Tim
>>
>>I don't think that a pencil will give you quite the same Q as a nice
>>Amidon toroid core. :-)

True, the graphite core will make it lossy. But if you remove the
pencil, the resulting air core coil is likely to have a higher Q than
one wound on a toroid. It is likely to be more temperature stable
too. The Q would be better if the coil were larger than pencil
diameter, however.

>>The other key advantage a toroid gives you is the fact that it's
>>self-shielding to a large extent. That can simplify circuit layout
>>quite a bit.

That's the much more important advantage of the toroid.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 4630. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: markv@pixar.com
Message-ID: <64vb80$pdt$1@atlantis.pixar.com>
Source record: 89013
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

In article <34726935.119667680@news.atl.bellsouth.net>,
Gary Coffman <ke4zv@bellsouth.net> wrote:
>On Wed, 19 Nov 1997 08:34:57 -0500, "Ronald D. Lucier"
><optics3d@ix.netcom.com> wrote:
>>Hey - if morse code is so bad, so tough to learn, so out dated and so
>>completely useless, as many no coders continuously whine, why do I see
>>the majority of qsl cards for CW qsos?

>Because they had to resort to postcards to pass any real content?

Heh. As good a jab as I've read in this group in a couple of weeks. :)

>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

Mark
--
Mark T. VandeWettering (KF6KYI) Telescope Information (and more)
Email: <markv@pixar.com> http://www.idle.com/~markv/
<kf6kyi@qsl.net> http://www.qsl.net/kf6kyi

# 4631. Electronic QSL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: "Amor Powers, Radio" <power@radio.net>
Message-ID: <34734F35.5933@radio.net>
Source record: 89014
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Mark VandeWettering sezz:
>Gary Coffman sezz:
> >>why do I see
> >>the majority of qsl cards for CW qsos?
>
> >Because they had to resort to postcards to pass any real content?
>
> Heh. As good a jab as I've read in this group in a couple of weeks. :)

LOL. I liked that one too. :-)

But when will QSLs become electronic? A one-time key, Password protected and encrypted QSL verification! Then the QSL could be sent by any means required or available such as internet, packet, CW, or phone. A QSL bureau web site could handle the entire transaction, and the recipients could instantly verify and print if they like, or just leave it in memory at the bureau.

We would then exchange "QSL information" by simply sending a unique password serial number during the QSO.

Maybe someone's already cooked this scheme before. But it's worth heating up again.

Amor Powers

# 4632. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34734F2E.6766@pop.removethistomailme.net>
Source record: 89015

Hi, Gary --

Gary Coffman wrote:
>
> <snip>
>
> True, the graphite core will make it lossy. But if you remove the
> pencil, the resulting air core coil is likely to have a higher Q than
> one wound on a toroid.
>

Not sure I follow you there. It strikes me that an air-core inductor will almost *always* have a lower Q than an equivalent toroidal inductor, simply because you'd need several times as much wire to get the same inductance without the toroid core. More wire = more ESR for the same XL = lower Q. Not to mention greater vulnerability to interwinding capacitance losses with a multiturn air-wound inductor.

I'll confess I'm not too familiar with what other properties of the core, besides its permeability, affect the final Q value. Barring core saturation effects, a toroid should exhibit less loss in general than a reasonably-sized air-wound inductor of similar value, due to more effective flux coupling if nothing else. It's always been my understanding, reinforced by empirical experimentation, that it's hard to beat an appropriately-chosen toroid core when it comes to winding a high-Q inductor for practical HF work.

Sure, you might do better with a *much* larger air-wound coil wound with *much* heavier wire, but as a practical option for substitution in a circuit designed around a toroid, I'd have my doubts about that approach. I assume he's building a receiver front end, not a kilowatt matchbox. :-)

-- jm KE5FX

---
Note: My E-mail address has been altered to avoid spam
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# 4633. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: thecbguy@ameritech.net
Message-ID: <347324bd.8752848@news.detroit.mi.ameritech.net>
Source record: 89016
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Certainly isn't a need for this topic in rec.radio.cb

On 19 Nov 97 14:24:07 GMT, ns@laban.astro.uu.se (Nils) wrote:

>Not the "code-debate" here also!
>Let this be strictly a DX group!
>

# 4634. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <347366E5.2BDE@kfa-juelich.de>
Source record: 89017

John Mock wrote:
>
> True, the graphite core will make it lossy. But if you remove the
> pencil, the resulting air core coil is likely to have a higher Q than
> one wound on a toroid. It is likely to be more temperature stable
> too. The Q would be better if the coil were larger than pencil
> diameter, however.
>
> >>The other key advantage a toroid gives you is the fact that it's
> >>self-shielding to a large extent. That can simplify circuit layout
> >>quite a bit.
>
> That's the much more important advantage of the toroid.
>
> Could one make the air core coil into a air-core toroid? Would it still be
> at least somewhat self-shielding?
>
> -- KD6PAG (Networking Old-Timer, RF newbie)
In a word, YES! The self-shlelding comes from the shape of the coil
more than anything, with external fields inducing a voltage in some part
of the winding and a voltage of the opposite sign in turns lying
opposite to "some part of the winding".

Bob

# 4635. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: "Gregory T. Helding" <nospam@stop.spam.now>
Message-ID: <34734937.612ABEEE@stop.spam.now>
Source record: 89018
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

The hobby would be much the smaller for it.

Walt Davidson wrote:

> On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
> Landing, NJ)) wrote:
>
> > They are leaving open the issue of whether there
> > should be a "codeless" class of Internet user and are soliciting
> > comments on this proposal.
>
> The "codeless" class should have read-only access.
>
> The same restriction should be applied to no-coders on the amateur
> radio bands. The hobby would be much the better for it.
>
> ;-)
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: walt@ dial.pipex.com
> "Only dead fish go with the flow"

--
.-. .-.
/ \ .-. .-. / \
/ \ / \ .-. / \ / \
/___Greg_Helding______KB9RMA__\ghelding@casecorp.com_____\
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'

# 4636. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-19 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <34736615.3ED4@kfa-juelich.de>
Source record: 89019

John Miles wrote:
> 
> Hi, Gary --
> 
> Gary Coffman wrote:
> >
> > <snip>
> >
> > True, the graphite core will make it lossy. But if you remove the
> > pencil, the resulting air core coil is likely to have a higher Q than
> > one wound on a toroid.
> >
> 
> Not sure I follow you there. It strikes me that an air-core inductor
> will almost *always* have a lower Q than an equivalent toroidal
> inductor, simply because you'd need several times as much wire to get
> the same inductance without the toroid core. More wire = more ESR for
> the same XL = lower Q. Not to mention greater vulnerability to
> interwinding capacitance losses with a multiturn air-wound inductor.
> 
> I'll confess I'm not too familiar with what other properties of the
> core, besides its permeability, affect the final Q value. Barring core
> saturation effects, a toroid should exhibit less loss in general than a
> reasonably-sized air-wound inductor of similar value, due to more
> effective flux coupling if nothing else. It's always been my
> understanding, reinforced by empirical experimentation, that it's hard
> to beat an appropriately-chosen toroid core when it comes to winding a
> high-Q inductor for practical HF work.
> 
> Sure, you might do better with a *much* larger air-wound coil wound with
> *much* heavier wire, but as a practical option for substitution in a
> circuit designed around a toroid, I'd have my doubts about that
> approach. I assume he's building a receiver front end, not a kilowatt
> matchbox. :-)
> 
> -- jm KE5FX
> 
> ------------------------------------------------------
> Note: My E-mail address has been altered to avoid spam
> ------------------------------------------------------
Nobody seems to be mentioning it, so here goes. At certain frequencies
the commercial toroids are practically giving you air core inductors in
toroidal form. They have no magnetic material and just define the shape
as toroidal (good for the pickup and other coupling properties.)

This range lies around 50 MHz to 150 MHz. Q=150 or more can be reached. You can get these high Q-values with good solenoids as well, in the upper frequencies. (I have measured around 400 on a commercial coil wound with flat silver-plated conductors.)
You can also do quite well at lower frequencies with patience to use some of the better winding structures (not just a multilayer solenoid.) with solenoids using no cores (no worry about saturation causing IMD, etc.)

Bob

Bob

# 4637. article on putting ft101 on warc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <01bcf554$e7507900$5300e6cd@desktop>
Source record: 88923

A couple of years ago I posted on the old fido echo ham radio and had lost
it. I have had many requests for it
Thanks to N8BLK finding the last 2 posts in his archives here it is.

Marty, I only found part 2 & 3, when I checked, however hope this helps or
brings back some memories, I'm copying it into this message.

==========

==
=
Date: 10-28-95 Time: 11:29p Number: 4476
From: Marty Duplissey Refer: 0
To: All Board ID: BURGERS Recvd: No
Subject: FT-101 on WARC Part 2 64: Ham Radio TE Status:
Public

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--
-

Hello all!

30 Meters transmit for the FT-101EE

The first thing is of course to unplug the rig (G). I grin at this but
I've
been bitten a few times and this mod can bite if the rig is plugged in.
You will have to remove the entire case. IE the top, bottom and wrap case.
(I call the wrap case the case that is left after both the top and bottom
are
removed). With this rig this is pretty simple. After removing the case put
the
radio on it's back all modifications are on the bottom. (All refrences will
be
frm the rig on it's back and facing you) Then remove the cover from the
tuned
circuits. It will be the large cover on your left with a bunch of holes in
it
This will expose the tuned circuits. You will notice 3 circuit boards with
mucho trimmer capicitors and the bandswitch wafers. This is where all our
mods will be made.

From the factory the WWV position shares the 20 meter tuned circuits in
the receive end. We will be removing these jumpers and adding components
to giove 30 meters it's own tuned circuit in receive and transmit.

The first thing we need to do is get oriented. We will call the first circuit
board (nearest to you) PB-1 the next one PB-2 and the last one PB-3. Yeasu calls
then PB-1188, PB-1187A and PB-1092 respectivly. I like my names for
simplicity. Also I will be refering to the band switch wafers by letters
starting with the one nearest to you as A, the next one as B etc ending with
M. I guess this would be a good time to give you a parts list.
This is the parts list from the original article. Liberal substitutions from
your junk box is allowed, as a matter of fact my parts list just vaugely
resembles this. As long as you can get close on the capicitance you will be
OK.

T1 & 2 2 79pf Trimmers rated at 250V for PB-1 and 2
T3 1 40pf Trimmer rated at 500V for PB-3
C1 1 50pf Silver Mica cap for PB-1 rated at 250V
C2 1 68pf Silver Mica cap for PB-2 rated at 250V
C3 1 68pf Silver Mica cap for PB-3 rated at 500V

Let's get to work. The first thing is to remove the jumpers connecting the
WWV setting with 20 meters. You will need to remove the jumper on wafers C and
E.
C is no problem but E is kinda tight. I would recomend removing E at the 20
meter tab and extending the wire to our new capicitors we will be
installing.

Now we need to install our new capicitors for 10mhz. On PCB-1 the only place
I could find to put T1 and C1 was between the upper right hand cap and the
mounting screw. Install the caps in parallel with one leg at ground and the
other leg going to switch wafer C at the WWV position. Install TC2 and C2
on PB-2 as close to the left edge of the PB as possible the same way
except bring the other leg to the wire you have hanging off wafer E.
Install TC3 and C3 on PB-3 on the side closest to you between the 2 mounting
points for the cover for the tuned circuits in the same way. You will have
to run a wire from them to wafer switch G. It is kinda hard to get to and
deep but it is doable (If I can do it anybody can, I promise).

Now the fun part begins (G). For some reason Yeasu left out the tab on
Wafer l and we will need one here. I scrounged my junk box for a tab
that resembled the one they had used and found one that was close.
You will have to do the same. Cut the new tab very carefully from the old
switch with wire cutters and cut away the brad on one side. Then
Super glue the new tab in the proper position on wafer switch I. After
the glue has set attach a jumper from the tab to the 40 meter tab
(the next one to the right with the cloth cover). All we need to do

now is put a tap on the final tank circuit for our new band. Go to
wafer M. We will be putting a wire from the 30 meter position tab
to the pi tank coil. Remove the 2 inductors that are in the way and
attach a wire in-between the 20 meter and 40 meter taps. (This should
be just below the nut holding the bandswitch together). Run
this wire to the tab on wafer M. Reattach the 2 inductors.
Now drill holes in the cover in order to reach the trimmers and put
the cover back on.

Now for the aligment. The new band will have to be aligned.
Put the preselector at 4 on the dial (Not 4 O'Clock). Go to 10.000 mhz
and load it up into a dummy-load as well as you can (Remember to keep
your plate current below 200 ma).Don't be fooled by the noise at 10 on
the dial. It is a spur generated by the rig and if you load up on it it
could damage the rig. Adjust TC2 and TC3 for the highest power output.
Then turn on the calibrater and tune for a S-meter reading under 10 and
adjust TC1 for the best S-meter reading.

Now you can put the cover back on. You should have as good performance
on 30 meters as you have on any othe band.

I make no warrantys for this modification. If you mess your radio up it
is not my fault. I have done this mod and It works great on my radio.
I cannot say the same about yours. You do this at your own risk.

Next week I add 12 and 17 meters

Marty Duplissey
Internet mduplissey@lsbs.com

=
Date: 10-30-95 Time: 10:19p Number: 4509
From: Marty Duplissey Refer: 0
To: All Board ID: BURGERS Recvd: No
Subject: FT-101 on Warc Part 3 64: Ham Radio TE Status:
Public

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-

Hello All!
Putting the FT-101EE on 17 and 12 meters

Ok folks here is the last installment of my series on adding the WARC
bands
to the Yeasu FT-101EE. The only parts you will need for this are as
follows.

1 Crystal cut for 30.520 Mhz (for 12 meters)
1 Crystal cut for 24.020 Mhz (for 17 meters)
I ordered both from International Crystal out of Oklahoma City. but there
are many sources for these.

1 DPDT 12v relays from Radio Shak
About a foot of hookup wire (22 gauge multi conductor).
A small experimenters circuit board form Radio Shack.
A good pair of wire cutters and a lot of patience. (workng room is a premium
on this mod)

Before cutting any wires I did some experimenting and found that the rig would tune up on 12 meters from the 10 meter position and tune up on 17 meters from the 15 meter position.

So how do we go about inserting 12 and 17 meters without sacrificing anything. I decide to move 28-28.8 mhz to the 10C position and use it's slot for 12 meters. Then move 28.5-29 mhz to the 10D position and use it's spot for 17 meters. Then build a switch (using the relay) to switch the 28 and 28.5 mhz crystals with the 29 and 29.5 crystals using the clarifer
switch (I like the idea of the LED and it reminds me of my old Kenwood 830).
Then replace the clarifier pot with a combination pot and pull on switch and
maybe a new LED for it. I have not completed the switch part of the mod but you
get the Idea. It will work. It is kinda involved, but this is the only way I could figure out how to do it. I'm sure someone else has done it differently.
(I thought of many different ways myself) but this is the way it worked for me.

First as in my last article have the radio on it's back and facing you with the case comepletly off. I will be reffering to the band switch (S2 in the scematic) wafers as A to M starting from the front. This is where
90% of the mod takes place.

(Note this mod assumes you have a copy of the operaters manual and scematic)

Due to Lawsuits I must make the usual disclaimer:
This mod is only garranteed to work on my radio.
I make no warranties about its usefullness on yours. If you break your radio
you own the pieces.

Locate wafer C (3rd from the front). Study it for a while and familiarize yourself as to which tab engages which bands. Isolate 10B by cutting the wires between it and the 10A tab and the 10C tab. Then using some hookup wire jumper the 10A and 10C tabs. Now due to the 15 meter tab being buried on this wafer I elected to run a wire from the 10B tab to the capicitor on the adjoing circuit board. Run a wire from the 10B tab to Capicitor TC14 (do this under the circuit board and make sure you connect to the non-ground side.)

Locate wafer E. Isolate 10B just like the wafer C. It is a major pain in the butt to do but it can be done. Connect 10B and the 15 meter tab. Now due to the fact that 10C and D are so deep I elected to run a wire from 11 meter tab to TC5 instead of trying to jumper them on this one.(Take the same precations here as above)

Locate wafer H. Jumper the 15 meter tab with the 10B tab (It has nothing attached, so this one is easy.

Locate wafer M (The final tank coil wafer). Isolate 10B as before. Jumper 10A
and 10C. Run a wire from 10B tab to the 15 meter tab(It's kinda deep but do-able).

Well that's all for this side for now. Turn the radio over. and locate the
Het crystals in the front right hand side. Remove the 10C and 10D crystals. Replace them with the 10A and 10B crystals respectively.
Put the 30.520 crystal in the 10A position and the 24.020 crystal in the 10B position. Turn the radio back over to realign the 10 and 15 meters bands.

Realign 10 and 15 meters per the users manual. Put the case back on.

That's it! Except for the loss of 29MHZ. I plan to build a switch using the
relay to switch the 28 and 29 mhz crystals. Should be easy as one leg is grounded so all you need to switch is 1 leg per crystal. As I stated before I plan to use the clarifer switch and replace it with a pot with a pull-on switch. With some nice rub on numbers you could make it look factory.
(BTW Does anybody know of a good source for these in white? All I can find around here are black)

I am in the proccess of making many more mods to this radio to bring it onto the 90's. I can't help it. I'm a tinkerer. I'd rather work on my rig than
use it (Grin). I will be posting them as I get them completed.
(If there is interest)

Marty Duplissey
N5KBP
P.O. Box 789
Longview, TX. 75606
Internet for a few weeks
Internet in a few days mduplissey@lsbs.com
10/30/95
Marty Duplissey
Internet mduplissey@lsbs.com

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=

# 4638. Re: Hi-level tube mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971120024401.VAA07627@ladder01.news.aol.com>
Source record: 88924

Here's some more info:

The July, 1994 issue of Electric Radio had a good article on the Squires Sanders SS-1R receiver. This unit used two 7360 mixers and no rf amplifier, and achieved both good sensitivity (better than .25 uV for 10 db S+N/N on ten meters, SSB bandwidth) and good strong signal/dynamic performance (it takes over a volt to overload). Unfortunately there was no reference to its performance by "modern" measurements.

The real measure, though, is how well the rx performs in the kind of operating you like to do. Specs only tell so much - a design may test well, but under real life band conditions have so much LO noise that you can't hear the weak ones, etc. Also important is how "buildable" a design is.

Hope this helps. Keep those bottles burning!

73 de N2EY

# 4639. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <6508l9$njn@mtinsc05.worldnet.att.net>
Source record: 88925

Hey guys,
What is DDS?
Mike

# 4640. Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: n4ij@aol.com
Message-ID: <19971120001700.TAA19537@ladder02.news.aol.com>
Source record: 88926

What are the experience building DDS circuits? Or are there PLL
designs that are manageable out there? New chips available?
I've read about Harris and Analog Device DDS chips, but am not
sure if this is a practicable thing to attempt.

Doug N4IJ
dsnowden@ncdc.noaa.gov

# 4641. 2N2222 Colpitts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34742135.6F88@trader.com>
Source record: 88927

Someone posted a link to SPICE colpitts files and a SPICE demo,
in response to my question about making a Colpitts Oscillator with a 2N2222.
Thanks a million. I've spent the last two days learning to use it, but I'm
getting results somewhat like my 30MHz scope gives with the actual circuit.
I'd written the scope results off as grounding problems, but now...?
Could I trouble you for a tad more help?

The 1996 ARRL Handbook shows a 2N2222 Colpitts in Fig. 14-13b,
which I have posted as a CIR at http://www.trader.com/users/5012/9019/radio.htm
I'm trying to make a fixed 29MHz oscillator so I've modified this schematic
from the published one in 3 ways:
The parallel tuning caps in the tank have been replaced with a single 33 pf cap,
L1 has been given a value of .91uH,
and I have assumed the RFC is 135uH from elsewhere in the text.
I'm looking at current and voltage at nodes 1 and 4, and don't understand
why the values are volts (!) when stepped at 5ns but only pico- or femto- volts
when stepped at .2us? In fact, different stepping rates give different resonant
frequencies, similar to what I'm seeing at different sweep rates on the scope.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 4642. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: grohe@galaxy.nsc.com
Message-ID: <347c1d8f.9330324@139.187.81.1>
Source record: 88928
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 18 Nov 1997 02:34:37 GMT,
in the newsgroup sci.electronics.design,
davidcopperhead@usa.net (David Copperhead)
from Agkistrodon Contortrix thoughtfully posted:

> Howdy,
>
> I am looking for a stable 885.25MHz oscillator circuit,
> (maybe a Colpitts oscillator?)
> The output must be at a minimum of +7dBm, or I suppose
> I could use a cheap Minicircuits amp like a MAR-6 to get
> that level.
> The output will go into the LO port of a Minicircuits ZLW-2 Mixer, the reason
> for the +7dBm level.
> a camera video signal will go into the IF port. The output of the
> RF port of the mixer will go into an Avantek UTO-546 RF amp and BPF then to an
> antenna.
>
> This is an attempting to design a low-power video transmitter for UHF Channel
> 83.

Channels 70-83 were dropped in 1984 to make way for the "new"
Mobile Radio services (ie: Cell Phones).

You will make a LOT of people VERY angry!!!!

Legally, you should use 910MHz (I forget the actual band limits).

If you MUST use a UHF channel, use UHF channel 28 or higher (Ch's
14-22 are shared with mobile radio services ie: Police, Fire,
Taxi, etc). Ch 28+ is far enough away to prevent any "splatter"
from messing up any of those services.

Your oscillator does not have to be that stable. Most TV's AFC
circuits can track +/- 500KHz.

Do an Alta Vista search for "ATV transmitter", and you will come
across transmitter circuits designed for Amateur TV (450MHz &
910MHz).

Cheers,
Paul Grohe

---

Paul Grohe National Semiconductor Corp.
Sr. Electronics Technician Santa Clara, CA. USA

http://www.national.com
NORTH AMERICA EUROPE
1 (800) 272-9959 +49 (0) 180-532 78 32
mailto:support@nsc.com mailto:europe.support@nsc.com
Usenet Disclaimer: Any opinions expressed are mine, not NSC's
---

# 4643. Re: Is Glass OK for Dummy Load Container?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19971120111736704 32@zetnet.co.uk>
Source record: 88929

> Would it be OK to put a KW dummy load in a large glass pickle jar?
> Other than the risk of it being broken by contact and the glass and oil
> making a mess, any other concerns?
> I have a 250 watt 12" resistor I want to use.
> BTW: I may just hang a few neon bulbs in the jar to watch them glow!
> (Assuming the oil I use is clear enough - will they glow in oil, or will
> the oil absorb too much of the RF, or short the neon bulbs before they can
> charge?) Thanks! 73, DavidC AA1FA
=========
When in a glass jar the dummy load will radiate a lot of RF ! That's
why it's important to fit it in a metal container .....paint cans or
similar . If necessary these can be solder-attached to each other
with the appropriate top/bottom removed ,to accommodate the length of
the available resistor(s)

Best wishes , Frank , GM0CSZ / KN6WH
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : frank.dinger@zetnet.co.uk or gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

# 4644. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: thecbguy@ameritech.net
Message-ID: <34743d61.306701@news.detroit.mi.ameritech.net>
Source record: 88930
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Wed, 19 Nov 1997 17:08:27 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>On Wed, 19 Nov 1997 08:34:57 -0500, "Ronald D. Lucier"
><optics3d@ix.netcom.com> wrote:
>>Hey - if morse code is so bad, so tough to learn, so out dated and so
>>completely useless, as many no coders continuously whine, why do I see
>>the majority of qsl cards for CW qsos?
>
>Because they had to resort to postcards to pass any real content?
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

Yessss!!!!!

# 4645. Attn:Radio club volunteers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: n9vjg@aol.com
Message-ID: <19971120154101.KAA23482@ladder01.news.aol.com>
Source record: 88931

Dear radio hobby club volunteer:

FBOM Magazine Online, the interactive version of FBOM Magazine, is offering to post information about your non-profit radio club's hamfests, jamborees and other large radio hobby-related events free of charge on our web site <http://n-lemma.com/FBOM/>.

The only strings attatched are that your club is a non-profit organization and you can use some extra publicity.

These listings will be continously updated. As an added incentive for others to rely on the listings, we will contact you 2 weeks prior to your event and put a "Confirmed or not confirmed by FBOM" stamp on the listing.

Please send us information about your club's fundraising events as soon as possible. You can also use a form on the our web site. Simply click any references to "Hamfest listings."

For any questions, email the Publisher, Eric Bond, N9VJG <n9vjg@n-lemma.com> or the Webitor, Chuck Brown, N9UPO <n9upo@n-lemma.com>.

Feel free to spread the word to other radio hobby-related clubs and organizations--especially those who do not have internet access. Our mailing address:

FBOM
P.O. Box 7711
Westchester, IL 60154-7711

Thank you and 73s

Eric Bond, N9VJG W.C./NCI-1099
Janitor and Publisher
FBOM Magazine Online
http://n-lemma.com/FBOM/

# 4646. Re: 2N2222 Colpitts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Mike <short@5volt.net>
Message-ID: <347481C5.244D@5volt.net>
Source record: 88932

This is a multi-part message in MIME format.

--------------3F397A0D9CC
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dennis Erwin Thurlow wrote:
>
> Someone posted a link to SPICE colpitts files and a SPICE demo,
> in response to my question about making a Colpitts Oscillator with a 2N2222.
> Thanks a million. I've spent the last two days learning to use it, but I'm
> getting results somewhat like my 30MHz scope gives with the actual circuit.
> I'd written the scope results off as grounding problems, but now...?
> Could I trouble you for a tad more help?

[...]

> geosynq@trader.com
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM

That was me. Two days is very little time to learn SPICE -
congratulations on an excellent first try!

In the schematic, turn off "Node Numbers", "Pin Connections",
and "Grid". These just get in the way.

The inductor value of .91u is hard to read. You cannot see the
decimal point, and it looks like the value is 1,000 times
larger. Express components as a number larger than 1.

Just a minor point, but I prefer ground symbols to point to
ground. I re-arranged the schematic to orient the symbols a bit
better.

In Transient Analysis:

1. You need to carefully set each parameter to correspond with
the desired analysis. Do not accept the defaults given.

2. The "Time Range" of 100 us is far too great. This gives a
similar problem to sampling scopes when the frequency is above
the sampling rate, and causes the waveform to alias.

You need to figure out how many cycles you wish to view and set
the "Time Range" to suit, just like a scope! For a 29 MHz
signal, the period is 34 ns. I set the "Time Range" to 500ns.

After the circuit is working, you can change the range to look at the signals further downstream after the amplitudes have stabilized.

3. The "Maximum Time Step" should be set to some other value than just zero. SPICE will sometimes go unstable if the time step is too large. For this time scale, start with 5e-10, or about three orders of magnitude smaller than the "Time Range".

4. The "Number of Points" needs to be larger than 51. I set it to 400.

5. Turn off "Auto Scale Ranges". This tells SPICE to re-scale the Y values to get a waveform on-screen. You may get waveforms, but they may be greatly magnified and are meaningless.

Most of the time, you want to set the Y scale to some reasonable value and tell SPICE to leave it there. This will tell you if the circuit is performing the way you expect, or if it has died.

6. In the "Y Expression" entries, it is a bad idea to refer to node numbers. These change if you add parts or move them around. It is better to use Text mode and place a signal name above the desired trace on the schematic, and refer to the signal name in "Transient Analysis Limits".

7. The "X Range" corresponds to the 100 us "Time Range" described above, and is far too great. I changed it to 500n to correspond with the "Time Range" setting.

8. The "Y Range" shows the effect of letting SPICE autoscale.

With values such as

"1.1718e-005,1.1708e-005"
"3.10134,3.10133"
"2.4317,2.43169"

you can easily see the amplitudes are in the microvolt region and the circuit is not oscillating. The waveform amplitudes should be several volts, not microvolts.

You need to set the "Y Range" to values you expect to see, and let SPICE confirm what you already know.

9. You cannot assign two different Y scales to the same waveform. In order to measure the base current, put it on a different graph.

10. Trying to measure a waveform at node 4 is futile. This node is between a large choke and the emitter resistor. If the choke is doing its job, there will be very little signal to measure.

10. The "Fmt" tells SPICE how to format the output data. I usually set it to "5.3".

Back to the schematic.

An LC oscillator takes a long time in SPICE to start oscillating. I added a small 0.1V "STRT" pulse to the tank at the bottom of the 1000pf series caps. This has no effect after the initial step, so it does not affect the analysis.

After making all these changes, the transient analysis showed no oscillations. The dc voltages were normal, so I expect the loop gain around the oscillator was too low.

The ratio between the 1000 pf series caps and the 33 pf tuning cap seemed too large. I changed the 1000pf series caps to 200pf just to try to get the oscillator loop gain high enough to oscillate.

That did the trick - the circuit oscillated for the first time!

The rest is up to you. I am attaching the CIR file as a small zip.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

```
--------------3F397A0D9CC
Content-Type: application/zip
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="COLPITTS.ZIP"

<encoded_portion_removed>
ABkHAAAAAA==
--------------3F397A0D9CC--
```

# 4647. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: orion@xyznycap.rr.com
Message-ID: <3474634e.4002548@news>
Source record: 88933
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Wed, 19 Nov 1997 10:49:14 GMT, no.junk.mail@thank.you (Walt
Davidson) wrote:

>On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
>Landing, NJ)) wrote:
>
>> They are leaving open the issue of whether there
>> should be a "codeless" class of Internet user and are soliciting
>> comments on this proposal.
>
>The "codeless" class should have read-only access.
>
>The same restriction should be applied to no-coders on the amateur
>radio bands. The hobby would be much the better for it.

>73 de G3NYY

Here's a prime example of the arrogant, pro-code jackasses who are
ruining Amateur Radio.

Demonstrating to the government that you Know the Holy Code allows
one to enter the Temple of the Holy HF, the Lower Bands Lodge Hall
where only the Good and True amateurs reside.

quote from Len Anderson

--
Larry Gamache N2YMJ

To reply, delete the
xyz from my address.

# 4648. Re: Dumbing Down (was: Re: cheap ARRL paper [was: RSGB manual for Canucks])

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: aswNS@hamp.hampshire.edu
Message-ID: <34745b13.0@192.33.12.30>
Source record: 88934

On Fri, 14 Nov 1997 08:22:51 +0000 Ian White, G3SEK
(G3SEK@ifwtech.demon.co.uk) wrote in rec.radio.amateur.homebrew:

: A good index needs a lot of creative human input to identify which key-
: words readers will want to look for. The key-words often don't exist in
: the main text at all (eg condensers - see capacitors) so only the
: indexer can think to include them. Only a real, human indexer can find
: the optimum balance between length and detail.

When I was a kid in the 50's my father gave me an old 1942 Special Defense Edition ARRL Handbook. From the early 60's I have bought a current ARRL Handbook every five years or so. From as far back as I can remember I have found the indexes in ARRL Handbooks very hard to use -- there is always a mismatch between what I want to look for (I *know* it is there!) and what they index. My old Handbooks always have notations in the index where I have noted the things couldn't find.

I know making an index is hard, I recently co-authored a book and was very happy to have an expert do the indexing. Even so, my own book's index is full of notes for things I have looked for and failed to find, which I hope will be indexed in the next edition.

Many years ago, in John Barth's novel _The End of the Road_ I read the comment of a character who was a professional indexer. He at some point remarks (I paraphrase, I can't recall the exact words) that anyone who tries to index his own book is a fool. I have often thought of that when looking for something in the ARRL Handbook.

73, Al N1AW

+----------------------------------+
| Albert S. Woodhull |
| Hampshire College, Amherst, MA |
| awoodhull@hamp.hampshire.edu |
| http://minix1.hampshire.edu/asw/ |
+----------------------------------+

# 4649. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971118223355.27326A-100000@Ocean.CAM.ORG>
Source record: 88935

Toroid wound coils are self-shielding. So reasons of layout may be a good reason for using them rather than non-toroid wound coils. If you're building from scratch, it may not matter, since you can change the layout to keep components away from the coil, or to add shielding. And you can fiddle with the actual coil to get the correct inductance that might be affected by the nearness of components.

One important thing to note is that it's the donut shape of the toroids, not the material (ferrite or iron), that they are made of that make them shielded. Doug DeMaw had a bit about this in the Hints & Kinks column years ago, precisely because this point may be missed by many.

I've kept an eye out for something that would provide the donut shape for making coils at VHF, because the self-shielding is a useful thing.

One reason for using ferrite or iron cores over air wound is that the core material allows for fewer turns for the same inductance, an advantage at times.

A disadvantage of toroid wound coils is that there is no way of adjusting them. You either have to play with the number of turns, something made difficult by there not being any partial turns in a toroid wound coil. Or with external capacitors, changing fixed capacitors until you hit the right value, or a trimmeer. Added fuss or added expense, when you can often adjust an air wound coil be expanding or compressing turns.

There once was an article in QST about a receiver, and the author had made partially adjustable toroids by combining a slug-tuned coil with a toroid.

I don't have the article handy, but the idea was reproduced in Pat Hawker's Amateur Radio Techniques.

The author glued a small slug tuned coil form to the side of the toroid with epoxy. He wound 2/3 of the turns over the toroid, and the remaining 1/3 turns over the over the coil form and the toroid. I doubt I'm describing this well. Apparently, a 10 percent variation is possible, and if I recall, he said it was still partially self-sheilding.

One important thing to remember is that not all toroids are used for tuned circuits. If they are used for broadband transformers, they count on the core material for the broadband characteristic, so they can't be replaced with air-wound coils.

Michael VE2BVW

On Tue, 18 Nov 1997, Tim wrote:

> I see schematics now and then calling for lets say a 8uh coil,
> X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
> the circuit is truly 8uh does it matter if I use the torroid?
>
> The equivallent coil would be wound on a pencil or something handy using
> the standard coil formulas.
>
> Tim
>
>

# 4650. Re: 6 METER SSB RIG / KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971116200044.5214A-100000@Ocean.CAM.ORG>
Source record: 88936

But if you're going to use a double balanced on the signal frequency,
you might want to think about using a high level modulator feeding
the antenna. You'd see these years ago, when SSB was still relatively
new and DSBsc was sometimes promoted as an almost as good thing. I
recall at least one article where a commercial AM ham rig was converted
to DSBsc by reworking the PA.

The advantage is that you don't have to worry about a chain of
linear amplifiers to get the output of a low level modulator up
to a suitable level.

DSB rigs would be a good way of getting activity on 6 meters. They
aren't a lot more complicated than an HF QRP rig, and 6 meters
is still low enough that layout is still not too much of a problem.
Their simplicity would allow for portable operation, due to
compactness and lower current drain, which would allow for mountaintopping
where the low power and simple antennas would work okay.

Of course, if enough people started building DSB rigs for 6 Meters,
the chance increases that they might start trying to contact each other.
And DSBsc doesn't work so well with a direct conversion receiver.

Michael VE2BVW

On 16 Nov 1997, Peter Parker wrote:

> wdr@world.std.com wrote:
>
> > There's some activity -- in Cuba and elsewhere -- in homebrewing HF
> >DSB-SC , which should be applicable to VHF too. I think the NE-612
> >would work in that applicatoin.
> >
>
> I've used the NE602 successfully in DSB transceivers at HF, though they
> should work on 50 MHz but I haven't tried it. I still think the best
> starting point is to use a VXO (which should give 50-100kHz shift on 50
> MHz) and build a direct conversion DSB/CW transceiver. I would suggest
> the following:-
>
> VXO
> ---
>
> VXO: any dual gate mosfet
> buffer: 2N2222A, etc
>
> Receiver

> --------
>
> RX preamp: BF981
> Rx detector: NE602
> AF preamplifier: LM301, 308, 741, etc
> AF filter LPF 3kHz (optional) 741, etc
> AF amp CD4007 (biased to linear operation) or LM386.
>
> Transmitter
> -----------
>
> Speech amplifier: 741
> Balanced modulator: NE602
> RF amp stages: 2N2222A
> Driver: 2N3866/2N4427
> PA: 2N3553
>
> You might be able to get up to 1-2 watts out of this arrangement, though
> I haven't tried it.
>
> 73,
>
> Peter VK1PK
>
>
>
>
> _____________________________________________________
> Peter Parker
>
> E-mail: parkerp@pcug.org.au
> Amateur Radio: VK1PK
>
> Home Page: http://www.pcug.org.au/~parkerp/
> The home of Novice Notes Online, the Australian QRP Home
> Page and the STWG Web Site.
> _____________________________________________________
>
>
>
>

# 4651. Wanted: Chebyshev (5 Pole) Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: "Floyd Soo, W8RO" <hires@rust.net>
Message-ID: <3474AD88.2C29@rust.net>
Source record: 88937

I have a RF Electronics (Lee Martin, KD4YBC) 5 Pole Chebyshev Filter Kit. The documentation has two page 3s and is missing page 4. Lee no longer has this documentation in his computer. If anyone has the docs to this kit and is willing to copy page 4 for me, please contact me!

Tnx and 73!
Floyd Soo, W8RO
President, HI-RES Communications, Inc.
Net Manager and Board Member, Collins Collectors Association (#002)
QRP-L #392
hires@rust.net
http://www.rust.net/~hires

# 4652. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Jimcar <jimcar@erols.com>
Message-ID: <3474983A.135D@erols.com>
Source record: 88938
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

orion@xyznycap.rr.com wrote:
>
> On Wed, 19 Nov 1997 10:49:14 GMT, no.junk.mail@thank.you (Walt
> Davidson) wrote:
>
> >On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
> >Landing, NJ)) wrote:
> >
> >> They are leaving open the issue of whether there
> >> should be a "codeless" class of Internet user and are soliciting
> >> comments on this proposal.
> >
> >The "codeless" class should have read-only access.
> >
> >The same restriction should be applied to no-coders on the amateur
> >radio bands. The hobby would be much the better for it.
>
> >73 de G3NYY
>
> Here's a prime example of the arrogant, pro-code jackasses who are
> ruining Amateur Radio.
>
> ?Demonstrating to the government that you Know the Holy Code allows
> one to enter the Temple of the Holy HF, the Lower Bands Lodge Hall
> where only the Good and True amateurs reside.?
>
> quote from Len Anderson
>
> --
> Larry Gamache N2YMJ
>
> To reply, delete the
> xyz from my address.
to think this thread started out as satire...

# 4653. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: zeno@magicnet.net
Message-ID: <zeno-2011971459560001@pm54-31.magicnet.net>
Source record: 88939
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

In article <MPG.edbda89f3719b2e9898e3@news.planet.net>, kf2ti@planet.net (Steve (KF2TI - Landing, NJ)) wrote:

> FCC Enacts Internet Morse Code Requirement
> --- ------ -------- ----- ---- -----------
>
> The FCC, under pressure to clean up the Internet, especially after the
> Communications Decency Act provisions regarding Internet content
> regulation were stricken as violating the U.S. Constitution, has
> decided instead to require a Morse code requirement for Internet
> users. Citing the success of the Amateur Radio Service and the general
> belief that its requirement for operators to pass a Morse code
> proficiency exam and other technical requirements, has kept the A.R.S.
> "clean", the FCC will enact a 5 word-per-minute requirement for all
> Internet users. They are leaving open the issue of whether there
> should be a "codeless" class of Internet user and are soliciting
> comments on this proposal.
>
> Persons wishing to develop a web site having only links to other web
> sites having links to other web sites, and so forth, must pass a 13
> word-per-minute test and demonstrate proficiency in HTML, the Internet
> authoring language.
>
> Persons wishing to develop web sites that have actual content, as
> compared to just links to other web sites, must pass a 20
> word-per-minute Morse proficiency test, demonstrate proficiency in
> HTML and the Java programming language, and show that they have
> mastery of at least one human language, such as English.
>
> The FCC, which lacks budgetary authority to implement the testing
> program, has stated that it intends to create Volunteer Examiner
> programs for Internet applicants.

Interesting, code needed to make a phone call.

## 4654. Obtaining current governement electronic manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <652199$t88$1@news.ysu.edu>
Source record: 88940

Is there any fairly easy way to purchase technical
manuals of current US military electronic equipment?

I'd actually just like to obtain the schematic of a simple
non classified device that is used by the US Navy and maybe
other branches, as well as by ocean research institutions,
both government and private.

It's equipment I worked on (in development) some years ago,
so I'm pretty familiar with it, and one of the contractors who
once (and maybe still) produced it is nearby.

Hank Riley, N1LTV
h1riley@umassd.edu

# 4655. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <347482AA.49C0@pop.removethistomailme.net>
Source record: 88941

John Wiseman wrote:
>
> John Miles wrote in message <3473C36F.5E77@pop.removethistomailme.net>...
>
> >Another aspect of DDS which some consider an advantage and others a
> >drawback, is that they're tough to apply without having a microprocessor
> >around to control them.
>
> As a technology experiment, I designed and built a controller for my
> homebrew's DDS & vacuum luminescent display from an Altera
> FPGA that was synthesized using VHDL. You can read about it
> if you are interested in the December issue of QEX (any day now...)
> or in John's page at the following site -
> http://members.aol.com/johnw39038/index.htm
>
> 73s, JW
> KE3QG
>
> ==========================================================
> John Wiseman
> Senior Researcher
> Hitachi America, Ltd., Digital Media Systems Laboratory
> Princeton, NJ
> Email: johnw@dmsl.hitachi.com
> Voice: (609)-520-0071 ext. 18 Fax: (609)-520-8953
> Amateur Radio: KE3QG
> ==========================================================

Great article! If I ever end up with enough free time to play with
FPGAs, that's the first place I'll look to get started.

These days, whenever I need more than a half-dozen or so TTL chips in a
homebrew project, I'm usually tempted to say "screw it" and go run the
project off a cheap PC motherboard. That's the plan for my current
receiver project at any rate. I might well rethink that strategy in
favor of an FPGA-based controller, if it turns out to be feasible to do
so. It would sure be nice to save the space taken up by the PC
motherboard and power supply.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 4656. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34731382.163271614@news.atl.bellsouth.net>
Source record: 88942

On Wed, 19 Nov 1997 23:20:05 +0100, Bob Mueller <r.mueller@kfa-juelich.de>
wrote:
>John Miles wrote:
>>
>> Hi, Gary --
>>
>> Gary Coffman wrote:
>> >
>> > <snip>
>> >
>> > True, the graphite core will make it lossy. But if you remove the
>> > pencil, the resulting air core coil is likely to have a higher Q than
>> > one wound on a toroid.
>> >
>>
>> Not sure I follow you there. It strikes me that an air-core inductor
>> will almost *always* have a lower Q than an equivalent toroidal
>> inductor, simply because you'd need several times as much wire to get
>> the same inductance without the toroid core. More wire = more ESR for
>> the same XL = lower Q. Not to mention greater vulnerability to
>> interwinding capacitance losses with a multiturn air-wound inductor.

Any "cored" inductor will have core losses. For a small inductance, the
extra wire loss probably won't offset the reduction in core losses. If you're
talking about a choke of several millihenries, I'd agree that the extra wire
losses would likely dominate.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 4657. article on putting ft101 on warc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <01bcf555$fa2e60e0$5300e6cd@desktop>
Source record: 88943

A couple of years ago I posted on the old fido echo ham radio and had lost
it. I have had many requests for it
Thanks to N8BLK finding the last 2 posts in his archives here it is.

Marty, I only found part 2 & 3, when I checked, however hope this helps or
brings back some memories, I'm copying it into this message.

==========

==
=
Date: 10-28-95 Time: 11:29p Number: 4476
From: Marty Duplissey Refer: 0
To: All Board ID: BURGERS Recvd: No
Subject: FT-101 on WARC Part 2 64: Ham Radio TE Status:
Public

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--
-

Hello all!

30 Meters transmit for the FT-101EE

The first thing is of course to unplug the rig (G). I grin at this but
I've
been bitten a few times and this mod can bite if the rig is plugged in.
You will have to remove the entire case. IE the top, bottom and wrap case.
(I call the wrap case the case that is left after both the top and bottom
are
removed). With this rig this is pretty simple. After removing the case put
the
radio on it's back all modifications are on the bottom. (All refrences will
be
frm the rig on it's back and facing you) Then remove the cover from the
tuned
circuits. It will be the large cover on your left with a bunch of holes in
it
This will expose the tuned circuits. You will notice 3 circuit boards with
mucho trimmer capicitors and the bandswitch wafers. This is where all our
mods will be made.

From the factory the WWV position shares the 20 meter tuned circuits in
the receive end. We will be removing these jumpers and adding components
to giove 30 meters it's own tuned circuit in receive and transmit.

The first thing we need to do is get oriented. We will call the first circuit
board (nearest to you) PB-1 the next one PB-2 and the last one PB-3. Yeasu calls
then PB-1188, PB-1187A and PB-1092 respectivly. I like my names for
simplicity. Also I will be refering to the band switch wafers by letters
starting with the one nearest to you as A, the next one as B etc ending with
M. I guess this would be a good time to give you a parts list.
This is the parts list from the original article. Liberal substitutions from
your junk box is allowed, as a matter of fact my parts list just vaugely
resembles this. As long as you can get close on the capicitance you will be
OK.

T1 & 2 2 79pf Trimmers rated at 250V for PB-1 and 2
T3 1 40pf Trimmer rated at 500V for PB-3
C1 1 50pf Silver Mica cap for PB-1 rated at 250V
C2 1 68pf Silver Mica cap for PB-2 rated at 250V
C3 1 68pf Silver Mica cap for PB-3 rated at 500V

Let's get to work. The first thing is to remove the jumpers connecting the
WWV setting with 20 meters. You will need to remove the jumper on wafers C and
E.
C is no problem but E is kinda tight. I would recomend removing E at the 20
meter tab and extending the wire to our new capicitors we will be
installing.

Now we need to install our new capicitors for 10mhz. On PCB-1 the only place
I could find to put T1 and C1 was between the upper right hand cap and the
mounting screw. Install the caps in parallel with one leg at ground and the
other leg going to switch wafer C at the WWV position. Install TC2 and C2
on PB-2 as close to the left edge of the PB as possible the same way
except bring the other leg to the wire you have hanging off wafer E.
Install TC3 and C3 on PB-3 on the side closest to you between the 2 mounting
points for the cover for the tuned circuits in the same way. You will have
to run a wire from them to wafer switch G. It is kinda hard to get to and
deep but it is doable (If I can do it anybody can, I promise).

Now the fun part begins (G). For some reason Yeasu left out the tab on
Wafer l and we will need one here. I scrounged my junk box for a tab
that resembled the one they had used and found one that was close.
You will have to do the same. Cut the new tab very carefully from the old
switch with wire cutters and cut away the brad on one side. Then
Super glue the new tab in the proper position on wafer switch I. After
the glue has set attach a jumper from the tab to the 40 meter tab
(the next one to the right with the cloth cover). All we need to do

now is put a tap on the final tank circuit for our new band. Go to
wafer M. We will be putting a wire from the 30 meter position tab
to the pi tank coil. Remove the 2 inductors that are in the way and
attach a wire in-between the 20 meter and 40 meter taps. (This should
be just below the nut holding the bandswitch together). Run
this wire to the tab on wafer M. Reattach the 2 inductors.
Now drill holes in the cover in order to reach the trimmers and put
the cover back on.

Now for the aligment. The new band will have to be aligned.
Put the preselector at 4 on the dial (Not 4 O'Clock). Go to 10.000 mhz
and load it up into a dummy-load as well as you can (Remember to keep
your plate current below 200 ma).Don't be fooled by the noise at 10 on
the dial. It is a spur generated by the rig and if you load up on it it
could damage the rig. Adjust TC2 and TC3 for the highest power output.
Then turn on the calibrater and tune for a S-meter reading under 10 and
adjust TC1 for the best S-meter reading.

Now you can put the cover back on. You should have as good performance
on 30 meters as you have on any othe band.

I make no warrantys for this modification. If you mess your radio up it
is not my fault. I have done this mod and It works great on my radio.
I cannot say the same about yours. You do this at your own risk.

Next week I add 12 and 17 meters

Marty Duplissey
Internet mduplissey@lsbs.com

=
Date: 10-30-95 Time: 10:19p Number: 4509
From: Marty Duplissey Refer: 0
To: All Board ID: BURGERS Recvd: No
Subject: FT-101 on Warc Part 3 64: Ham Radio TE Status:
Public

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-

Hello All!
Putting the FT-101EE on 17 and 12 meters

Ok folks here is the last installment of my series on adding the WARC
bands
to the Yeasu FT-101EE. The only parts you will need for this are as
follows.

1 Crystal cut for 30.520 Mhz (for 12 meters)
1 Crystal cut for 24.020 Mhz (for 17 meters)
I ordered both from International Crystal out of Oklahoma City. but there
are many sources for these.

1 DPDT 12v relays from Radio Shak
About a foot of hookup wire (22 gauge multi conductor).
A small experimenters circuit board form Radio Shack.
A good pair of wire cutters and a lot of patience. (workng room is a premium
on this mod)

Before cutting any wires I did some experimenting and found that the rig would tune up on 12 meters from the 10 meter position and tune up on 17 meters from the 15 meter position.

So how do we go about inserting 12 and 17 meters without sacrificing anything. I decide to move 28-28.8 mhz to the 10C position and use it's slot for 12 meters. Then move 28.5-29 mhz to the 10D position and use it's spot for 17 meters. Then build a switch (using the relay) to switch the 28 and 28.5 mhz crystals with the 29 and 29.5 crystals using the clarifer
switch (I like the idea of the LED and it reminds me of my old Kenwood 830).
Then replace the clarifier pot with a combination pot and pull on switch and
maybe a new LED for it. I have not completed the switch part of the mod but you
get the Idea. It will work. It is kinda involved, but this is the only way I could figure out how to do it. I'm sure someone else has done it differently.
(I thought of many different ways myself) but this is the way it worked for me.

First as in my last article have the radio on it's back and facing you with the case comepletly off. I will be reffering to the band switch (S2 in the scematic) wafers as A to M starting from the front. This is where
90% of the mod takes place.

(Note this mod assumes you have a copy of the operaters manual and scematic)

Due to Lawsuits I must make the usual disclaimer:
This mod is only garranteed to work on my radio.
I make no warranties about its usefullness on yours. If you break your radio
you own the pieces.

Locate wafer C (3rd from the front). Study it for a while and familiarize yourself as to which tab engages which bands. Isolate 10B by cutting the wires between it and the 10A tab and the 10C tab. Then using some hookup wire jumper the 10A and 10C tabs. Now due to the 15 meter tab being buried on this wafer I elected to run a wire from the 10B tab to the capicitor on the adjoing circuit board. Run a wire from the 10B tab to Capicitor TC14 (do this under the circuit board and make sure you connect to the non-ground side.)

Locate wafer E. Isolate 10B just like the wafer C. It is a major pain in the butt to do but it can be done. Connect 10B and the 15 meter tab. Now due to the fact that 10C and D are so deep I elected to run a wire from 11 meter tab to TC5 instead of trying to jumper them on this one.(Take the same precations here as above)

Locate wafer H. Jumper the 15 meter tab with the 10B tab (It has nothing attached, so this one is easy.

Locate wafer M (The final tank coil wafer). Isolate 10B as before. Jumper 10A
and 10C. Run a wire from 10B tab to the 15 meter tab(It's kinda deep but do-able).

Well that's all for this side for now. Turn the radio over. and locate the
Het crystals in the front right hand side. Remove the 10C and 10D crystals. Replace them with the 10A and 10B crystals respectively.
Put the 30.520 crystal in the 10A position and the 24.020 crystal in the 10B position. Turn the radio back over to realign the 10 and 15 meters bands.

Realign 10 and 15 meters per the users manual. Put the case back on.

That's it! Except for the loss of 29MHZ. I plan to build a switch using the
relay to switch the 28 and 29 mhz crystals. Should be easy as one leg is grounded so all you need to switch is 1 leg per crystal. As I stated before I plan to use the clarifer switch and replace it with a pot with a pull-on switch. With some nice rub on numbers you could make it look factory.
(BTW Does anybody know of a good source for these in white? All I can find around here are black)

I am in the proccess of making many more mods to this radio to bring it onto the 90's. I can't help it. I'm a tinkerer. I'd rather work on my rig than
use it (Grin). I will be posting them as I get them completed.
(If there is interest)

Marty Duplissey
N5KBP
P.O. Box 789
Longview, TX. 75606
Internet for a few weeks
Internet in a few days mduplissey@lsbs.com
10/30/95
Marty Duplissey
Internet mduplissey@lsbs.com

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# 4658. Quartz Crystal products supplier from China

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: vanlong@mei.ceic.gov.cn
Message-ID: <MPG.ede18af18e3df2e98968a@news.vic.com>
Source record: 88944

=-=-=-=-=-=-=-=-=-=-=-=-=
http://www.vanlong.com
=-=-=-=-=-=-=-=-=-=-=-=-=

Your future partner in China, and I'm sure you can
get more benefit from us!

Vanlong Technical Co., Ltd. is a worldwide supplier
of quartz crystal products. We mainly introduce the
quartz crystal and other electronic products made in
the major home coordinated manufacturers to overseas.

We are able to provide you strictly inspected quality
products in reasonable prices.

If you are interested in China quartz crystal products,
please feel free to visit our website:
http://www.vanlong.com/

We assure you our best attention to any inquire from
you and your company.

Su Yan
Director
Vanlong Technical Co., Ltd.
Tel: +86 10 6834-7389
Fax: +86 10 6831-6745
Email: sales@vanlong.com

=-=-=-=-=-=-=-=-=-=-=-=-=
http://www.vanlong.com
=-=-=-=-=-=-=-=-=-=-=-=-=

# 4659. Re: MC1542 pinout & specs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971120132721.1826F-100000@oso.slonet.org>
Source record: 88945

Hi Josh, Michael and the group. Hi once again Josh! Nice to see you in print here. When I saw your request a few days ago I tried to find any info on the MC 1542. None to be had. With the replies that you just now got, I would suggest you look carefully to determine if there might be a better number or a logo on that part. If it is Motorola, then you might find a set of "bat wings" thereon. Cliff Buttschardt K7RR (ex W6HDO)

# 4660. Re: SWR Meter with external sensor capability: can I add 440 mhz capability

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Bill VanRemmen <billy@frontiernet.net>
Message-ID: <01bcf55d$0728a880$f38482d1@default>
Source record: 88946

cookie <fakeaddress@spambuster.com> wrote in article
<64icvs$rh8$1@kali.ziplink.net>...
> I just bought a 440 mhz FM transceiver, and wanted to check the SWR of a
couple
> of 440 antennas that were cluttering the junk box. I own a Daiwa NS
660A,
> which is a 1.6 - 150 mhz SWR meter. It has the capability to add an
external
> sensor.
>
> Can I build a sensor that will work on 440? Someone suggested that the
UHF
> SWR meters have a shorter piece of wire between the two coax connectors.
>

Feb '97 QST, pg 33 has my VHF SWR meter in it. I have sucessfully used it
at 440.

# 4661. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <3474C51A.3344@qsl.net>
Source record: 88947

And if you use Wint-O-Green, or the blue mint,
you get a Spark-Transmitter!

-Hi!
-Ed
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,OHR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
mailto:we6w@qsl.net http://www.qsl.net/we6w

# 4662. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3474D26E.427F@one.net>
Source record: 88948

Tim wrote:
>
> I see schematics now and then calling for lets say a 8uh coil,
> X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
> the circuit is truly 8uh does it matter if I use the torroid?
>
> The equivallent coil would be wound on a pencil or something handy using
> the standard coil formulas.
>
> Tim

I am truly impressed by the wealth of response you got to this one. Even though some of the responders went off on tangents, even the tangents were interesting.

I'm going to throw in my own 2 cents worth anyway, as some of the responses seemed too indirect.

You ask: "...does it matter...?"

Probably not. Especially if you're talking about 2-mix or 6-mix toroids. They're really only good at HF.

As some of the posters pointed out, however, you may need a form (considerably) larger than a pencil.

Rich W2RG

# 4663. GE Mastr II Tuning Help Needed Please !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: mlussier <mlussier@erols.com>
Message-ID: <652s8b$dag$1@winter.news.erols.com>
Source record: 88949
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

------=_NextPart_000_004E_01BCF5FC.9D08E1E0

charset="iso-8859-1"

Help !! Ha anyone done a conversion from 150.4-174.0 GE Mastr II Receiver to
144.00 band?
I under stand this receiver is best modified to 220 but I am trying my best
to get it down to 146.175 specifically
if you can't can you please point me in the direction of the right person.

Thank you

Mike Lussier
KF4MQF
Mlussier@erols.com

------=_NextPart_000_004E_01BCF5FC.9D08E1E0

charset="iso-8859-1"

Help !! Ha anyone done a conversion =
from=20
150.4-174.0 GE Mastr II Receiver to 144.00 band?

I under stand this receiver is best =
modified to=20
220 but I am trying my best to get it down to 146.175 =
specifically

if you can't can you please point me =
in the=20
direction of the right person.

Thank you

Mike Lussier

KF4MQF

Mlussier@erols.com

------=_NextPart_000_004E_01BCF5FC.9D08E1E0--
```

# 4664. INTERNET CODE requirement already exists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: "Amor Powers, Radio" <power@radio.net>
Message-ID: <34748E90.7624@radio.net>
Source record: 88950
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

> >On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
> >Landing, NJ)) wrote:
> >
> >> They are leaving open the issue of whether there
> >> should be a "codeless" class of Internet user and are soliciting
> >> comments on this proposal.

There is already a "code requirement" for the internet.
Every user has to learn how to type. This weeds out those with no
hand-eye coordination or touch-insensitive persons...
The skill of touch-typing is very similar to the Morse skill.

In fact, my maximum CW speed and typing speed at one time were almost
exactly the same (topping out at about 45WPM). I had a "mental block" at
that speed for some reason. Through practice I increased my typing speed
to about 60WPM. Internet chat groups on the low end of the #channels
(where all the DXers work) was the fix.

Amor Powers

# 4665. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: "Amor Powers, Radio" <power@radio.net>
Message-ID: <3474AA5B.15EF@radio.net>
Source record: 88951
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

zeno@magicnet.net sezz:

> Interesting, code needed to make a phone call.

It already exists to some extent. Users must know IDD country codes or
NANP (North American Numbering Plan). :-)

Amor Powers

# 4666. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: "Amor Powers, Radio" <power@radio.net>
Message-ID: <3474A922.28D5@radio.net>
Source record: 88952
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Walt sezz:

> What our hobby needs is quality in its recruits, not quantity.

We need both.
Without quantity, the spectrum will be "sold" to other users who will
rent it out... to anyone who hands them a credit card.

Amor Powers

## 4667. Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: Jughead <jughead@teleport.com>
Message-ID: <34752065.3E3B@teleport.com>
Source record: 88953

JUGHEAD'S INFORMATION STATION
http://www.teleport.com/~jughead

Lot's of information relating to Amateur Radio
Go to the WIRELESS PAGE

# 4668. Receiving tubes for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <650bkj$cr1$1@newsfeed.smartt.com>
Source record: 88954

Hi!,I do have for sale a lot of receiving tubes,for a fair price.
For any of your need,just contact me with the numbers you need
and I will do the best to help you out.....thanks

Eric By email or PH/FAX (250)868-1182
Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4669. NOS tubes 4 sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971120222800.RAA27557@ladder01.news.aol.com>
Source record: 88955

For Sale:
I have a large inventory of quality NOS tubes and a wide variety of radio related publications. Also available are radios, test equipment and misc. radio parts. My schematic service is the best price around at just $3 delivered for schematics and tuning info. Quality, tested used tubes are also available. If I don't have it, I'll try to help you find it! Hundreds of happy customers have used my service. Ask Rog42@aol.com for an e-mail copy of my latest offerings - list #1115-T

# 4670. Returned mail: Host unknown (Name server: walt.ict.nl: host not found)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-20 00:00:00 UTC
From: MAILER-DAEMON@ict.NL
Message-ID: <199711201839.TAA14988@ict.nl>
Source record: 88956

```
This is a MIME-encapsulated message

--TAA14988.880051143/ict.nl

The original message was received at Thu, 20 Nov 1997 19:39:02 +0100
from root@tweety.dev.ict.nl [192.168.1.8]

----- The following addresses had permanent fatal errors -----
<jan.van.lienden@walt.ict.nl>

----- Transcript of session follows -----
550 <jan.van.lienden@walt.ict.nl>... Host unknown (Name server: walt.ict.nl: host not
found)

--TAA14988.880051143/ict.nl
Content-Type: message/delivery-status

Reporting-MTA: dns; ict.nl
Received-From-MTA: DNS; tweety.dev.ict.nl
Arrival-Date: Thu, 20 Nov 1997 19:39:02 +0100

Final-Recipient: RFC822; jan.van.lienden@walt.ict.nl
Action: failed
Status: 5.1.2
Remote-MTA: DNS; walt.ict.nl
Last-Attempt-Date: Thu, 20 Nov 1997 19:39:03 +0100

--TAA14988.880051143/ict.nl
Content-Type: message/rfc822

Return-Path: <Ham-Homebrew@mlist.ucsd.edu>
Received: from tweety.dev.ict.nl (root@tweety.dev.ict.nl [192.168.1.8])
by ict.nl (8.8.5/8.8.5) with SMTP id TAA14986
for <jan.van.lienden@walt.ict.nl>; Thu, 20 Nov 1997 19:39:02 +0100
From: Ham-Homebrew@mlist.ucsd.edu
Received: from ict.nl (root@cerberus.dev.ict.nl [192.168.1.5]) by tweety.dev.ict.nl
(8.6.12/8.6.12) with ESMTP id TAA10001 for <jan.van.lienden@asml.ict.nl>; Thu, 20 Nov 1997
19:34:59 +0100
Received: from duif.dev.ict.nl (duif.dev.ict.nl [192.168.1.7])
by ict.nl (8.8.5/8.8.5) with SMTP id TAA14980
for <jan.van.lienden@asml.ict.nl>; Thu, 20 Nov 1997 19:39:02 +0100
Received: by duif.dev.ict.nl(Lotus SMTP MTA v1.1 (385.6 5-6-1997)) id C1256555.0066CA12 ;
Thu, 20 Nov 1997 19:42:44 +0100
X-Lotus-FromDomain: ICT
Reply-To: Ham-Homebrew@mlist.ucsd.edu
To: Ham-Homebrew@ucsd.edu
Message-ID: <C1256555.0066C8A0.00@duif.dev.ict.nl>
```

Date: Thu, 20 Nov 1997 04:25:41 -0800
Subject: Ham-Homebrew Digest V97 #676
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Ham-Homebrew Digest Thu, 20 Nov 97 Volume 97 : Issue 676
Today's Topics:
2N2222 Colpitts
885.25 MHz Oscillator, (Ch.83 video)
Any Successful DDS Builders ??? (4 msgs)
Difference between torroid or air wound? (4 msgs)
Hard line spool for sale
Matching Sweep Tubes
parts needed
PS Heating Up Charging Battery - Concern? (2 msgs)
Quartz Crystal products supplier from China
Radio-Computer Interface -> IC706?
Regen Receivers
WTB HP8640B Sig Gen
Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.
Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".
We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
---
Date: Thu, 20 Nov 1997 03:38:29 -0800
From: Dennis Erwin Thurlow <geosynq@trader.com>
Subject: 2N2222 Colpitts
Someone posted a link to SPICE colpitts files and a SPICE demo,
in response to my question about making a Colpitts Oscillator with a
2N2222.
Thanks a million. I've spent the last two days learning to use it, but I'm
getting results somewhat like my 30MHz scope gives with the actual circuit.
I'd written the scope results off as grounding problems, but now...?
Could I trouble you for a tad more help?
The 1996 ARRL Handbook shows a 2N2222 Colpitts in Fig. 14-13b,
which I have posted as a CIR at
http://www.trader.com/users/5012/9019/radio.htm
I'm trying to make a fixed 29MHz oscillator so I've modified this schematic
from the published one in 3 ways:
The parallel tuning caps in the tank have been replaced with a single 33
pf cap,
L1 has been given a value of .91uH,
and I have assumed the RFC is 135uH from elsewhere in the text.
I'm looking at current and voltage at nodes 1 and 4, and don't understand
why the values are volts (!) when stepped at 5ns but only pico- or femto-
volts

when stepped at .2us? In fact, different stepping rates give different
resonant
frequencies, similar to what I'm seeing at different sweep rates on the
scope.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM
------------------------------
Date: Tue, 18 Nov 1997 22:23:23 GMT
From: mzenier@netcom.com (Mark Zenier)
Subject: 885.25 MHz Oscillator, (Ch.83 video)
In article <64qurt$cq8@mtinsc02.worldnet.att.net>,
David Copperhead <davidcopperhead@usa.net> wrote:
>I am looking for a stable 885.25MHz oscillator circuit,
>(maybe a Colpitts oscillator?)
...
>This is an attempting to design a low-power video transmitter for UHF
Channel
>83.
There's no channel 83. That's part of the cell-phone allocation
now, and they would have no sense of humor after tracking down an
interference complaint. Even if they didn't notice, it's in the base
station side of things, so you'd be dealing, in any urban area, with a
ton of interference to your signal. (Beyond the fact that it's against
FCC regulations to have low power transmitters in the TV broadcast bands.
The legal stuff runs in 902-928 MHz).
Mark Zenier mzenier@eskimo.com mzenier@netcom.com
------------------------------
Date: 20 Nov 1997 00:17:03 GMT
From: n4ij@aol.com (N4ij)
Subject: Any Successful DDS Builders ???
What are the experience building DDS circuits? Or are there PLL
designs that are manageable out there? New chips available?
I've read about Harris and Analog Device DDS chips, but am not
sure if this is a practicable thing to attempt.
Doug N4IJ
dsnowden@ncdc.noaa.gov
------------------------------
Date: Wed, 19 Nov 1997 16:30:44 -0800
From: Laura HALLIDAY <ve7ldh@direct.ca>
Subject: Any Successful DDS Builders ???
N4ij wrote:
> What are the experience building DDS circuits? Or are there PLL
> designs that are manageable out there? New chips available?
> I've read about Harris and Analog Device DDS chips, but am not
> sure if this is a practicable thing to attempt.
Go for it. They're easy, generally idiot-proof, and work well.
Bear in mind the limitations of present-day DDS (it's *not*

a panacea) and you will get very worthwhile results.
You will need a computer to tell the DDS chip what to do, but
that's easy these days - microcontrollers are cheap, easy to
use and hard to kill, and every ham shack I've seen lately has
a computer in it anyway...that XT you've been using as a door
stop is overkill for this task.
--
Laura Halliday "Les cigognes se sont envolees
ve7ldh@direct.ca Est-ce que nos promesses seront eternelles?
Grid: CN89mg Les tournesols se sont refermes
(Chenevez/Laporte) Peut-etre la vie est-elle encore belle."
------------------------------
Date: Wed, 19 Nov 1997 22:58:23 -0600
From: John Miles <jmiles@pop.removethistomailme.net>
Subject: Any Successful DDS Builders ???
AMDX wrote:
>
> Hey guys,
> What is DDS?
> Mike
Direct Digital Synthesis.

_ _ _
DDS synthesizes a sine-wave signal in the digital domain by cycling the
contents of a sine lookup table through a high-speed DAC at the desired
frequency.
DDS chips are fun to play with, and are exceptionally powerful.
Advantages include low cost, design simplicity, high frequency switching
speed, range (typically DC to 50+ MHz output for modern parts),
stability and freedom from phase noise (determined solely by the
fixed-frequency clock driving the DDS chip's phase accumulator), and
precision (typical 32-bit parts are tunable to within a fraction of a Hz
over the entire HF spectrum.)
Drawbacks include quantization noise due to the finite # of bits
available on the DAC, typically 10 or 12, and phase-truncation spurs due
to the incongruence of the phase accumulator's word size versus the
frequency being synthesized. The latter can be especially troublesome
because they often occur too close to the desired carrier to be disposed
of with a passive LC filter. Frequently the output of a DDS is cleaned
up with a relatively-simple PLL before being used in a receiver LO or
other noise-sensitive application. For casual homebrewing the PLL
cleanup loop isn't strictly necessary (cf. the number of popular
"Digi-VFO" articles appearing in magazines of late).
Another aspect of DDS which some consider an advantage and others a
drawback, is that they're tough to apply without having a microprocessor
around to control them.
The later ARRL Handbooks have some reasonable -- if not spectacularly
comprehensive -- information on DDS in them. Qualcomm has some
excellent app notes at www.qualcomm.com as well.
-- jm
------------------------------------------------------

Note: My E-mail address has been altered to avoid spam
---
---
Date: Wed, 19 Nov 1997 19:43:39 -0600
From: John Miles <jmiles@pop.removethistomailme.net>
Subject: Any Successful DDS Builders ???
N4ij wrote:
>
> What are the experience building DDS circuits? Or are there PLL
> designs that are manageable out there? New chips available?
> I've read about Harris and Analog Device DDS chips, but am not
> sure if this is a practicable thing to attempt.
>
> Doug N4IJ
> dsnowden@ncdc.noaa.gov
They are very easy to work with. I have a Qualcomm Q2334-50 running off
the PC parallel port with a couple of glue chips and an outboard Harris
DAC. The AD9850 from Analog Devices also seems to come highly
recommended, and has the advantage of fewer pins to wire up and no
requirement for a separate DAC.
DDS and PLL are two technologies that were almost made for each other.
You can build a simple PLL with a DDS-based reference that gives you the
best of both worlds.
-- jm
---
Note: My E-mail address has been altered to avoid spam
---
---
Date: Wed, 19 Nov 1997 17:47:40 GMT
From: ke4zv@bellsouth.net (Gary Coffman)
Subject: Difference between torroid or air wound?
On Wed, 19 Nov 1997 06:46:15 GMT, nobody@crosslink.net (Robert Lay)
wrote:
>On Tue, 18 Nov 1997 20:25:02 -0600, John Miles
><jmiles@pop.removethistomailme.net> wrote:
>
>>> I see schematics now and then calling for lets say a 8uh coil,
>>> X number of turns on a T-50-6 or a T37-2 etc. If the coil required for
>>> the circuit is truly 8uh does it matter if I use the torroid?
>>>
>>> The equivallent coil would be wound on a pencil or something handy
using
>>> the standard coil formulas.
>>>
>>> Tim
>>
>>I don't think that a pencil will give you quite the same Q as a nice
>>Amidon toroid core. :-)
True, the graphite core will make it lossy. But if you remove the
pencil, the resulting air core coil is likely to have a higher Q than

one wound on a toroid. It is likely to be more temperature stable
too. The Q would be better if the coil were larger than pencil
diameter, however.
>>The other key advantage a toroid gives you is the fact that it's
>>self-shielding to a large extent. That can simplify circuit layout
>>quite a bit.
That's the much more important advantage of the toroid.
Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |
------------------------------
Date: Wed, 19 Nov 1997 14:42:22 -0600
From: John Miles <jmiles@pop.removethistomailme.net>
Subject: Difference between torroid or air wound?
Hi, Gary --
Gary Coffman wrote:
>
> <snip>
>
> True, the graphite core will make it lossy. But if you remove the
> pencil, the resulting air core coil is likely to have a higher Q than
> one wound on a toroid.
>
Not sure I follow you there. It strikes me that an air-core inductor
will almost *always* have a lower Q than an equivalent toroidal
inductor, simply because you'd need several times as much wire to get
the same inductance without the toroid core. More wire = more ESR for
the same XL = lower Q. Not to mention greater vulnerability to
interwinding capacitance losses with a multiturn air-wound inductor.
I'll confess I'm not too familiar with what other properties of the
core, besides its permeability, affect the final Q value. Barring core
saturation effects, a toroid should exhibit less loss in general than a
reasonably-sized air-wound inductor of similar value, due to more
effective flux coupling if nothing else. It's always been my
understanding, reinforced by empirical experimentation, that it's hard
to beat an appropriately-chosen toroid core when it comes to winding a
high-Q inductor for practical HF work.
Sure, you might do better with a *much* larger air-wound coil wound with
*much* heavier wire, but as a practical option for substitution in a
circuit designed around a toroid, I'd have my doubts about that
approach. I assume he's building a receiver front end, not a kilowatt
matchbox. :-)
-- jm KE5FX
------------------------------------------------------
Note: My E-mail address has been altered to avoid spam
------------------------------------------------------
------------------------------
Date: Wed, 19 Nov 1997 23:20:05 +0100
From: Bob Mueller <r.mueller@kfa-juelich.de>

Subject: Difference between torroid or air wound?
John Miles wrote:
>
> Hi, Gary --
>
> Gary Coffman wrote:
> >
> > <snip>
> >
> > True, the graphite core will make it lossy. But if you remove the
> > pencil, the resulting air core coil is likely to have a higher Q than
> > one wound on a toroid.
> >
>
> Not sure I follow you there. It strikes me that an air-core inductor
> will almost *always* have a lower Q than an equivalent toroidal
> inductor, simply because you'd need several times as much wire to get
> the same inductance without the toroid core. More wire = more ESR for
> the same XL = lower Q. Not to mention greater vulnerability to
> interwinding capacitance losses with a multiturn air-wound inductor.
>
> I'll confess I'm not too familiar with what other properties of the
> core, besides its permeability, affect the final Q value. Barring core
> saturation effects, a toroid should exhibit less loss in general than a
> reasonably-sized air-wound inductor of similar value, due to more
> effective flux coupling if nothing else. It's always been my
> understanding, reinforced by empirical experimentation, that it's hard
> to beat an appropriately-chosen toroid core when it comes to winding a
> high-Q inductor for practical HF work.
>
> Sure, you might do better with a *much* larger air-wound coil wound with
> *much* heavier wire, but as a practical option for substitution in a
> circuit designed around a toroid, I'd have my doubts about that
> approach. I assume he's building a receiver front end, not a kilowatt
> matchbox. :-)
>
> -- jm KE5FX
>
> ----------------------------------------------------
> Note: My E-mail address has been altered to avoid spam
> ----------------------------------------------------
Nobody seems to be mentioning it, so here goes. At certain frequencies
the commercial toroids are practically giving you air core inductors in
toroidal form. They have no magnetic material and just define the shape
as toroidal (good for the pickup and other coupling properties.)
This range lies around 50 MHz to 150 MHz. Q=150 or more can be
reached. You can get these high Q-values with good solenoids as well,
in the upper frequencies. (I have measured around 400 on a commercial
coil wound with flat silver-plated conductors.)
You can also do quite well at lower frequencies with patience to

use some of the better winding structures (not just a multilayer
solenoid.) with solenoids using no cores (no worry about saturation
causing IMD, etc.)
Bob
Bob
------------------------------
Date: 19 Nov 1997 13:24:28 -0800
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Subject: Difference between torroid or air wound?
True, the graphite core will make it lossy. But if you remove the
pencil, the resulting air core coil is likely to have a higher Q than
one wound on a toroid. It is likely to be more temperature stable
too. The Q would be better if the coil were larger than pencil
diameter, however.
>>The other key advantage a toroid gives you is the fact that it's
>>self-shielding to a large extent. That can simplify circuit layout
>>quite a bit.
That's the much more important advantage of the toroid.
Could one make the air core coil into a air-core toroid? Would it still be
at least somewhat self-shielding?
-- KD6PAG (Networking Old-Timer, RF newbie)

------------------------------
Date: Sat, 15 Nov 1997 07:30:58 -0800
From: Steve Smith <kc6wrd@jps.net>
Subject: Hard line spool for sale
What brand, size, and part number. How much do you have and how much
cash do you want for it?
GT R 86 wrote:
>
> Spool of hardline for sale: have large spool of hardline that I want sell
or
> trade for 2 meter equipment or hf amp.
> In Central Illinios , meet half way or you pick up....too large to ship I
think
> .
------------------------------
Date: 19 Nov 1997 19:50:27 GMT
From: res@cmprime.cis.att.com (Richard E Stealey)
Subject: Matching Sweep Tubes
: Does anyone have any experience at matching sweep tubes. Can you describe
the
: procedure that you have successfully used?
I am familiar with the procedure used at RL Drake to match their finals
in the '60s.
They put the tubes in a fixture that had some fixed bias on the grid
and probably proper voltage on screen and plates, and measured the
plate current. The tester marked the current reading on the
tube envelope. Typical numbers were 25 to 45. At 600 volts (if that
is what plate voltage was) of plate voltage 25 probably meant 25 ma.

of plate current, which would equate to 15 watts of dissipation.
And that is within the rating of the tube.
Then they put only tubes withthe same numbers in a rig. So, by their
definition "matched" meant within 5 ma of each other.
If you have a rig that you are matching for, why not do the same, using
one tube at a time?
Rick K2XT
------------------------------
Date: 19 Nov 1997 22:47:13 GMT
From: "whocares" <mars@juno.com>
Subject: parts needed
Where can i find the following parts?
LM360
11C90
Mar-6
74S160
Please post replys in this newsgroup
Thanks
------------------------------
Date: Sat, 15 Nov 1997 10:21:58 -0500
From: Rich Griffiths <richg@one.net>
Subject: PS Heating Up Charging Battery - Concern?
DavidC wrote:
>
> I recently acquired a used gel-cell battery. It is a large (car battery
> size).
> It measured just under 9v when I got it. I connected a 2.5A 13.8v
Micronta
> PS I had laying around and started the charging process. After several
> hours the battery was up to 11v.
> My concern is that the PS is getting very hot, should I have diodes in
the
> charging line or something to protect the PS, or is the process of bring
> the voltage back up in the battery just unusually taxing on the PS?
> Oh, and my meter is unable to measure the amperage over 600MA, what
> inexpensive metering setup would be good to monitor this battery - the
goal
> is to keep a trickle charger (the Micronta?) on it.
> Thanks in advance for your help!
> --
The battery is probably shot. A regular lead-acid battery is usually a
goner if
the voltage falls below 10 to 11 volts. I would expect the same of the
gel-cell.
It's worth a try running it on the charger for a while, but don't be
surprised
if it doesn't revive.
I wouldn't put diodes in the lines. The voltage drop may prevent you from
bringing the battery up to proper voltage even if it is still good. A
low-value

resistor or 12-V light bulb will moderate the current, and you can make
rough
current measurements by measuring the voltage drop across it (Ohm's Law:
I = E/R). The resistance of the light bulb will go up if the current is
very
high (bright bulb), so the measurements won't be accurate, but they're
cheap
and easy, and they give you a rough value.

Rich W2RG

---

Date: Sat, 15 Nov 1997 07:28:23 -0500
From: Jim Harvey <wb8nbs@ameritech.net>
Subject: PS Heating Up Charging Battery - Concern?

DavidC wrote:
>
> I recently acquired a used gel-cell battery. It is a large (car battery
> size).
> It measured just under 9v when I got it. I connected a 2.5A 13.8v
Micronta
> PS I had laying around and started the charging process. After several
> hours the battery was up to 11v.
> My concern is that the PS is getting very hot, should I have diodes in
the
> charging line or something to protect the PS, or is the process of bring
> the voltage back up in the battery just unusually taxing on the PS?
> Oh, and my meter is unable to measure the amperage over 600MA, what
> inexpensive metering setup would be good to monitor this battery - the
goal
> is to keep a trickle charger (the Micronta?) on it.
> Thanks in advance for your help!
> --

Put a 12 volt light bulb in series with the power supply to limit the
charging current. When the light bulb goes out or gets real dim you
know
it's close to full charge.

--

Jim Harvey, Redford, Mich. Amiga person - Linux person - WB8NBS
This message came from Netscape running on a LINUX Laptop!
He who dies with the most software wins.

---

Date: Thu, 20 Nov 1997 09:52:21 +0800
From: vanlong@mei.ceic.gov.cn (Su Yan)
Subject: Quartz Crystal products supplier from China

=-=-=-=-=-=-=-=-=-=-=-=-=
http://www.vanlong.com
=-=-=-=-=-=-=-=-=-=-=-=-=
Your future partner in China, and I'm sure you can
get more benefit from us!
Vanlong Technical Co., Ltd. is a worldwide supplier

of quartz crystal products. We mainly introduce the
quartz crystal and other electronic products made in
the major home coordinated manufacturers to overseas.
We are able to provide you strictly inspected quality
products in reasonable prices.
If you are interested in China quartz crystal products,
please feel free to visit our website:
http://www.vanlong.com/
We assure you our best attention to any inquire from
you and your company.
Su Yan
Director
Vanlong Technical Co., Ltd.
Tel: +86 10 6834-7389
Fax: +86 10 6831-6745
Email: sales@vanlong.com
=-=-=-=-=-=-=-=-=-=-=-=-=
http://www.vanlong.com
=-=-=-=-=-=-=-=-=-=-=-=-=
------------------------------
Date: Wed, 19 Nov 1997 22:43:26 GMT
From: kc8dmn@bright.net (Rick Ramzy)
Subject: Radio-Computer Interface -> IC706?
Has anyone built or seen a homebrew computer interface for the IC706 that
actually works? I have been searching, and have built a few, all with no
luck. Any help would greatly be appriciated, Rick Ramzy - KC8DMN
------------------------------
Date: 19 Nov 97 03:51:39 GMT
From: "Gary - KJ6Q" <gdavidson@deletecwnet.com>
Subject: Regen Receivers
Tom Bruhns <tomb@lsid.hp.com> wrote in article
<64dcq5$mre@hpcvsnz.cv.hp.com>...
> Gary Coffman (ke4zv@bellsouth.net) wrote:
>
> : That's the problem with the regen, unless it is fronted with a good
> : unilateral front end, it radiates madly all the time.
>
> Gee, regens have kind of passed out of my vocabulary, but my recollection
> is that a regen doesn't radiate...a superregen does. Have I just
> forgotten?? I'm thinking of a regen as an RF amplifier with positive
> feedback below the point of oscillation, with something to detect the
> RF amplitude in its tank, and a superregen as a gated oscillator, where
> the amplitude of the osillation at the end of the gate time is
> proportional to the RF (signal level) in the tank at the start of the
> gate.
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com

>
HEH HEH HEH, you win the prize this time - good 'ol Gary activated keypad
before engaging brain, something he usually avoids...

------------------------------

Date: 19 Nov 1997 14:13:57 GMT
From: Lou de Beer <lou.de.beer@general.com>
Subject: WTB HP8640B Sig Gen

Iam looking for a COMMERCIAL NON-WORKING Hewlett-Packard 8640B Sig Gen..

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End of Ham-Homebrew Digest V97 #676
******************************

--TAA14988.880051143/ict.nl--

# 4671. FS: Power Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: Craig Siegenthaler <kiwa@wolfenet.com>
Message-ID: <654mqt$bfi$2@sparky.wolfe.net>
Source record: 88870

For Sale: Cleaning House!

1. primary 120/220 VAC 60Hz
sec. 1 12.1 VAC / 9 amp
sec. 2 44.0 VAC / 2.5 amp
sec. 3 12.9 VAC / 2.0 amp
sec. 4 12.9 VAC / 3.2 amp

Dimensions 5.25 l x 4.0 w x 4.25 h inches
price $12.00

2. primary 120 VAC 60 Hz
sec. 56 VAC CT 6 amp

dimensions: 4.5 l x 3.5 w x 6.25 h inches
made by ADC for 3M
price $10

3. SOLA Constant Voltage Transformer: new - unused
type 20-13-150
primary 95-130 VAC 60 Hz
output 118 VAC 4.24 amps (500VA)
price $110.00 or BO

Please note that prices do not include shipping.

Craig Siegenthaler
612 South 14th. Ave.
Yakima, WA 98902

509-453-5492

# 4672. Security Briefing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: "James R. Doyle" <jdoyle@survivalguide.com>
Message-ID: <654mdt$g84@freddy.firstnethou.com>
Source record: 88871

A complimentary copy of our Residential Security Briefing is available via
e-mail to
jdoyle@survivalguide.com

# 4673. Dongles are Obsolete!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: kgoerg@webblabs.com
Message-ID: <3476140E.DE936EDD@webblabs.com>
Source record: 88872

Electrical and electronic engineers rely heavily on modern simulation and synthesis software. Sadly, effective usage of these tools is almost invariable restricted by one-user security schemes of one sort or another. Our breakthrough site licenses render other options obsolete.

For audio-to-microwave nodal circuit analysis, structure and filter synthesis, and system engineering support, the unprecedented Professional Partnership Program is the first true site-wide option. For details, see:

http://www.webblabs.com/pp.htm

If you are with a smaller firm, the alternatives to the PP Program are far more costly. If you represent a large company, your per-user cost will approach zero and there are no annual fees!

Our Education Partnership Program provides comparable benefits for engineering and electronics schools:

http://www.webblabs.com/ep.htm

For additional information, please contact me by e-mail at your first opportunity.

Kathy Goerg
Webb Laboratories
13731 W. Capitol Drive Suite 260
Brookfield, WI USA
kgoerg@webblabs.com
TEL 414.367.6825 FAX 414.367.6824

# 4674. MFJ Hi-Q Loop Antenna Queries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: "Joseph R. Romanosky" <saywhat@erols.com>
Message-ID: <347617A6.D93019D0@erols.com>
Source record: 88873
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.misc

Anyone have any experience using the MFJ Super Hi-Q loop (10-30 MHz)
or the 40-15M version? I have one of the original AEA Isoloop antennas,

so I have some experience using small transmitting loops....I am
considering purchasing an MFJ loop, but would like some feedback from
Hi-Q loop
owners first....

Also, any info on other manufacturers of small loops? My main goal is
to get on 40 and 30 meters...since I already have the AEA loop covering
20-10...

thanks 73

de K3KN

# 4675. FREE PARTS!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: jmello@lynx.dac.neu.edu
Message-ID: <jmello-2111971654550001@a-206-07.sp.neu.edu>
Source record: 88874

Free parts, complete set of internals from a comercial Motorola Console VHF tranciever aprox 1950-1960 The frequency is158.250 has been in storage for aprox 30 years. I'm using the case for a cabinet. everything looks in good shape. Take it away before I throw it away. Metro Boston Area.

# 4676. Re: 4x150 homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: Mike <short@5volt.net>
Message-ID: <34767FAE.E67@5volt.net>
Source record: 88875

ACI6 wrote:
>
> What frequency?
>
> At VHF, you can drive a 4X150 to full output with a watt or two when driving
> the grid. I had to build a resistive attenuator to go from say 15W down to 2W
> on 144 and 220 MHZ.
>
> My favorite method is to switch the screen grid supply to turn the tube on/off.
> Grid bias is on all the time. It is good to have a mercury-wetted relay for
> this, but it's not a big deal. You need to take the screen to ground when you
> want the tube off. I switch the screen to a 1K resistor to ground with the
> relay. Have three amps all running from same power supply and they work fine
> driving the grid and switching the screen on/off.
>
> Some will tell you you will have problems with neutralizing when driving the
> grid, but I haven't seen it. Also have Gonset amp on 6M. It is grid driven, but
> switches grid bias to turn tube on/off. All amps use 4X150 or 4CX250.
>
> Regards,
>
> Bill

Off-Topic, but 4X150's are hot tubes. We had 2 in parallel in a Collins
UHF rig in the RCAF (Royal Canadian Air Force) back in the '60's.

The driver was amazingly feeble (I don't remember the driver tube after
all these years, but I was always surprised it could drive the 4X150's to
full output.)

Up on the DEW Line, I was cleaning the RF connectors on a rig, and an
idiot friend of mine keyed the mike and said "Hello Test".

I didn't feel a thing, but the arc off my finger went about an inch as I
janked it from the connector.

The RF burn went in deep, and took a long time to heal. I encouraged my
friend to never do that again.

It didn't hurt the 4X150's at all :)

--

Best Regards,

Mike
CEO, Analog & Digital Design

Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4677. Help with HP851B filter alignment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34766827.54B1@pop.removethistomailme.net>
Source record: 88876

I'd like to hear from anyone who has successfully aligned the 20 MHz IF
filter sections in an HP 851B spectrum analyzer display unit.

-- jm (de KE5FX)

---
Note: My E-mail address has been altered to avoid spam
---

# 4678. TL-922 on 50 MHz ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: Alan Doherty <alan@gi0otc.demon.co.uk>
Message-ID: <AjoaJHA7EYd0EwDL@gi0otc.demon.co.uk>
Source record: 88877

Hi All,
Has anyone attempted to modify a TL-922 for 50 MHz ?

Regards,
Alan.

++++++++++++++++++++++++++++++++++++++
+ Alan Doherty, GI0OTC +
+ E-Mail: alan@gi0otc.demon.co.uk +
+ ****** +
++++++++++++++++++++++++++++++++++++++

# 4679. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: geotek@flex.net
Message-ID: <3475929b.72925320@news.zippo.com>
Source record: 88878

On 20 Nov 1997 00:17:03 GMT, n4ij@aol.com (N4ij) wrote:

>What are the experience building DDS circuits? Or are there PLL
>designs that are manageable out there? New chips available?
>I've read about Harris and Analog Device DDS chips, but am not
>sure if this is a practicable thing to attempt.
>
>Doug N4IJ
>dsnowden@ncdc.noaa.gov
>

I just finished a modulator design for L-Band Inmarsat use. The design incorporates a hybrid synthesizer using a 9850 DDS and a National PLL. It has very low phase noise and 1Hz resolution (.3Hz accuracy) from 55 to 85MHz. Neat as a pin.

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

# 4680. Re: Difference between torroid or air wound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <347448CA.1BA4@powerup.com.au>
Source record: 88957

I experimented with coils for a VFO wound on a Lifesaver.
They worked very well.

John Mock wrote:

> Could one make the air core coil into a air-core toroid? Would it still be
> at least somewhat self-shielding?
>
> -- KD6PAG (Networking Old-Timer, RF newbie)

--
**********
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
**********

# 4681. Re: Wanted: Chebyshev (5 Pole) Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <652l04$44q@mtinsc04.worldnet.att.net>
Source record: 88958

Hi Floyd,
Purchase a used ARRL Handbook (amateur radio handbook) it will tell you how
to build chebyshev filters 3,5and7 pole.

Floyd Soo, W8RO <hires@rust.net> wrote in article
<3474AD88.2C29@rust.net>...
> I have a RF Electronics (Lee Martin, KD4YBC) 5 Pole Chebyshev Filter
> Kit. The documentation has two page 3s and is missing page 4. Lee no
> longer has this documentation in his computer. If anyone has the docs
> to this kit and is willing to copy page 4 for me, please contact me!
>
> Tnx and 73!
> Floyd Soo, W8RO
> President, HI-RES Communications, Inc.
> Net Manager and Board Member, Collins Collectors Association (#002)
> QRP-L #392
> hires@rust.net
> http://www.rust.net/~hires
>

## 4682. Tube transmitter Kits!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <3474e61b.17352894@news1.mnsinc.com>
Source record: 88959
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,uk.radio.amateur

Have a look at the Vintage Radio Kit Co. Web Page!!

http://www.mnsinc.com/bry/vintage.htm

See the new REGEN receiver and BREADPAN antenna tuner kits!

Who ever said kit-building was dead? Read all about the 5 watt Giant,
the "Cake Pan CW 5."

Cool stuff IMHO!

# 4683. Re: CQ 40m Fun Machine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <3474e7b1.17758625@news1.mnsinc.com>
Source record: 88960

On Tue, 11 Nov 1997 18:59:12 GMT, wmeara@erols.com (Bill Meara )
wrote:

>Crystals should not be a problem. You can have them custom made by
>JAN crystals. For parts, use MOUSER or others. Order via
>Internet or FAX to save time. Don't be afraid to modify the
>circuits to your liking as you go through.

Actually guys, there is no need to pay those high JAN Crystals prices.
You can get them for less than the commercial type prices if you are
prepared to hunt a little!

Ny experience has been that VERY few crystals show up at hamfests any
more. I HAVE bought a few that way - usual;ly NOT in ft243 holders
though. Often I get HC-6/U types etc that way.

To buy the FT243s you should contact CW Crystals or some of the other
less expensive suppliers that cater to ham homebrewers.

Full details are at:

http://www.mnsinc.com/bry/mega/xtals.htm

Enjoy!

73 de AF4K, Bry

# 4684. WTB: 2 inch 2AP1 CRT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: wabate@erols.com
Message-ID: <34761461.30540802@news.erols.com>
Source record: 88961

I need a replacement 2AP1 CRT for my transmitter. Anyone have a new one for sale ?

Thanks, Bill, K3PGB
wabate@erols.com

# 4685. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <6534op$obp$1@vixen.cso.uiuc.edu>
Source record: 88962

In a previous article, wa6vse@fast.net ("Carl R. Stevenson") says:

>Direct Digital Synthesizer ... essentially an NCO and a DAC.
>(those are Numerically-Controlled Oscillator and Digital-Analog
>Converter, just to save you from having to ask)
>
>73,
>--
>Carl - wa6vse
>wa6vse@fast.net
>NCI #1052
>Join No Code International!
>Support the modernization of ham radio and
>help to assure its survival into the 21st century!
>
>
>AMDX <AMDX@worldnet.att.net> wrote in article
><6508l9$njn@mtinsc05.worldnet.att.net>...
>> Hey guys,
>> What is DDS?
>> Mike
>>
>

I built the Fred Williams synthesizer that appeared in QST a number of years ago and in the ARRL Handbook for a few years. Although it is not as compact as more modern designs (it uses 2 circuit boards filled with chips) I have been extremely impressed with its performance. I improved the filtering on the output and redesigned the controller to use an 8751, which I felt was more versatile, and added a tuning dial circuit (2 speeds, I can change the frequency in 1 Hz steps or 100 Hz steps).

It seems to keep jumping from project to project of mine. I've been thinking of playing with frequency-hopping spread-spectrum using this circuit.

73, Zack W9SZ

--

# 4686. 19" Equipment Enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: "storm@webwide.net" <kstewart@webwide.net>
Message-ID: <01bcf68d$c98b4320$8e4c29d1@kstewart.atlantech.net>
Source record: 88963

Standard 19" Single Bay Cabinets
H 76" W 23" D 24"
Available mounting space 70"

Gray in color. 16GA material. Removable doors
Weight 225lbs.
Location Dallas,TX

To many features to list.

They have never been used. Perfect for hobbiest or someone expanding a radio or data network. They are nice enough to put in your living room. HONEST!

Let's make a deal.

Call 972-727-4225 or 903-455-8136
e-mail kstewart@webwide.net

# 4687. FS:20+MOTOROLA 800MEG RADIOS $250+SHIPPING HT'S,MOBILES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: revgbb1@aol.com
Message-ID: <19971121224401.RAA17506@ladder02.news.aol.com>
Source record: 88964

11 -DIM IV BEEPERS/CHARGERS
11-MX-350 HT'S NO BAT/OR ANT.
2-MX-330 HT'S NO BAT OR ANT
1-BASE CONTROL T-1603AM-CNSOL WITH MIKE
4 -MITREX MOBILES WITH ACC
3-SYNTOR X WITH ACC
2-CONVETER COMS N1244A DROP INS WITH MIKES
ALL ARE ON 800-857.2175 ???? I BOUGHT A-LOT FROM A POLICE DEPT. THAT WENT TO
TRUNK SYSTEM, $250+FREIGHT COD FROM S.FLA

# 4688. Infra Red Audio Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: nuckolls@aeroelectric.com
Message-ID: <3476122c.10105650@news.supernews.com>
Source record: 88965

Any ideas for chipsets to fabricate wireless
headset? Up to four separate paths in close
proximity so ability to generate/discriminate
"carrier" frequency desirable. Max range
1 meter. Voice communications grade audio
quality is fine. Can't use RF so we're looking
for IR technologies.

Bob K0DYH

<http://www.aeroelectric.com>

# 4689. HERE COME THE BUCKS . . .

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: meeeeee989@aol.com
Message-ID: <19971121123100.HAA00431@ladder02.news.aol.com>
Source record: 88966

DO YOU WANT TO MAKE BUCKS FAST???--AND NO ONE LOSES . . .
Of course you do, we all do !!! Here's how to do so with little effort, and, yes IT'S LEGAL.

Some people make things happen
Some watch things happen
While others wonder what has happened

This is the easiest way that you can make a buck. Think how excited you'll be to open up your mailbox day after day! Will it be $50 in dollar bills? or $5,000? Start making your plans, because it can happen to you.

DON'T PASS UP THIS ONCE IN A LIFETIME OPPORTUNITY!!! (I'm glad I didn't)

Like you're doing now, I was checking out newsgroups and came across an article similar to this that said you could make thousands of dollars within weeks, with only an initial investment of $6.00! So I thought, "Yeah, right, this must be a scam!", but, like most of us, I was curious; I kept reading.

Anyway, it said that if you send $1.00 to each of the 6 names and addresses stated in the article, you could make thousands in a very short period of time. You then place your own name and address at the bottom of the list at #6, and post the article to at least 200 newsgroups.(There are about 22,000.)

No catch, that was it. After thinking much about it, I came to the conclusion that this could not be a scam (but, if it was, only scamed out of $6 , I could afford it.)

Even though the investment was a measly $6, I had three questions that needed to be answered before I could get involved in this sort of thing. Just like you, I was skeptical, or thought it might take too much work or something.

1. Is this really legal? . . . I called a lawyer first. This lawyer friend was a little unbelieving that I would actually make any money but he said it WAS LEGAL if I wanted to try it. I told him it sounded a lot like a chain letter but the details of the system (SEE BELOW) actually made it a legitimate legal business.

2. Would the Post Office be ok with this . . . I called them: 1-800-725-2161 and they confirmed THIS IS ABSOLUTELY LEGAL! (See Title 18,h sections 1302 NS 1341 of Postal Lottery Laws). This clarifies the program of collecting names and addresses for a mailing list.

3. Is this moral? Well, everyone who sends me a buck has a good chance of getting A LOT of money . . . a much better chance than buying a lottery ticket!!! In the end it looks to me like no one loses, we help each other move ahead.

So, having these questions answered, I invested EXACTLY $7.92 ... six $1.00 bills and six 32 cent postage stamps . . . and boy am I glad I did !!!

Within 7 days, I started getting money in the mail! I was shocked! I still figured it would end soon, and didn't give it another thought. But the money just continued coming in. In my first week, I made about $20.00 to $30.00 dollars. By the end of the second week I had a mad total of $1,000.00 !!!!! In the third week I had over $10,000.00 and it was still growing. This is now my fourth week and I have made a total of just over $42,000.00 and it's still coming in . . . It's certainly worth $6.00 and 6 stamps !!!

So now I'm reposting this so I can make even more money! (and helping you to make a lot of money.) The *ONLY* thing stopping *ANYONE* from increasing their own bank account is pure laziness ! It took me all of 5 MINUTES to print this out, follow the directions, and begin posting to newsgroups. It took me a mere 45 minutes to post to over 200 newsgroups. And for this GRAND TOTAL investment of $7.92 (US) and under ONE HOUR of my time, I have reaped an incredible amount of money --like nothing I've ever even heard of anywhere before ! Enough said, time to start !

Let me tell you HOW this works, and most importantly, WHY it works. Also, make sure you print a copy of this article now, so you can get the information off of it when you need it. The process is very simple and consists of THREE easy steps:
STEP 1--Send the 6 people on the list a single dollar each.
STEP 2--Put your name and address on the list in position 6.
STEP 3--Post this amended letter to 200 (or more!) Newsgroups.

==========
HOW IT WORKS
==========

STEP 1:

Get 6 separate pieces of paper and write the following on each piece of paper:

PLEASE ADD ME TO YOUR MAILING LIST.
$1 US DOLLAR PROCESSING FEE IS INCLUDED.

(This is the key as this is what makes it legal since you are paying for and later offfering a service.)

Now get 6 $1.00 bills and place ONE bill inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope to prevent theft/robbery. Then, place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelopes, each with a piece of paper stating the above phrase and a U.S. $1.00 bill. Now send to:

#1
JA Gualtieri
45-350 Columbia St. W.
Waterloo, ON, Canada N2L 6G3

#2
Andrew Wiggin

PO BOX 424
East Setauket, NY 11733

#3
Ashle
347 Jamboree
Manchester, MO 63021

#4
The Mom
4464 Castelar Street, #320
San Diego, CA 92107

#5
Chris Watson
1138 Indian Road
Virginia Beach, VA 23451

#6
Virgil
3538 West 12th Street
Trainer, PA 19061-5301

STEP 2: Now delete name #1, move the other names up (6 becomes 5, 5 becomes 4, etc...) and add YOUR name as number 6 on the list. (If you want to remain anonymous, put a nickname, but the address MUST be correct, or you won't receive your dollars in the mail.)

STEP 3: Now post your amended article to at least 200 newsgroups. Remember, 200 postings is just a guideline. The more you post, the more money you make! As you might know, it's not that difficult to post to news groups. So, you don't know HOW to post in the news groups? Well, do exactly the following:
---
HOW TO POST TO NEWSGROUPS FAST WITH YOUR WEB BROWSER:

Highlight and COPY(Ctrl-C) the text of this posted message and PASTE(Ctrl-V) it into a plain text editor (like Wordpad or WordPerfect) and save it. After you have made the necessary changes that are stated above, simply select a newsgroup then COPY(Ctrl-C) and PASTE(Ctrl-V) the text into the message composition window of the newsgroup, and post it!
---
GENERAL NOTES ON POSTING: A nice page where you'll find all the newsgroups if you want help is http://www.liszt.com/ (When you go to the home page, click on the link 'Newsgroup Directory'). But I don't think you'll have any problem posting because it's very easy once you've found the newsgroups. All these web browsers are similar. It doesn't matter which one you have (But it makes it very easy if you have Netscape Navigator 3.0 or later. You may download it from the Internet if you don't have it.) You just have to remember the basic steps, stated below.

BASIC STEPS FOR POSTING:
1. Find a newsgroup and you click on it.
2. You click on 'POST AN/NEW ARTICLE' or 'TO NEWS' or anything else similar to

these.
3. You type your flashy headline in the subject box.
4. Now, either you attach the file containing your amended letter, or you PASTE the letter.(You have to COPY it from the text editor, of course, from before.)
5. Finally, you click on 'SEND' or 'POST' or 'OK', whatever is there.
---
**REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200**

That's it! You will begin receiving money from around the world within day's! You may eventually want to rent a P.O. Box due to the large amount of mail you receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it.

**JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**

==========
Now the WHY part:
==========
Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2 and they each only receive 5 replies, that just made me $3,125.00!!! Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625.00! With a original investment of only $6.00! AMAZING! And as I said 5 responses is actually VERY LOW! Average is probable 20 to 30!

So lets put those figures at just 15 responses you get. Here is what you will make:

at #6 $15.00

at #5 $225.00

at #4 $3,375.00

at #3 $50,625.00

at #2 $759,375.00

at #1 $11,390,625.00

When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is, do you realize that thousands of people all over the world are joining the internet and reading these articles everyday, JUST LIKE YOU are now!! So can

you afford $6.00 and see if it really works?? I think so...

People have said, "what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet. Remember, play FAIRLY and HONESTLY and this will work. We all just have to be honest and help each other get ahead.

REMEMBER-HONESTY IS THE BEST POLICY. WHAT ARE 6 DOLLARS TO YOU? YOU DON'T NEED TO CHEAT THIS IDEA TO MAKE MONEY!!! IF YOU NEEDTHE $6, I'M SURE ANY OF THE PEOPLE ON THE LIST AHEAD OF YOU WOULD SEND YOU $6 IN DOLLAR BILLS TO GET GOING--YOU HAVE NOTHING TO LOSE !!

** We will monitor the program and if we find you have cheated by not sending your money to your five recipients, we will just dump you out of the system. Come on folks, let's work together and make this work for everyone.

GOOD LUCK to all and please play fairly and reap the huge rewards from this, which is tons of extra CASH.

Please remember to declare your extra income. Thanks once again...

# 4690. Re: Returned mail: Host unknown (Name server: walt.ict.nl: host not found)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: Mike <short@5volt.net>
Message-ID: <347676DD.7997@5volt.net>
Source record: 88967

Mail Delivery Subsystem wrote:

[...]

This has all the earmarks of a Windows NT failure. Total garbage.

Someone bought into MicroCrash. I wish they would fire their consultants
and get off the system.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

## 4691. Crystal Set Kit Sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: zaax@aol.com
Message-ID: <19971121133500.IAA03525@ladder02.news.aol.com>
Source record: 88968

Does anyone out there have a listing of companies that supply crystal set kits?
Any info on this will be greatly apreciated.

73
Zack Schindler
N8FNR

# 4692. Indexes & literary allusions / was Re: Dumbing Down and ARRL Hb

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-21 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EK0GGo.F6L@world.std.com>
Source record: 88969

Al Woodhull <aswNS@hamp.hampshire.edu> wrote:

> Many years ago, in John Barth's novel _The End of the Road_ I read the
> comment of a character who was a professional indexer. He at some
> point remarks (I paraphrase, I can't recall the exact words) that
> anyone who tries to index his own book is a fool. I have often thought
> of that when looking for something in the ARRL Handbook.

Fascinating. I ran into that character and remark in Kurt
Vonnegut's "Cat's Cradle". Unfortunately, the ability of computers
to make a bad index quick-and-cheap has destroyed the market for
professional indexers. Anyway, it is true, to make a good index
requires the use of a good thesaurus. Most software help systems
will tell you all about a command you found on a menu, but won't
help you find it if you don't know WHICH verb/noun they CHOSE to
use, and book indices these days are lacking in the nice little
cross-references (modulators: see mixers) that help you find things.

73 de N1VUX BPL with Tech-No-Code
Still certified code free, but not much longer? passed 3B and 4A!
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

## 4693. Neon sign xfmr wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: JDM <jmul@iland.net>
Message-ID: <01bcf6e5$dd37da20$1ae7f2cd@jmul>
Source record: 88879

I need a neon sign transformer to make a Jacobs Ladder for a science project.. 120 Vac input, 10-15 Kv output although other outputs could be used. If anyone can help me, I'd appreciate hearing from you, thanks.

# 4694. Re: 4x150 homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19971122032700.WAA17246@ladder02.news.aol.com>
Source record: 88880

What frequency?

At VHF, you can drive a 4X150 to full output with a watt or two when driving the grid. I had to build a resistive attenuator to go from say 15W down to 2W on 144 and 220 MHZ.

My favorite method is to switch the screen grid supply to turn the tube on/off. Grid bias is on all the time. It is good to have a mercury-wetted relay for this, but it's not a big deal. You need to take the screen to ground when you want the tube off. I switch the screen to a 1K resistor to ground with the relay. Have three amps all running from same power supply and they work fine driving the grid and switching the screen on/off.

Some will tell you you will have problems with neutralizing when driving the grid, but I haven't seen it. Also have Gonset amp on 6M. It is grid driven, but switches grid bias to turn tube on/off. All amps use 4X150 or 4CX250.

Regards,

Bill

# 4695. Re: RF Matching Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <3484526b.16320737@news.gate.net>
Source record: 88881

On Sun, 16 Nov 1997 17:41:06 -0800, dan <dan@lakeweb.com> wrote:

>Pat Orrell wrote:
>>
>> Hi All
>>
>> Does anyone know of any shareware program for RF matching that has
>> smith chart display. Motorola did one I think and there is one called
>> EEZ Match
>>
>Here it is:

The one by dan Moline who works at Motorola is freeware and I think
its located on oak archives. A good one considering the price.

James
>

>http://sss-mag.com/smith.html
>
>I have used it and it really is a nice application. It takes
>a little getting use to but once you do, you can mess around
>with you parameters very quickly and see them move through
>your band of interest. Remember, the lower the Q the broader
>the bandwidth, stay away from the outside of the circle.
>
>Best, Dan. http://www.lakeweb.com/dbLabs/

A wise man knows that he is not all knowing. Only a fool thinks he is!

# 4696. Yaesu FT-230R parts radio wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: nuvistor@aol.com
Message-ID: <19971122042701.XAA23584@ladder02.news.aol.com>
Source record: 88882

I have an FT-230R 2M fm radio with a bum display.The radio is fully functional otherwise. Please dig out that dead radio and see if it is a FT-230R! Yaesu says that the no longer stock the part. If anyone has any ideas, Please email me at the address below. Thanks in advance! 73 Chris KC2BZH
Christopher Bucca KC2BZH
nuvistor@aol.com

If Ignorance is Bliss,
Then there are a lot of
Happy People out there!

# 4697. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: mailfrmpa@aol.com
Message-ID: <19971122045600.XAA26479@ladder02.news.aol.com>
Source record: 88883

>> Here's a prime example of the arrogant, pro-code jackasses who are
>> ruining Amateur Radio.

> Demonstrating to the government that you Know the Holy Code allows
>> one to enter the Temple of the Holy HF, the Lower Bands Lodge Hall
>> where only the Good and True amateurs reside.

What part of this doesn't make perfect sense to you?

K0MB

# 4698. 2N2222 Colpitts Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3476CB8C.B4D@trader.com>
Source record: 88884

Mike,
Your email address, short@5volt.net, doesn't work!
I have a few more questions about the SPICE emulator,
but in the meantime, I've got a simulation that works.
The discovery process, gifs, and links to download the
SPICE files and the SPICE demo software are posted at:
http://www.trader.com/users/5012/9019/colpitts.htm
Thanks!
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 4699. Re: 2N2222 Colpitts Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: Mike <short@5volt.net>
Message-ID: <3476E58C.6725@5volt.net>
Source record: 88885

Dennis Erwin Thurlow wrote:

> Mike,
> Your email address, short@5volt.net, doesn't work!
> I have a few more questions about the SPICE emulator,
> but in the meantime, I've got a simulation that works.
> The discovery process, gifs, and links to download the
> SPICE files and the SPICE demo software are posted at:
> http://www.trader.com/users/5012/9019/colpitts.htm
> Thanks!

> geosynq@trader.com
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM

The email address is munged to reduce spam. It helps, but is not 100% effective.

You might find a valid address at one of the URL's listed below. Some of the Spambots do.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4700. Fussy AF amp @ N2CQR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34774345.360090606@news.erols.com>
Source record: 88886

Progress on my 30 meter direct conversion transceiver was temporarily slowed by family responsibilities, but I am now back at the work bench. { I've taken a simple 5 Watt VXO controlled transmitter and paired it up with a Sudden RX from Kanga (602 and 386) and am using a second 386 chip from a Kanga sidetone board for some additional audio amplification (and sidetone).} Words of wisdom from cyberspace led me to reduce the amount of coupling from the transmitter's VXO to the local oscillator input on the NE602 chip. (Thanks Harry!) This eliminated most of the annoying "popping and squealing" that I'd experienced whenever I turned the main tuning cap. I put some additional capacitance in parallel with the main tuning cap to eliminate some weird noises that I got at the "min cap" position.

I worked out a real "kludge" fix for my audio amp oscillation problem: I got one of those cheap little Radio Shack computer speaker sets. they have some audio amplification circuitry in one of the speakers. When I use this speaker with the active devices on, I get no feedback. With the same speaker connected, If I put the switch in the "speaker only (no amp) position, I get frantic motorboating! I get the same motorboating if I connect a ordinary 8 ohm speaker to the output.

Any ideas on what is going on here? Could it be that the input impedance of the speaker (with Amp in circuit) is preventing the motorboating? How can I get the same result with only a speaker in the circuit?

Thanks, 73, N2CQR

# 4701. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <34772330.726504@news.gate.net>
Source record: 88887
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Wed, 19 Nov 1997 08:34:57 -0500, "Ronald D. Lucier"
<optics3d@ix.netcom.com> wrote:

>Walt Davidson wrote:
>>
>> On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
>> Landing, NJ)) wrote:
>>
>> > They are leaving open the issue of whether there
>> > should be a "codeless" class of Internet user and are soliciting
>> > comments on this proposal.
>>
>> The "codeless" class should have read-only access.
>>
>> The same restriction should be applied to no-coders on the amateur
>> radio bands. The hobby would be much the better for it.
>>
>> ;-)
>>
>> 73 de G3NYY
>>
>
>I second that. All those in favor?
>
>Hey - if morse code is so bad, so tough to learn, so out dated and so
>completely useless, as many no coders continuously whine, why do I see
>the majority of qsl cards for CW qsos? I presort cards for the W1 QSL
>bureau. Better than 75% are for CW contacts. Somebody better get a
>clue here.

That is a irrational statement here. I dare say that 75% of all QSO's
on the amatuer band are CW. All you have proven as that in the W1 QSL
bureau most hams that send QSL cards use CW. That is all, nothing
more or nothing less.
Just because he sees more QSL cards are for CW contacts, he make the
assumption that more contacts are via CW. That's like asking the
general public if they like carrots. If only the ones who reply are
the ones who hate carrots. You make an assuption that most people
don't like carrots. Something like a straw poll. Not worth a tinkers
D$%$^#.
>
>For those of you who will take exception to the "CW requirement" for the
>internet...Lighten up or get a life!

I ask what is the relavence of proficiency in one form of
communications a mandate to priviledges that are not even related to
this mode of communicatoins?
Does it mean that someone who doesn't like one aspect of amatuer radio
should not have priviledges in another area?
Do you subscribe to the theory that I had to do it so everyone else
after me must also?
I wonder if someone jumped off a bridge, would you?

>
>73 to all, even no-coders de W1AAE

regards
James

A wise man knows that he is not all knowing. Only a fool thinks he is!

# 4702. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <34772a48.9278250@news.gv.net>
Source record: 88888

aswNS@hamp.hampshire.edu (Al Woodhull)
shared these priceless pearls of wisdom:

->I have noticed that Ray-O-Vac makes rechargeable alkaline batteries.
->I wonder if these are useful as substiutes for NiCds in ham gear?

If I'm not mistaken (and I quite frequently am) Rayovac has a website at www.rayovac.com with a lot of the answers you want as well as an "ask the expert" mail address.

I wrote a very early article on using them in handhelds -- albeit aviation band handhelds. You might see if your library has the magazine KITPLANES for January '96.

Jim

# 4703. Wanted pic&#65533;s Ham Project&#65533;s !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: CORTICOL@MAIL.TELEPAC.PT
Message-ID: <656sti$aug@brown.telepac.pt>
Source record: 88889

Hi

Thanks for read my massage, i want know any sites with Pic
(Microchip) Projets for Ham Radio or general projects.
I&#65533;m try found projects for :

--RadioControl Clock
--Frequencie counter
---DDS Vfo ( for my old Ft902dm)

Thanks in advance

Paulo Gariso_CT1DTA

Packet < Ct1dta@Ct1egq.ctpt.prt.eu >

# 4704. Re: GE Mastr II Tuning Help Needed Please !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <34773B02.F62@earthlink.net>
Source record: 88890

mlussier wrote:
>
> Help !! Ha anyone done a conversion from 150.4-174.0 GE Mastr II
> Receiver to 144.00 band?
> I under stand this receiver is best modified to 220 but I am trying my
> best to get it down to 146.175 specifically
> if you can't can you please point me in the direction of the right
> person.
>
> Thank you
>
> Mike Lussier
> KF4MQF
> Mlussier@erols.com

Should tune up just fine with no mods....
Chris
WB5ITT

# 4705. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: miker <&mreiney@hevanet.com>
Message-ID: <347744B6.5799@hevanet.com>
Source record: 88891

Jim Weir wrote:
>
> aswNS@hamp.hampshire.edu (Al Woodhull)
> shared these priceless pearls of wisdom:
>
> ->I have noticed that Ray-O-Vac makes rechargeable alkaline batteries.
> ->I wonder if these are useful as substiutes for NiCds in ham gear?
>
> If I'm not mistaken (and I quite frequently am) Rayovac has a website at
> www.rayovac.com with a lot of the answers you want as well as an "ask the
> expert" mail address.
>
> I wrote a very early article on using them in handhelds -- albeit aviation
> band handhelds. You might see if your library has the magazine KITPLANES
> for January '96.
>
> Jim
For those of us who's library has never heard of KITPLANES, a summary
of the salient points would be appreciated.
thanks, miker
--
Please remove & from return address before replying.

# 4706. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <347825f6.1436846@news.gate.net>
Source record: 88892
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Wed, 19 Nov 1997 14:16:55 -0600, "Gregory T. Helding"
<nospam@stop.spam.now> wrote:

>The hobby would be much the smaller for it.
>

Oh no one of those! Likes to keep his ball and not let anyone else
share unless they meet up to their expectations.

A smaller amatuer radio market will mean ever higher costs for new
equipment. Smaller numbers also mean less political muscle when it
comes to attacks on the bands that are already in use. To those
amatuer operators that subscribe to the 1920's, the times are a
changing. I would not be suprised if more of the UHF and higher bands
come under attack from commercial interests. These people have power
and if the population of the amatuer service remains the same or
dwindles the hobby will also. It is estimated the frequencies
assigned to the amatuer band exclusively would bring to the federal
government about 30 to 60 BILLION dollars based on the last PCS
auction inthe 900 MHZ range. That's alot bucks there for politicians
to spend. Numbers in any radio service acan help to fight the money
grabbing poloticians and commercial interests that stand to make more
than the frequencies are wortth.

That's my penny's worth

>
>Walt Davidson wrote:
>
>> On Tue, 18 Nov 1997 17:36:01 -0500, kf2ti@planet.net (Steve (KF2TI -
>> Landing, NJ)) wrote:
>>
>> > They are leaving open the issue of whether there
>> > should be a "codeless" class of Internet user and are soliciting
>> > comments on this proposal.
>>
>> The "codeless" class should have read-only access.
>>
>> The same restriction should be applied to no-coders on the amateur
>> radio bands. The hobby would be much the better for it.
>>
>> ;-)
>>
>> 73 de G3NYY

>>
>> --
>> Walt Davidson Email: walt@ dial.pipex.com
>> "Only dead fish go with the flow"
>
>
>
>--
> .-. .-.
> / \ .-. .-. / \
> / \ / \ .-. / \ / \
>/___Greg_Helding______KB9RMA__\ghelding@casecorp.com_____\
> \ / \ / \ / \ /
> \ / `-' `-' \ /
> `-' `-'
>
>
Regards
James

A wise man knows that he is not all knowing. Only a fool thinks he is!

# 4707. PCB Frequency Synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: kevinm@infinity.ccsi.com
Message-ID: <655kt1$mk9$2@quest.ccsi.com>
Source record: 88893
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Does anyone know a manufacturer who produces PC board frequency synthesizers suitable for dropping into a project? I need a fairly complete board level product with low phase noise in the 75-225 MHz region. Thanks.

$$e^{-\frac12 K^2} \frac d{dK} e^{\frac12 K^2}e^{\sqrt{in}}$$
Kevin McWilliams
KW5Q
Applied Mathematician

# 4708. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: cmoore@sedona.intel.com
Message-ID: <347759F0.3A59@sedona.intel.com>
Source record: 88894
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

jdaggett@gate.net wrote:
> Just because he sees more QSL cards are for CW contacts, he make the
> assumption that more contacts are via CW.

Hi James, there is a logical explaination. CW is so inefficient as
a communications mode, that everyone has to resort to snail mail
to finish their QSOs. :-)
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 4709. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: troublemaker@radiotelephone.net.ham
Message-ID: <34776b4f.1853320@news.total.net>
Source record: 88895
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Sat, 22 Nov 1997 18:34:08 GMT, jdaggett@gate.net wrote:

>> Hey - if morse code is so bad, so tough to learn,

it's not tough to learn. we just don't want to spend time on it
because it is useless. I had to do it just because I wanted to have
HF voice access.

>> Better than 75% are for CW contacts.
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
no way !!

---

Trouble Maker AKA M@S@
Student @ McGill University Science
Montreal, Quebec, Canada
E-mail : troublemaker@radiotelephone.net.ham
URL : http://www.radiotelephone.net (General)
http://www.radiotelephone.net/amateur/ (Radio)
http://www.geocities.com/~masataka/mcgill.htm (McGill University)

---

Remove ".ham" to reply.

WARNING: I will not buy/response any products from unsolicited e-mails !!

# 4710. Best Design For Tuner Open Wire 450 Feeding Doublet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf79f$c65a5200$098a92d0@bitnet.bit-net.com>
Source record: 88896
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have a couple of large roller inductors (different sizes). I'd like to build an
antenna tuner for my 200 foot per side doublet antenna that is fed with 450 open line.
What design should be optimum?
What components are required for a full power 160-10 meter tuner (6 would be a bonus).
I understand that a (commercial) true open line antenna tuner is rare and costly.
--
Thanks & 73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

# 4711. Tubes for sale.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <657pbr$ca5$1@newsfeed.smartt.com>
Source record: 88897

Hi!,I do have for sale a lot of receiving tubes,for a fair price.
For any of your need,just contact me with the numbers you need
and I will do the best to help you out.....thanks

Eric By email or PH/FAX (250)868-1182
Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4712. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: "Amor Powers, Radio" <power@radio.net>
Message-ID: <34776DED.2A05@radio.net>
Source record: 88898
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Ronald sezz:

> I presort cards for the W1 QSL
> bureau. Better than 75% are for CW contacts.

Ronald, are you reading other people's mail again? :-)

Amor Powers

# 4713. Re: Help-homebrew linear PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <658d4r$pot@bgtnsc02.worldnet.att.net>
Source record: 88899

Hello Jan,

I have attached 3 image files.
-files not inc. -ref outfit is Communications Concepts, Inc. ....
They are from a catalog I have. I once
bought a 900 Mhz down converter from this company and was very
satisfied. The company (order form is image 1) sells boards and parts
needed to build the amps. The other two images show two amps they sell
parts for. If you only want the data, look at the bottom of the image -
for the transistor maker's application bulletin number and contact them
for a copy. (AR305 & AR347)
73, Woody

Bergersen wrote:
>
> Can anyone tell me where to find plans and schematics for a linear power
> amp 0,5- 1 kw?
>
> vy 73 es tnx
>
> Jan

--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the
Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing
stuff.
http://www.geocities.com/capecanaveral/3722
.

# 4714. tektronics oscilloscope question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: Randy/DeeDee/Robin <dc@citynet.net>
Message-ID: <3477815D.6937@citynet.net>
Source record: 88900
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,rec.ham-radio,rec.ham-radio.swap

Anyone know what a tektronics 585a scope is worth? Is this the scope
included in those mail order training programs? Have one for sale
locally and wondering if price is right..reply via email! thanks,
Randy
--
>>To reply, remove the dot between 'city' and 'net'<<

>>Randy- KC8CPK, CRTT, NREMT-P, ICQ 4455106<<
>>Robin- RN, MICU<<
>>DeeDee- CCC,SLP<<

# 4715. Re: MFJ Hi-Q Loop Antenna Queries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-22 00:00:00 UTC
From: ka7w@tjantenna.com
Message-ID: <34776175.1196405@news.acrnet.com>
Source record: 88901
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.misc

On Fri, 21 Nov 1997 18:22:15 -0500, "Joseph R. Romanosky"
<saywhat@erols.com> wrote:

>Anyone have any experience using the MFJ Super Hi-Q loop (10-30 MHz)
>or the 40-15M version? I have one of the original AEA Isoloop antennas,
>
>so I have some experience using small transmitting loops....I am
>considering purchasing an MFJ loop, but would like some feedback from
>Hi-Q loop
>owners first....
>
>Also, any info on other manufacturers of small loops? My main goal is
>to get on 40 and 30 meters...since I already have the AEA loop covering
>20-10...
>
>thanks 73
>
>de K3KN
>
Take a look at http://www.tjantenna.com we are doing some work
with transmitting loops for 160/80 and 40 meters

73 de KA7W>
>

# 4716. LF Rx and DGPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Paul Breed <Paul@rasdoc.com>
Message-ID: <34786CB1.37128CB7@rasdoc.com>
Source record: 88820

I am about to homebrew a LF rx for recieving the CG DGPS transmissions.

The background:
The DGPS transmissions are:
282->325 Khz.
MSK modulated at 100 or 200bps (MSK - minimum shift keying)

I am an engineer with lots of digital and software experience, some
analog, and very little RF design experience.

My idea for a design is as follows: (Sorry no ASCII Art.)
908
Do an I/Q direct conversion Reciever.
Followed by an amplifier Low pass filter and A/D on each I/Q channel.
A low end DSP part would then decode the MSK from the I/Q.
(I know how to do the DSP and MSK Decode if I can get baseband I/Q)
If any one wants some sample code send mail.

Since all of the Gain is at AF frequencies how much problem will I have
with:
Microphonics?
Syncronizing the Gain between the I/Q ?

This allows me to use a very simple 1.1Mhz to 1.3Mhz PLL , or fixed
crystal as my only LO.
(The LO needs to be 4x the Rx so I can generate the 90deg shift easily.)

Is this idea brain dead?
Should I include some RF amplifcation ahead of the mixer?

If I want to do a fixed frequency version where can I get crystals at
specified frequenies?

Also can anyone help me with a loopstick antenna for this freq range?

The alternative is to do a multiconversion design:
If I do a multiconversion design there are lots of image problems from
the broadcast band.
To kill these images I would need to do an Up-conversion to 10.7M (Where
lots of cheap filters are availible)
then do an I/Q downconversion to the DSP part.
This has a lot more "RF" parts. The first and second LO, an IF filter
and a IF amp stage.

Thanks

Paul.

# 4717. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: jleikhim@nettally.com
Message-ID: <659vr2$ht31@server1.sprintans.net>
Source record: 88821
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Several years ago, I hd the opportunity to track down some
interference to a 470 MHz community repeater in Miami. The
interference had a strange emmission and contained background music
and random conversations. The interference led me to a sandwich shop
in Liberty City (high crime area), where I discovered a UHF yagi
attached to the side of the building. Upon questioning the proprietor,
who must have thought I was with the FCC, he requested "immunity from
prosecution". Turns out he had rigged up a video camera and mcrophone
in the place to catch on-going burglaries and was beaming the signal
(channel 14) back to his nearby apartment. The transmitter was a
"Hawkeye" device sold in Miami for "export only". I suggested he
string a coax cable accross the street. The signal went away the next
day never to return.

grohe@galaxy.nsc.com (Paul Grohe) wrote:

>On Tue, 18 Nov 1997 02:34:37 GMT,
>in the newsgroup sci.electronics.design,
>davidcopperhead@usa.net (David Copperhead)
>from Agkistrodon Contortrix thoughtfully posted:

>> Howdy,
>>
>> I am looking for a stable 885.25MHz oscillator circuit,
>> (maybe a Colpitts oscillator?)
>> The output must be at a minimum of +7dBm, or I suppose
>> I could use a cheap Minicircuits amp like a MAR-6 to get
>> that level.
>> The output will go into the LO port of a Minicircuits ZLW-2 Mixer, the reason
>> for the +7dBm level.
>> a camera video signal will go into the IF port. The output of the
>> RF port of the mixer will go into an Avantek UTO-546 RF amp and BPF then to an
>> antenna.
>>
>> This is an attempting to design a low-power video transmitter for UHF Channel
>> 83.

>Channels 70-83 were dropped in 1984 to make way for the "new"
>Mobile Radio services (ie: Cell Phones).

>You will make a LOT of people VERY angry!!!!

>Legally, you should use 910MHz (I forget the actual band limits).

>If you MUST use a UHF channel, use UHF channel 28 or higher (Ch's
>14-22 are shared with mobile radio services ie: Police, Fire,
>Taxi, etc). Ch 28+ is far enough away to prevent any "splatter"
>from messing up any of those services.

>Your oscillator does not have to be that stable. Most TV's AFC
>circuits can track +/- 500KHz.

>Do an Alta Vista search for "ATV transmitter", and you will come
>across transmitter circuits designed for Amateur TV (450MHz &
>910MHz).

>Cheers,
>Paul Grohe

>----------------------------------------------------------------
> Paul Grohe National Semiconductor Corp.
> Sr. Electronics Technician Santa Clara, CA. USA
> http://www.national.com
> NORTH AMERICA EUROPE
> 1 (800) 272-9959 +49 (0) 180-532 78 32
> mailto:support@nsc.com mailto:europe.support@nsc.com
> Usenet Disclaimer: Any opinions expressed are mine, not NSC's
>----------------------------------------------------------------

# 4718. Hallicrafters S-53A- any advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Michael Salmons <msalmons@voyager.apg.more.net>
Message-ID: <65a175$d1$1@news.more.net>
Source record: 88822
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.audio.tubes

Hello,

I have a Hallicrafters S-53A in pretty good shape. It has all original tubes (which are still working well, I think). I have had to replace the speaker, but that's it. I would like to upgrade some parts to improve its performance in general, and its resistance to drift and an increase in sensitivity, specifically. Is this a feasible goal with this unit? Can anyone suggest any upgrades or modifications to achieve this goal?

I am also interested in general info about this model- when it came out, whether its top or bottom of the line, etc. Any info would be appreciated. I really like the ergonomics of this model and am resisting upgrading to a newer radio.
If I should really be using another model from this period or style, I would be interested in that as well.

If it helps, in general, I prefer listening to the major international broadcasters and some tropical band stuff and live in the midwestern US.

Thanks!

Michael Salmons
msalmons@mail.coin.missouri.edu

# 4719. Source for ohmite Z-50 Rf chokes ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Stephen Hall <S.A.Hall@btinternet.com>
Message-ID: <01bcf84c$782f4ce0$LocalHost@default>
Source record: 88823

Hi,
Im looking for a source of ohmite Z-50 RF Chokes can anyone help???? I
need 3
Replies by email please
73's Steve G7EUW
s.a.hall@btinternet.com

# 4720. Data Needed: 2N7000 FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: "James C. Garland" <4CX250B@MIAVX1.MUOHIO.EDU>
Message-ID: <347894AC.1206@MIAVX1.MUOHIO.EDU>
Source record: 88824

Could someone email me or post data on the 2N7000 n-channel
FET. I've heard great things about the device and came
across several of them, but don't have any info on them.
Thanks,

Jim W8ZR

# 4721. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Ian Gill <ian@minidata.co.nz>
Message-ID: <01bcf7e5$400a0060$LocalHost@ian1>
Source record: 88825
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Now how would learning code help with spelling, Walt?

Regards Ian Gill ZL3TGK

Walt Davidson wrote:
> Hey James!
> Just think .... if you took the trouble to learn Morse code, it might
> even help you with your spelling too!

## 4722. Rx Upgrade?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Blake McGee <mcge0053@tc.umn.edu>
Message-ID: <3478BCB7.5D6F@tc.umn.edu>
Source record: 88826

Hello, I was wondering if anyone knew where I could get some info on the key sequences to upgrade the Rx capibilities for an IC-W32A. If anyone has an idea PLEASE let me know. I can't see spending $60 to have someone else do it!

-KC0CGL

# 4723. FT-51R to Computer Hookup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: achow@inetworld.net
Message-ID: <achow-2311971526500001@n206245248114.inetworld.net>
Source record: 88827

I am interested in making my own hookup between my FT-51R and my computer (kinda like the ADMS setup Yaesu has). I would prefer it to be for the Macitosh, but if not, I would not mind talking to people who have built a setup for the IBM either. Thanks.

73,

Alexander Chow
KF6GKP
achow@inetworld.net

# 4724. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <3478C7EC.48E5@scan.missouri.org>
Source record: 88828
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Gary Coffman wrote:

RDL> why do I see
> >the majority of qsl cards for CW qsos?
>
GC> Because they had to resort to postcards to pass any real content?
>

More likely, the CW contacts were the only ones with enough *meaningful*
content to justify a QSL card at today's cost.

Dick W0EX

# 4725. Premier 2-valve radio: any info greatly appreciated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Chris Venables <cvenables.cvl.wood@gtnet.gov.uk>
Message-ID: <34785bff.0@news.mcl.net>
Source record: 88829
Cross-posted to: alt.ham-radio,rec.radio.amateur,rec.radio.amateur.homebrew,uk.radio.amateur

I have recently acquired a 2valve/3waveband radio, which seems to date fron the '50s. It appears to have been built from a kit and has 'Premier Radio' on the tuning dial. It is of simple constuction based on an aluminium front panel with two sub-chasses for the coils and valves respectively. The controls consist of an uncalibrated tuning dial, ? reaction, ? aerial trimmer, a volume control and waveband/on-off switch. The valves (octal base and aluminised) are Ex.WD, only one is marked (VR130A), appear to have 6.3v heaters. Screw terminals for aerial, earth and headphones are on the front panel. My example has been built into a metal (approx 150x150x150cm), Ex WD valve box with a hinged lid.
Does this ring any bells with anyone? I would very much appreciate any info, HT/LT voltages, circuit data, reminiscences etc, mainly because I am itching to fire it up.

# 4726. Re: Help- Homebrew linear PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3478403A.6862@ix.netcom.com>
Source record: 88830

Bergersen wrote:
>
> Can anyone tell me where to find plans and schematics for linear power amp
> 0,5- 1 kw ?
>
> vy 73 es tnx
>
> Jan
---
Hi Jan -- see URL:
http://pw2.netcom.com/~ac6v/pageA.html#AMP
for Linear Amplifier info.
73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
70 PAGES AND OVER 2000 LINKS TO DX AND HAM RADIO!
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 4727. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m90ueygep.fsf@spinner.ecofe.com>
Source record: 88831

Unfortunately, I would imagine that we would get no advertisers. Major manufacturers do not want $100 projects that show how crappy their $5000 designs are in comparison.

My guess is that the "big three" would probably pay people not to to contribute :)

Hmmmm, i wonder if that's why there aren't many projects that don't require you to have expensive equipment or learn CW... [Removing tongue from cheek] Alas, at this point, it seems that no-coders are kinda stuck with FM if they aren't affluent or want to learn CW. I've been watching prices on VHF/UHF SSB/CW gear, and very little seems to be much under four figures these days.

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4728. Yeasu 902-DM modification needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: see@signaure.on.bottom
Message-ID: <34783d5c.54628321@news>
Source record: 88832

Well, I'm kind if homebrewing this rig....
I have a Yeasu 902-DM. My wife is not a ham, and I am putting a CB in her car. Can this rig be modiifed to cover 11 meters? I can get within 1 MHz of this band. Thanks for any help.

# 4729. Help-homebrew linear PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Bergersen <berger@east.no>
Message-ID: <01bcf7ae$70d4dda0$150477c3@Bergersen.east.no>
Source record: 88902

Can anyone tell me where to find plans and schematics for a linear power amp 0,5- 1 kw?

vy 73 es tnx

Jan

## 4730. Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: kc2bcg@aol.com
Message-ID: <19971123022200.VAA02696@ladder02.news.aol.com>
Source record: 88903

I have built a dummy load in a paint can. Can anyone tell me what type of oil is used to dissipate the heat? I have heard that vegetable oil should work. I appreciate any help you can offer!

My Email is KC2BCG@aol.com

73's
George
KC2BCG

# 4731. Help- Homebrew linear PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Bergersen <berger@east.no>
Message-ID: <01bcf7b9$d368c340$150477c3@Bergersen.east.no>
Source record: 88904

Can anyone tell me where to find plans and schematics for linear power amp
0,5- 1 kw ?

vy 73 es tnx

Jan

# 4732. Re: Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf7c3$1e7e2c40$0c8a92d0@bitnet.bit-net.com>
Source record: 88905

I've been told to use mineral oil. I'm not certain of the differences, though I'd imagine the vegetable oil would go rancid on you and would also be more prone to breaking down with the heat - ever smell burnt oil in a fried food kitchen when the temperature is too hot and they reuse the oil for too long in the deep fryers? yuk! 73, DavidC AA1FA

> I have built a dummy load in a paint can. Can anyone tell me what
> type of oil is used to dissipate the heat? I have heard that vegetable
oil
> should work. I appreciate any help you can offer!
> 73's George KC2BCG

# 4733. Small Wonder Labs, Green Mountain xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Corporal Kirschner <spike_dog@hotmail.com>
Message-ID: <3477D1B0.75E1@hotmail.com>
Source record: 88906

Does anyone have any experience with Small Wonder Labs and their Green Mountain CW transceiver? (it's a kit, see http://www.fix.net/~jparker/sml/gm.htm)

My initial reaction is that $75 is a little much.. Am i right?

Also, I live in a small apartment. Antennas are a problem, and I want to do QRP. Are there any recommended ways to get on the air, say 40 or 80 meters, with a SMALL, probably indoor, antenna?

Please reply in Email, as I don't read this group much.

thanks for any help...

# 4734. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <6586a8$bbn@news.myriad.net>
Source record: 88907
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

In <347759F0.3A59@sedona.intel.com>, cmoore@sedona.intel.com writes:
>jdaggett@gate.net wrote:
>> Just because he sees more QSL cards are for CW contacts, he make the
>> assumption that more contacts are via CW.
>
>Hi James, there is a logical explaination. CW is so inefficient as
>a communications mode, that everyone has to resort to snail mail
>to finish their QSOs. :-)
>--
>73, Cecil, W6RCA, OOTC (not speaking for my employer)

Cecil, that's as bad as telling folks OS/2 is only half an operating system! :)

//------------------------
Mike Luther - W5WQN
Mike.Luther@ziplog.com
Mike.Luther@3000.n117.z1.fidonet.org

# 4735. RF Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: ka0yos@aol.com
Message-ID: <19971123071800.CAA02272@ladder01.news.aol.com>
Source record: 88908

Our local club needs the following for the Club UHF Micor Repeater:

TLE 1603B Tripler/Low Level Amplifier for UHF Micor Repeater Transmitter

- or -

It has the following transistors:

1 - M9690 cross to MRF 838A
1 - 9737 replaces by Motorola 488441152 cross to 2N5944
1 - 11l52 Motorola 488441152 cross to 2N5944 (same as above)

These parts are available from Motorola, but a little out of the club's price range. If someone had some surplus stuff collecting dust we would be interested.

Thanks and 73,
Joe
ka0yos@amsat.org

# 4736. Re: Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Allan <doblera@cadvision.com>
Message-ID: <3477F99D.2837@cadvision.com>
Source record: 88909

DavidC wrote:
>
> I've been told to use mineral oil. I'm not certain of the differences,
> though I'd imagine the vegetable oil would go rancid on you and would also
> be more prone to breaking down with the heat - ever smell burnt oil in a
> fried food kitchen when the temperature is too hot and they reuse the oil
> for too long in the deep fryers? yuk! 73, DavidC AA1FA
>
> > I have built a dummy load in a paint can. Can anyone tell me what
> > type of oil is used to dissipate the heat? I have heard that vegetable
> oil
> > should work. I appreciate any help you can offer!
> > 73's George KC2BCG

I have also heard of people using ATF (tranny fluid) with varying
degrees of success in dummy loads.

Allan VE6XK

# 4737. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: "Lee St.Clair" <w7ax@montananet.com>
Message-ID: <01bcf801$3a5906e0$482d28cf@w7ax.montananet.com>
Source record: 88910

miker <mreiney@hevanet.com> wrote in article <347744B6.5799@hevanet.com>...
> Jim Weir wrote:
> >
> > aswNS@hamp.hampshire.edu (Al Woodhull)
> > shared these priceless pearls of wisdom:
> >
> > ->I have noticed that Ray-O-Vac makes rechargeable alkaline batteries.
> > ->I wonder if these are useful as substiutes for NiCds in ham gear?
> >
> > If I'm not mistaken (and I quite frequently am) Rayovac has a website
at
> > www.rayovac.com with a lot of the answers you want as well as an "ask
the
> > expert" mail address.
> >
> > I wrote a very early article on using them in handhelds -- albeit
aviation
> > band handhelds. You might see if your library has the magazine
KITPLANES
> > for January '96.
> >
> > Jim
> For those of us who's library has never heard of KITPLANES, a summary
> of the salient points would be appreciated.
> thanks, miker
> --
> Please remove & from return address before replying.
>

# 4738. Re: Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <347829B9.2CC9@lakeweb.com>
Source record: 88911

KC2BCG wrote:
>
> I have built a dummy load in a paint can. Can anyone tell me what type of oil
> is used to dissipate the heat? I have heard that vegetable oil should work. I
> appreciate any help you can offer!
>
> My Email is KC2BCG@aol.com
>
> 73's
> George
> KC2BCG

Officially it is transformer oil. Most common is mineral
oil from the pharmacy. Vegetable oil would work but is
likely to go rancid on you.

Best, Dan.

## 4739. Oscilloscope.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2311970802510001@wd1v.mv.com>
Source record: 88912
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,alt.ham-radio.marketplace,alt.ham-radio.packet

```
Oscilloscope.FAQ is located on
my home page.

If you'd like an Email version
sent to you as an attached text
file (55k), send an Email with
SCOPE FAQ on the SUBJECT LINE.

Best regards,

John Seney
http://www.mv.com/ipusers/wd1v
```

# 4740. Re: Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: bigsky@georgian.net
Message-ID: <659f62$7b3@blue.georgian.net>
Source record: 88913

On 1997-11-23 dan@lakeweb.com said:
>> I have built a dummy load in a paint can. Can anyone tell me what
>>type of oil is used to dissipate the heat? I have heard that
>>vegetable oil should work. I appreciate any help you can offer!
>> My Email is KC2BCG@aol.com
>> 73's
>> George
>> KC2BCG
>Officially it is transformer oil. Most common is mineral
>oil from the pharmacy. Vegetable oil would work but is
>likely to go rancid on you.
>Best, Dan.

True, but if hey stuffs french-fries in the can before tuning up his rig
he can enjoy lunch when he is finished!

73...
:^)

Terry Bendell
USWA Local 834 (Steward Body)

Net-Tamer V 1.10 - Test Drive

# 4741. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Green_Eggs_No_Spam@shore.net
Message-ID: <347845cc.414628@news.shore.net>
Source record: 88914
Cross-posted to: in.ham-radio,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Sat, 22 Nov 1997 14:17:20 -0800, cmoore@sedona.intel.com wrote:

>jdaggett@gate.net wrote:
>> Just because he sees more QSL cards are for CW contacts, he make the
>> assumption that more contacts are via CW.
>
>Hi James, there is a logical explaination. CW is so inefficient as
>a communications mode, that everyone has to resort to snail mail
>to finish their QSOs. :-)

Bleh hehehehe hehehehehe hehehehhee. You kill me Cecil.... :)

# 4742. Re: Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3479497e.2495037@eskinews.eskimo.com>
Source record: 88915

Allan <doblera@cadvision.com> wrote:

>DavidC wrote:
>>
>> I've been told to use mineral oil. I'm not certain of the differences,
>> though I'd imagine the vegetable oil would go rancid on you and would also
>> be more prone to breaking down with the heat - ever smell burnt oil in a
>> fried food kitchen when the temperature is too hot and they reuse the oil
>> for too long in the deep fryers? yuk! 73, DavidC AA1FA
>>
>> > I have built a dummy load in a paint can. Can anyone tell me what
>> > type of oil is used to dissipate the heat? I have heard that vegetable
>> oil
>> > should work. I appreciate any help you can offer!
>> > 73's George KC2BCG
>
>
>I have also heard of people using ATF (tranny fluid) with varying
>degrees of success in dummy loads.
>
>Allan VE6XK

---

The best stuff to use is called "transformer oil", and it's what they
fill (surprise) transformers with. I bought some years ago from the
local Shell distributor and it works fine. Check the yellow pages for
oil distributors. They probably have a minimum quantity of five
gallons, but the leftover could be easily sold.

73, Bill W7TI

## 4743. wwvb receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <34784EBA.1BAD@lakeweb.com>
Source record: 88916

I have marked up a description of the WWVB receiver processor.

It is now available at: http://www.lakeWeb.com/dbLabs/wwvb/

Just go down this antenna page to the bottom.

Thanks, Dan.

# 4744. HTX-100 Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: Lin Vaughan <kt4jt@firstsaga.com>
Message-ID: <01bcf82b$b5d74f00$a50960cf@kt4jt.firstsaga.com>
Source record: 88917

I still need either a digital board for a Radio Shack HTX-100 or a parts
radio
e-mail: kt4jt@firstsaga.com

# 4745. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19971123170000.MAA29823@ladder02.news.aol.com>
Source record: 88918

>www.rayovac.com

If it isn't here, you don't need it. There is a ton of info on Renewal Batteries at this site. It will answer you questions and then some.

Bill

# 4746. Pin-out and specs for 5899 vacuum tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-23 00:00:00 UTC
From: acj@ultranet.com
Message-ID: <acj-2311971231230001@d4.dial-7.wor.ma.ultra.net>
Source record: 88919

I need pin-out and specs for an 5899 tube, but don't have any vacuum tube reference liturature. Can anyone help?

Thanks!

Jon

# 4747. Heavy Duty Roller Inductors - Sell or Trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf887$69be8be0$098a92d0@bitnet.bit-net.com>
Source record: 88833
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Trade or Sell: I have some large roller inductors that I was going to assemble into a heavy duty antenna tuner - time is killing that project off!

1. Rotary inductor on 3.5" X 7" porcelain form. Coil is 23 turns of 0.125" dia. silver plated wire. Inductor is supported by a 4.5" wide X 5.5" high X 9.5" deep frame that is designed for chassis mounting. This is a beautiful rotary inductor. Shaft is 0.125" diameter. (asking $35.)

2. Motor driven rotary inductor CU-351/AR. 3.25" X 5" porcelain form. Coil is 25 turns of 0.125" wide silver-plated ribbon. Motor winds ribbon from porcelain form to separate metal drum. Great for remote antenna tuning. Motor is 27 VDC. Inductor frame is 4" wide X 6" high X 9.5" deep. (asking $45)

3. Rotary inductor on 2.38" X 7" insulite form. Coil is 30 turns of 0.125" diameter silver plated wire. Inductor is supported by a 3" wide X 3.5" high X 8" frame which can be chassis or panel mounted. Form is somewhat melted under the last 3 coil turns but inductor operation for the other turns is not affected. Repairs (peeling back the wire 3 turns and trimming the bubbled insulate, then rolling the wire back) are needed for the roller to access these 3 turns. (asking $25.) Asking prices are plus shipping. Will sell all 3 inductors for $100. shipped, just to save the hassle and expense of shipping the three separately.

Wanted:
1. 200 feet new buriable Belden 9913 equivalent (something not as prone

to siphon water - good to 450mHz)
2. 500 feet of Dacron rope (double strand ultraviolet protected black high

strength)
3. Two lengths of Rohn 25 (one straight, one tapered)
4. Power Supply for Multi-Elmac PRC-6, AF-67, AF-68
5. Amplified PC Speaker system with subwoofer
6. Older wood cabinet am/shortwave receiver (not hacked, all parts present, prefer it show some signs of life!)
7. Cartridges for my Canon BJC-4300 printer
(BCI-21 Black, BCI-21 Color, BC-20 Black, BC-22e Photo, BC-29F Neon IS-22 Color Image Scanner Cartridge)
8. Zoom lens for old Konica Autoreflex 35mm SLR
9. Antenna switch, full power, good to 440mHz
10. 3 gig HDD
11. IEEE Printer Cable (6-12 feet)
--

73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

# 4748. Re: Quartz Crystal products supplier from China (LONG)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: n4xy@bellsouth.net
Message-ID: <347a193a.45736044@news.atl.bellsouth.net>
Source record: 88834

On 24 Nov 1997 03:45:36 +0100, nobody@REPLAY.COM (Anonymous) wrote:
>
>China Sucks. Everything made there is pure crap. The military there
>stinks of feces. I won't help participate in your labor camps.

What an intelligent, obviously well-thought-out reply "nobody". I truly believe everyone should cast their 2 cents into the fray in this country... it is one of the things that differentiates us from countries where such things could cost one 10 years in a "re-education" camp.

HOWEVER... at least have sufficient courage of your convictions to sign your name to them. I would suggest you knew your tasteless remarks were themselves made of what you mention: crap... and that was why you feared identification with those words.

Don't you believe that we can reach out to the non-Democracies and win them through exposure to capitalism? YES there are some deplorable things going on in China... sweatshops and the like... but there are many many such sweatshops in New York City (for one) to this very day. Are you refusing to buy shirts labeled "Made In USA"? Of course not.

The difference is that we have laws against such practices, and have had for many years. Not always however. It takes time for a country to grow into maturity, equity, and responsibility to all its citizens. We TRY to eliminate such practices. But how many crystal manufacturing sweatshops have you heard of? Are THESE specific people responsible for the other uncivilized things occuring there? Probably not. Should we ignore them and their attempts towards capitalism? Is it their government that succeeds when these entrepreneurs succeed? I think not. Their success and example only stimulates further growth, using our philosophies-not the official government line. How can that do anything but help?

Would you have us ignore China entirely? We've tried that with Cuba, and the only thing that has accomplished in the past 40 years is the serious deprivation of the Cuban people of more than luxuries, but rather of medicines and food-which I also deplore. I doubt Fidel has gone hungry even one day.

It is not in the interests of Democracy for us to try and force our beliefs down a country's throat. The attractions of our Western standard of living and many freedoms will surely overcome despots everywhere, one by one, sooner or later. Remarks like yours however, help not one whit.
73

---
Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX
---

# 4749. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: "Robert M. Ganter" <ganter@ens.ascom.ch>
Message-ID: <347949DD.FD187F29@ens.ascom.ch>
Source record: 88835

MailfrmPA wrote:
>
> >> Here's a prime example of the arrogant, pro-code jackasses who are
> >> ruining Amateur Radio.
>
> > Demonstrating to the government that you Know the Holy Code allows
> >> one to enter the Temple of the Holy HF, the Lower Bands Lodge Hall
> >> where only the Good and True amateurs reside.
>
> What part of this doesn't make perfect sense to you?
>
> K0MB

The whole thing is crap. People saying such nonsense have the same tolerance as a islamic fundamenalistic terrorist saying 'You can believe in anything *I* want'. Shame on people like that!

Robert (HB9NBY) (working hard for the CW exam, because I want to do CW, not because Ihave to)

---
Robert Ganter, Ascom Business Systems AG
Software Engineering Cellular Dep. CWEC 3269
Ziegelmattstr. 1, CH-4503 Solothurn, Switzerland
email: ganter@ens.ascom.ch
Phone: ++41 (0)32 624 3269
Fax : ++41 (0)32 624 3648

# 4750. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Jim <jsides@flash.net>
Message-ID: <34792004.AF4@flash.net>
Source record: 88836

Lee St.Clair wrote:
>
> miker <mreiney@hevanet.com> wrote in article <347744B6.5799@hevanet.com>...
> > Jim Weir wrote:
> > >
> > > aswNS@hamp.hampshire.edu (Al Woodhull)
> > > shared these priceless pearls of wisdom:
> > >
> > > ->I have noticed that Ray-O-Vac makes rechargeable alkaline batteries.
> > > ->I wonder if these are useful as substiutes for NiCds in ham gear?
> > >
> > > If I'm not mistaken (and I quite frequently am) Rayovac has a website
> at
> > > www.rayovac.com with a lot of the answers you want as well as an "ask
> the
> > > expert" mail address.
> > >
> > > I wrote a very early article on using them in handhelds -- albeit
> aviation
> > > band handhelds. You might see if your library has the magazine
> KITPLANES
> > > for January '96.
> > >
> > > Jim
> > For those of us who's library has never heard of KITPLANES, a summary
> > of the salient points would be appreciated.
> > thanks, miker
> > --
> > Please remove & from return address before replying.
> >

WARNING, I tried these rechargable alkalines when they first came out. To try and save some bucks, I didn't buy the Rayovac Recharger unit. Big Mistake !! I tried to charge the first alkalines in an old Ni-Cad recharger (wall wart type) I had and the two (or 4 ??) AA batteries leaked all over everything and the chemical leak even destroyed the Ni-Cad Wall charger itself. I just glad I didn't first put the rechargable alkalines into one of my good radios that automatically recharge Ni-Cad's !!!

When Rayovac states on their package to "Only use Rayovac Alkaline Rechargable battery rechargers", YOU BETTER BELIEVE IT !! After getting the Rayovac recharger (charges 8 batteries at at time), I have had great luck with the batteries. They charge up to around 1.7V per cell (no load) and seem to last longer that the Ni-Cad batteries. Just DON'T put

them into any gear that recharges the batteries BESIDES the Rayovac recharger!!

73's de N5APG - Jim

# 4751. Icom FL-44A termination impedance ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Kari Back <Kari.Back@Karttakeskus.fi>
Message-ID: <34794048.613C@Karttakeskus.fi>
Source record: 88837

Hi all,

Icom FL-44A 455 kHz crystal filter didn't contain
data sheet and now the termination impedance value is
missing.

If someone had more info...
please reply email

73, Kari Back
--

# 4752. Icom FL-44A termination impedance ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: kari.back@karttakeskus.fi
Message-ID: <880367209.19867@dejanews.com>
Source record: 88838

Hi all,

Icom FL-44A 455 kHz crystal filter didn't contain
data sheet and now the termination impedance value is
missing.

If someone had more info...
please reply email

73, Kari Back

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 4753. Re: 885.25 MHz Oscillator, (Ch.83 video)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Ian Buckner <Ian_Buckner@hp.com>
Message-ID: <3479BDC8.3A0B@hp.com>
Source record: 88839
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Paul Grohe wrote:
>
> On Tue, 18 Nov 1997 02:34:37 GMT,
> in the newsgroup sci.electronics.design,
> davidcopperhead@usa.net (David Copperhead)
> from Agkistrodon Contortrix thoughtfully posted:
>
> > Howdy,
> >
> > I am looking for a stable 885.25MHz oscillator circuit,
> > (maybe a Colpitts oscillator?)
> > The output must be at a minimum of +7dBm, or I suppose
> > I could use a cheap Minicircuits amp like a MAR-6 to get
> > that level.
> > The output will go into the LO port of a Minicircuits ZLW-2 Mixer, the reason
> > for the +7dBm level.
> > a camera video signal will go into the IF port. The output of the
> > RF port of the mixer will go into an Avantek UTO-546 RF amp and BPF then to an
> > antenna.
> >
> > This is an attempting to design a low-power video transmitter for UHF Channel
> > 83.
>
> Channels 70-83 were dropped in 1984 to make way for the "new"
> Mobile Radio services (ie: Cell Phones).
>
> You will make a LOT of people VERY angry!!!!
>
> Legally, you should use 910MHz (I forget the actual band limits).
>
> If you MUST use a UHF channel, use UHF channel 28 or higher (Ch's
> 14-22 are shared with mobile radio services ie: Police, Fire,
> Taxi, etc). Ch 28+ is far enough away to prevent any "splatter"
> from messing up any of those services.
>
> Your oscillator does not have to be that stable. Most TV's AFC
> circuits can track +/- 500KHz.
>
> Do an Alta Vista search for "ATV transmitter", and you will come
> across transmitter circuits designed for Amateur TV (450MHz &
> 910MHz).
>

> Cheers,
> Paul Grohe
>
> ---
> Paul Grohe National Semiconductor Corp.
> Sr. Electronics Technician Santa Clara, CA. USA
> http://www.national.com
> NORTH AMERICA EUROPE
> 1 (800) 272-9959 +49 (0) 180-532 78 32
> mailto:support@nsc.com mailto:europe.support@nsc.com
> Usenet Disclaimer: Any opinions expressed are mine, not NSC's
> ---

I have to support this - if you look in a Murata filter catalog, for example, you will find filters with centre frequencies at 888.5 and 881.5MHz, either of which you could build a nice stable oscillator round. However, the application of these filters is for the E-TACS and E-AMPS cellular systems, so you are likely to get a rapid visit from some _seriously_ annoyed folk if you transmit in this band.

Cheers
Ian Buckner
(Speaking only for myself)

# 4754. -FS- Kenwood Xtal Filter YG-455S-1 $40.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Ron Sibbitt <pigeon@usa.net>
Message-ID: <65c2ls$all@news.avci.net>
Source record: 88840
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

```
For Sale:
Kenwood SSB Crystal Filter
Part # YG-455S-1
it is a Plug in 455 Khz Filter
for some Kenwood radios.
brand-new in the box with spec sheet.
$40.00 ...i'll pay shipping usa/48
email me.. pigeon@usa.net
73, Ron N8LMT
```

# 4755. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: aswNS@hamp.hampshire.edu
Message-ID: <3479a032.0@192.33.12.30>
Source record: 88841

On Sat, 15 Nov 1997 15:46:13 GMT Gary Coffman (ke4zv@bellsouth.net)
wrote in rec.radio.amateur.homebrew:

: This is an interesting thought. It got me to musing about the ways we
: look at feedback in amplifiers. When active devices were rare, expensive,
: and marginal in performance, we used positive feedback to get the most
: gain out of them we could. Of course positive feedback makes a circuit
...
: When active devices became more common, cheaper, and somewhat more
: capable, we turned our emphasis to negative feedback to try to tame and
: linearize them. A negative feedback system can be designed to be

That's an interesting observation, Gary. How about combining the two approaches, using a negative feedback circuit to control the level of positive feedback? It seems to me that with today's technology we could design a regenerative detector that was automatically kept just below or above the threshold of oscillation, as required for the mode we wanted to listen to, with no critical adjustments needed in either production or use. Have you heard of any such design? I can't be the first to have thought of it.

Wow, that would be a change. I remember my first regen, built from a kit in about 1953. The regeneration was controlled by a moveable tickler coil. I used toothpicks to attempt to maintain the coil in the critical position, once found. It was barely usable for broadcast listening. When I swapped in the short wave coils and tried to listen to hams it was barely possible to control on 80 meters, almost impossible on 40 and 20.

73, Al N1AW

+----------------------------------+
| Albert S. Woodhull |
| Hampshire College, Amherst, MA |
| awoodhull@hamp.hampshire.edu |
| http://minix1.hampshire.edu/asw/ |
+----------------------------------+

# 4756. Sell or Trade: Roller Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcf86e$1f3fd7e0$098a92d0@bitnet.bit-net.com>
Source record: 88842
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

I would like to trade or sell the following:

Are you a homebrewer? I have some large roller inductors that I was going to assemble into a heavy duty antenna tuner - time is killing that project off!

Rotary inductor on 3.5" X 7" porcelain form. Coil is 23 turns of 0.125" dia. silver plated wire. Inductor is supported by a 4.5" wide X 5.5"
high X 9.5" deep frame that is designed for chassis mounting. This is a beautiful rotary inductor. Shaft is 0.125" diameter. (asking $35.)

Motor driven rotary inductor CU-351/AR. 3.25" X 5" porcelain form. Coil is 25 turns of 0.125" wide silver-plated ribbon. Motor winds ribbon from porcelain form to separate metal drum. Great for remote antenna tuning. Motor is 27 VDC. Inductor frame is 4" wide X 6" high X 9.5" deep. (asking $45)

Rotary inductor on 2.38" X 7" insulite form. Coil is 30 turns of 0.125" diameter silver plated wire. Inductor is supported by a 3" wide X 3.5" high X 8" frame which can be chassis or panel mounted. Form is somewhat melted under the last 3 coil turns but inductor operation for the other turns is not affected. Repairs (peeling back the wire 3 turns and trimming the bubbled insulate, then rolling the wire back) are needed for the roller to access these 3 turns. (asking $25.)

Asking prices are plus shipping.
Will sell all 3 inductors for $100. shipped, just to save the hassle and expense of shipping the three separately.

Need: 200 feet new buriable Belden 9913 equivalent (something not as prone to siphon water - good to 450mHz), also need 500 feet of Dacron rope (double strand ultraviolet protected black high strength), two lengths of Rohn 25 (one straight, one tapered), Power Supply for Multi-Elmac PRC-6, AF-67, AF-68, Amplified PC Speaker system with subwoofer ... or offer something else you may have to trade!
--
73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

# 4757. Re: Best Design For Tuner Open Wire 450 Feeding Doublet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: "Craig B. Johnson" <craig.johnson@unisys.com>
Message-ID: <65cia0$qcv$1@ernie.rsvl.unisys.com>
Source record: 88843
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

DavidC wrote in message <01bcf79f$c65a5200$098a92d0@bitnet.bit-net.com>...
>I have a couple of large roller inductors (different sizes). I'd like to
>build an
>antenna tuner for my 200 foot per side doublet antenna that is fed with 450
>open line.
>What design should be optimum?
>What components are required for a full power 160-10 meter tuner (6 would
>be a bonus).
>I understand that a (commercial) true open line antenna tuner is rare and
>costly.
>--
>Thanks & 73, DavidC AA1FA
>"Now may the God of hope fill you with all joy and peace in believing, that
>you may abound in hope by the power of the Holy Spirit." Romans 15:13
>

David,

How about the Balanced-Balanced tuner by Rich Measures (AG6K) that is
described
in December 1990 QST? It uses two roller inductors and a single variable
capacitor.
I am building one now too.

- Craig, AA0ZZ

PS. I like the Bible verse too!

# 4758. Re: MFJ Hi-Q Loop Antenna Queries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3479da80.0@newshost.pcug.org.au>
Source record: 88844
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.misc

ka7w@tjantenna.com wrote:

>>
>Take a look at http://www.tjantenna.com we are doing some work
>with transmitting loops for 160/80 and 40 meters
>
>73 de KA7W>
>>
>

Also look at the Novice Notes Online Page (URL below) - Links section - under "Antennas" for a few links on magnetic loop antennas.

I use a homebrew 1.5m square loop indoors for 80 & 40m and it works very well considering its size.

73,

Peter VK1PK

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.
_____

# 4759. Re: Small Wonder Labs, Green Mountain xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3479dbc5.0@newshost.pcug.org.au>
Source record: 88845

To me $75 seems reasonable for a QRP transceiver kit, but only if it's frequency-agile and has a reasonable receiver.

Re your query on apartment antennas, look at the latest Novice Notes column that has been posted on "Novice Notes Online" (URL below). That column is all about antennas for people in your situation.

The best indoor antenna I've built is a magnetic loop. It is 1.5m square and works on both 80 & 40m. It should be OK for QRP on 40m (I normally use 20 watts) but if it can be made bigger, that's for the better. See the Novice Notes Online Links section for all the info I needed to build my version.

Hope this helps.

73,

Peter VK1PK

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.
_____________________________________________________

# 4760. Re: Homebrew frustration/1 transistor freq synrthesiser

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3479d9bf.0@newshost.pcug.org.au>
Source record: 88846

John Mock <kd6pag@nospam.mocha.ecofe.com> wrote:

>
>Hmmmm, i wonder if that's why there aren't many projects that don't
>require you to have expensive equipment or learn CW... [Removing
>tongue from cheek] Alas, at this point, it seems that no-coders are
>kinda stuck with FM if they aren't affluent or want to learn CW. I've
>been watching prices on VHF/UHF SSB/CW gear, and very little seems to
>be much under four figures these days.
>

You've identified a perfect niche for direct conversion DSB/CW gear, probably using a VXO and multipliers. Solid State Design provides info on gear for 6 and 2m (transmitters only) but there seems to have been little written since then.

Also DSB on 10m is a possibility. It is not out of the bounds of possibility that people could build their own 28 Mhz handheld transceiver. A few nights ago during a sporadic-E opening, I had 10 QSOs (mostly interstate and up to 1500-2000km distant) with 12 watts SSB from a modified CB used pedestrian mobile! A 5 watt DSB handheld could have made many of those contacts.

I've been working on an unusual 1 transistor VXO circuit that covers 28.420 - 28.500 MHz in a single range. It was designed by LZ1BB (for 3.5 MHz) with changes by VK1PK. Basically you start with a normal colpitts VXO. In my case I used 10.240 MHz xtals - easily obtainable from ex-commercial VHF transceivers. Then put a second xtal in parallel to increase the freq shift (as per the JA "Super VXO" circuit. You should get about 80 kHz shift.

Now here's the ingenious bit. From the base of the transistor to earth, wire a 18.3 MHz (or thereabouts) crystal. Also take the output (from the emitter) through a small capacitor and couple it to a tuned circuit on 28 Mhz. Would you believe that there is in fact a tunable output on 28 MHz? Somehow the one transistor works as two oscillators and a mixer - all in one! This could be a good basis for an 10m DSB rig.

73,

Peter VK1PK

--

---

Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

---

# 4761. Re: Homebrew frustration [was: RSGB manual for Canucks]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <3479d462.4411521@news.online.no>
Source record: 88847

On 23 Nov 1997 19:54:01 -0700, europa@primenet.com wrote:

>In article <19971119153701.KAA01944@ladder02.news.aol.com>,
>johnsonhe@aol.com (JohnsonHE) wrote:
>
>:>
>:>Until then, if you decide to design and write about your latest
>:>amateur-radio project, do so because you want to contribute your ideas to the
>: amateur radio community and advancement of the state of the art.
>:
>:Don't hold your breath, and don't look in the rags mentioned (and unmentioned)
>: for advancing the state of the art.
>:
>:W4ZCB
>
>
>If Earth were the best of all possible worlds, we could start up our own
>'zine with all sorts of neat stuff in it, and a very short leadtimes for
>articles. And sell it at Tower books like the hundred of other zines
>there.
>
>Unfortunately, I would imagine that we would get no advertisers. Major
>manufacturers do not want $100 projects that show how crappy their $5000
>designs are in comparison.
>
Indeed! I sent some comments about Ham Radio 12/77 article to cure
Drake R-4C problems, the article was written by representatives at a
wellknown xtal filter manufacturer. The editor did not dare to print
my comments, where I show that a few conclusions were wrong.
1) With all connections broken between BFO and the old product
detector - still it is bad interference pattern to be seen on IF
output with oscilloscope, so an MC1496 (or any other) would not
improve this problem
2) with the audio amplifier modification this would oscillate on
1,5MHz
.....
but few weeks later I received very much information about xtal
filters and other facilities to improve my Drake R-4C !!

I had much better luck following W5DA's instructions ('73' June 79)

---
Email: LA8AK at online dot no

# 4762. SSB Handheld 10m (12/15/17/20m next?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: "Amor Powers, Radio" <power@radio.net>
Message-ID: <3479FCA4.3CC5@radio.net>
Source record: 88848
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

The Cherokee AH-100 SSB handheld makes a great little 10 meter sideband rig. The price just dropped to US$214. It comes with a mobile adapter (MA100) that replaces the battery pack. The MA100 has a single coiled cord that ends in an SO-239 and cig lighter plug. This turns it into an all-in-the-mic mobile rig.

7Watts PEP. AM/SSB. It's fun working "handheld DX" with it when the band is open, using a WTA-1 Maxon telescopic whip.

Has anyone done the simple 12 meter mod yet?

When will ICOM, Kenwood, Yaesu, or Alinco, etc, jump in, using their already-tooled cases and battery packs, to bring out a 20, 17, 15, 12, or 10 meter handheld?
They could just start with a 10m and/or 15m SSB/(FM)/CW unit; with the rising DX conditions and the increase in activity.
Next: How about an HF all band handheld? Companion antenna could provide filtering.

Amor Powers

# 4763. Transistor SI TP2535 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <347a07ac.3445060@news.online.no>
Source record: 88849

Hi
I got few douzens transistors from LA3VW today they are TP2535. Any idea what it is ? need only simple details, connections, will check more closely from possible site, but at the moment adobe acrobate 3.01 fails to unzip

73
Jan-Martin

---
Email: LA8AK at online dot no

# 4764. Henry 3K Premier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: "Steven S. Hong" <NINAGUGU@msn.com>
Message-ID: <01bcf913$c650a500$32542299@default>
Source record: 88850

I have for sale Henry 3K Premier 1.8-30 Mhz 2500 WattsPEP output using
3CX1200A7. $1800.
Wanted: Kenwood old HF TRX TS-900.
Jin Lee KB6LUE 714-441-1002 ninagugu@msn.com

# 4765. Kenwood TS-900

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: "Steven S. Hong" <NINAGUGU@msn.com>
Message-ID: <01bcf913$fa99a780$32542299@default>
Source record: 88851

I looking for a Kenwood TS-900 hf trx.
Jin Lee 714-441-1002 ninagugu@msn.com

# 4766. Re: RF Matching Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: pat@orrell.prestel.co.uk
Message-ID: <347a1192.978625@news.prestel.co.uk>
Source record: 88852

On 24 Nov 1997 14:01:00 -0700, europa@primenet.com wrote:

The motorola MIMP program seems good, but it is a shame it is only a
DOS program. I wander if Motorola plan to do a windows version

Pat@Orrell.prestel.co.uk

>In article <346f28e0.5623589@news.prestel.co.uk>, pat@orrell.prestel.co.uk
>(Pat Orrell) wrote:
>
>:Hi All
>:
>:Does anyone know of any shareware program for RF matching that has
>:smith chart display. Motorola did one I think and there is one called
>:EEZ Match
>:
>:Thanks
>:
>:Pat@Orrell.prestel.co.uk
>
>
>There is also one for the Mac, designed by a guy in France. You can easily
>find it on www.filez.com, by using smith or smithchart as search words.
>
>But its worth buying MicroSmith from the Arrl for the $30 or so, as I like
>that one the best. Wes Hayward's program.
>
>Rob.

# 4767. WTB: HP 8505A, HP 8503A/B, HP 8501A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Alan Tabourian <71203.1307@CompuServe.COM>
Message-ID: <ugvRvmT#8GA.333@nih2naab.prod2.compuserve.com>
Source record: 88853
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

I would like to buy an HP 8505A Network Analyzer with the HP
8503A/B S Parameter test set and the HP 8501A Storage Normalizer
complete with manuals and interconnect cables.

Pls email offers.

Alan+

# 4768. Re: WTB: HP 8505A, HP 8503A/B, HP 8501A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Mike <bad@email.adr>
Message-ID: <347A7718.6366@email.adr>
Source record: 88854
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

Alan Tabourian wrote:

> I would like to buy an HP 8505A Network Analyzer with the HP
> 8503A/B S Parameter test set and the HP 8501A Storage Normalizer
> complete with manuals and interconnect cables.

> Pls email offers.

> Alan+

I just threw one away a while ago. Had a short on one of the minus
supplies and could not track it down. Repair costs would have been
exhorbitant.

Sorry...

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4769. WTB: Tek 492

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Alan Tabourian <71203.1307@CompuServe.COM>
Message-ID: <utN9VwV#8GA.192@nih2naac.prod2.compuserve.com>
Source record: 88855
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

I would like to buy a Tek 492 Spectrum Analyzer complete with manual.

Pls email offers.

Alan+

# 4770. FS: NOS Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Kevin Harlan <bob@net.com>
Message-ID: <65dn32$el2$1@ha1.rdc1.occa.home.com>
Source record: 88856

NOS Tubes, large quantities of each available.
---
6AZ8 Philips, $2.90 each
JAN 5751 GE, $3.50 each
6186W (6AG5WA) philips, $.25 each
JAN 6922(E88CC, 6DJ8) Philips, $2.90 each
7062 (E180CC) Amperex,$3.90 each
3-500C, Chinese, carbon plate, $120.00 each
NOS Tubes, limited quantities available.
---
(3) JAN 3B28, $20.00 each
(5) JAN 6AH6WA, $1.50 each
(1) JAN 6BM6, $50.00
(1) JAN 6L6WGB, $14.00
(1) 6LF6/6MH6, GE, $30.00
(5) 6SH7, $2.00 each
(2) JAN 6SJ7WGT, $5.00 each
(16) JAN 6SL7WGT, $5.00 each
(2) 6X8, RCA, $2.00 each
(5) JAN 12AX7WA, $7.50 each
(1) JAN 807, RCA, $6.00
(12) JAN 5654W (6AK5W), $1.50 each
(13) JAN 5670W, $4.00 each
(1) JAN 5933WA (807W), $6.00
(3) JAN 6005W, $3.00 each
(2) JAN 6021W, $3.00 each
(1) JAN 6550A, $25.00
(2) JAN 8334, $1.50 each
(1) JAN 8532W, $4.00
(1) EL360, CEI, England, $4.00

Free Shipping in the USA & Canada on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.

For shipping cost outside of USA & Canada, e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 139%
of the US $ amount ( conversion rate .72 ). No minimum order.
Prices valid until 11-30-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"
Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

# 4771. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <65duse$jau@redgreen.cs.ubc.ca>
Source record: 88857

aci6@aol.com (ACI6) writes:
>Yes sir, Jim. The Rayovac web site indicates that the correct way to charge
>these batteries is to charge at a rather high current level, stop the charge,
>check the cell voltage and repeat the process until the cells maintain 1.65
>volts. Then the charging is complete.
>
>So, the charging should be done by pulsing the cells and NOT continuous
>charging as with nicads.

Pulse charging produces a mechanically bettery replating of the electrode
so it is preferable to continuous charging. I believe this is true for
NiCds as well as alkaline batteries.

The real reason you can't use a NiCd charger for alkaline cells is that
the alkalines absolutely will not tolerate overcharge without damage.
Charging must stop at full charge. You can use pulse charging, or you
can use a regulated 1.65 V voltage. The latter is slower and doesn't
do as good a job, but it works fine. Pure Energy sells rechargeable
alkalines and two different chargers. One is pulse, the other is
constant voltage.

NiCds, on the other hand, are built to accept overcharge for long periods
if it is at a low rate (C/10 or less). This allows them to be charged
as a series string, with the cells that reach full charge first just
sitting there undamaged by the overcharge as the other cells come up to
full charge. You couldn't do this with alkalines - they have to be
charged individually, with a charging circuit per cell (like RayOVac does)
or at least with all cells in parallel (like Pure Energy).

In addition to the RayOVac web site, you might also want to look at
http://www.bti.ca. BTI is the company that developed the technology
in the first place, and there is a lot of useful data on their web site.

Dave

# 4772. Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Jim Smith <jimsmith@2xtreme.net>
Message-ID: <65dupf$8ht$1@news.ncal.verio.com>
Source record: 88858

Anyone have a recommendation for where to find plans for a good
transverter?
Jim Smith
KF6IEG

# 4773. Component Ident./Spec. GE-1L38 Vacuum Capacitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-24 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19971124205216704 32@zetnet.co.uk>
Source record: 88859

Recently I acquired 2 pcs GE-1L38 Vacuum Capacitor. The measured
capacitance is 50 pF.
Would much appreciate being informed about the voltage rating of this device.
TIA
Frank , GM0CSZ / KN6WH
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU * EU *
* * *

## 4774. C8151

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: Suleyman Yalcinkaya <suleyman@netas.com.tr>
Message-ID: <347AD092.1977@netas.com.tr>
Source record: 88770
Cross-posted to: rec.radio.amateur.homebrew,,rec.radio.amateur.misc

Hi all,
I'm looking for PIN Desciption of C8121 syntesizer IC for CB Radio;
mailto:suleyman@netas.com.tr

# 4775. Re: Fussy AF amp @ N2CQR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <347AEA32.430D@pop.valley.net>
Source record: 88771

Bill Meara wrote:
<snip>
> I worked out a real "kludge" fix for my audio amp oscillation problem:
> I got one of those cheap little Radio Shack computer speaker sets.
> they have some audio amplification circuitry in one of the speakers.
> When I use this speaker with the active devices on, I get no
> feedback. With the same speaker connected, If I put the switch in the
> "speaker only (no amp) position, I get frantic motorboating! I get
> the same motorboating if I connect a ordinary 8 ohm speaker to the
> output.
>
> Any ideas on what is going on here? Could it be that the input
> impedance of the speaker (with Amp in circuit) is preventing the
> motorboating? How can I get the same result with only a speaker in
> the circuit?
Hello--
Are you switching only one of the speaker's two leads? If so, the return lead may provide the feedback or ground-loop path. Install a DPDT switch and see if the problem goes away.
73,
Brad AA1IP

# 4776. Re: RF Matching Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <65eucn$57h$1@news1.teleport.com>
Source record: 88772

In article <346f28e0.5623589@news.prestel.co.uk>, pat@orrell.prestel.co.uk
(Pat Orrell) wrote:
>
>Hi All
>
>Does anyone know of any shareware program for RF matching that has
>smith chart display. Motorola did one I think and there is one called
>EEZ Match
>
>Thanks
>
>Pat@Orrell.prestel.co.uk

MicroSmith is good, and inexpensive. It's available from the ARRL for $39
plus shipping. You can contact them via pubsales@arrl.org or
http://www.arrl.org.

Roy Lewallen

# 4777. Re: Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: "User Rdkeys Robert D. Keys" <rdkeys@seedlab1.cropsci.ncsu.edu>
Message-ID: <65euct$ksv$1@uni00nw.unity.ncsu.edu>
Source record: 88773

Allan <doblera@cadvision.com> wrote:
> DavidC wrote:
> >
> > I've been told to use mineral oil. I'm not certain of the differences,
> > though I'd imagine the vegetable oil would go rancid on you and would also
> > be more prone to breaking down with the heat - ever smell burnt oil in a
> > fried food kitchen when the temperature is too hot and they reuse the oil
> > for too long in the deep fryers? yuk! 73, DavidC AA1FA
> >
> > > I have built a dummy load in a paint can. Can anyone tell me what
> > > type of oil is used to dissipate the heat? I have heard that vegetable
> > oil
> > > should work. I appreciate any help you can offer!
> > > 73's George KC2BCG

> I have also heard of people using ATF (tranny fluid) with varying
> degrees of success in dummy loads.

> Allan VE6XK

Folks,..... there is nothing magic about cooling oil for dummy loads.

All it is is a heat dissipator. Just size accordingly. It will get
warm if sized too low, but it will not generally burn or so anything
strange at usual ham powers.

Good old plain dime-store mineral oil or good old 10/20/20/40wt motor
oil from the grocery or quickiemart works fine. Change it every
couple of years. Synthetic oil would probably be more stable in
the long term --- Mobil 1 or such. ATF should work, too.

If you put a good blower on the dummy load resistor, you probably
don't even need the oil. Mil dummy loads are often blower cooled
rather than oil cooled. For the average length of time under load,
very small resistors will dissipate sufficient heat to work well.
All you need to do is move the heat load away from the resistors.
How you do it is mostly irrelevant --- air, oil, water, ambient
radiation, whatever.

For reference, and a cheap 200 watt dummy load, use a 200 watt lamp.
Most anything from a 60 watter to a 200 watter will work fine for
testing purposes, and the average rice box rig that puts out around
100 watts can use a pair of 75 watters in parallel if your worried
about the heat load. There are tables of lamp resistances that
you can find in the literature if you want to be more exact.
On the HF bands, it works fine, is cheap, and presents no real

inductive problem, contrary to popular belief. Also you can see it loading up. I have been using them for almost 30 years, and and have not had any problems on rigs up to 500 watts output. For comparative reference, the Navy recommended 500 watt mazda lamps for their larger ship/shore transmitters such as the TBK, for use as a dummy load. Some rice boxes tend to be a bit problematic with lamp loads, but most work fine. You can even put a lamp in a paint can, and drill a few holes for visual readout and minor heat dissipation, if you want to get exotic, and be well-shielded.

Your mileage may vary, but I tend to laugh at the wierd science that winds up in dummy loads. At vhf and above, it can make a difference, but at normal ham HF, it is mostly irrelevant. Think of what frequency you are working, and what a dummy load is, and fix to suit. Tolerances are quite broad in dummy loads --- anything from 30-100 ohms works fine. 50+-5 even for purists is fine at HF and even vhf.

Have fun, but dont get too worried about the oiling requirements for your dummy load. Most anything will work.

Bob/NA4G

# 4778. FS: RADIOS & MISC.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: JP <restar@idir.net>
Message-ID: <01bcf9c8$8d2ad060$ccf3efcf@restar.idir.net>
Source record: 88774
Cross-posted to:
rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
FOR SALE
FT 757GXII= $900 (low $700)
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300 (SOLD)
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net
```

# 4779. TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <65ep27$8fj$1@newsfeed.smartt.com>
Source record: 88775

My name is Eric and I am looking to buy any radio tubes. If you are retired

from repairing radios and have a bunch of tubes left over, I would like to talk to you so I can make an offer. You can EMAIL me or call me on the phone

at: 250-868-1182 in Kelowna BC Canada in voice or fax.
You can email me a list of what you have and we could dicker a price from that.
Thank you for your consideration. Eric Pirtyak..VE7BWP..

Net-Tamer V 1.09.2 - Test Drive

# 4780. WTB TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <65epja$8md$1@newsfeed.smartt.com>
Source record: 88776

Hi! I am looking for someboby who is retired or thinking about it,
or simply cleaning your shack..ect. Who could sell me his whole inventory

or a large amount of any kind of vaccum tubes.you can email me
or contact me to give me an idea of what you have that we can
make a fair deal,.....thanks

ERIC PH/FAX:(250)868-1182 KELOWNA B.C

Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4781. Re: WTB: HP 8505A, HP 8503A/B, HP 8501A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <347B0E66.3AC4@pop.removethistomailme.net>
Source record: 88777
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

Mike wrote:
>
> Alan Tabourian wrote:
>
> > I would like to buy an HP 8505A Network Analyzer with the HP
> > 8503A/B S Parameter test set and the HP 8501A Storage Normalizer
> > complete with manuals and interconnect cables.
>
> > Pls email offers.
>
> > Alan+
>
> I just threw one away a while ago. Had a short on one of the minus
> supplies and could not track it down. Repair costs would have been
> exhorbitant.
>
> Sorry...
>
> Best Regards,
>
> Mike
> CEO, Analog & Digital Design
> Automated Production Test
> http://www.csolve.net/~add/home.htm
>
> Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
> http://www.csolve.net/~add/zips/tcp.htm

Mike,

The next time you're about to throw a piece of HP test equipment away
because of a power supply problem you "cannot track down", please send
me a note at the above e-mail address (removing the anti-spam part
first).

I'll gladly pay for the shipping and even throw in a reasonable handling
charge to compensate you for your trouble.

thanks -- jm (de KE5FX)

---
Note: My E-mail address has been altered to avoid spam
---

# 4782. Modifications to Kenwood Tm-261A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: tobyw@abts.net
Message-ID: <347d2541.245551160@news.abts.net>
Source record: 88778

Looking for information on how to modify my Kenwood TM-261A (144mhz FM Transceiver). I want to be able to TX from 136 to 174 Mhz.

Either post or Email me at tobyw@abts.net if you can help!

Thanks in advance!

# 4783. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <347b2968.0@newshost.pcug.org.au>
Source record: 88779

"Jim Smith" <jimsmith@2xtreme.net> wrote:
> Anyone have a recommendation for where to find plans for a good
>transverter?

A bit like asking how long is a piece of string! Could you be more
specific - ie input frequency, output frequency, desired RF power output?

73,
--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home
Page and the STWG Web Site.
_____________________________________________________

# 4784. WTB: Kenwood TS-900

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: "Steven S. Hong" <NINAGUGU@msn.com>
Message-ID: <01bcf9c1$ed8bd5a0$b1582299@default>
Source record: 88780

I looking for a Kenwood HF TRX TS-900.
KB6LUE Jin Lee 714-441-1002 ninagugu@msn.com

# 4785. 24 Ghz TRX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: "Steven S. Hong" <NINAGUGU@msn.com>
Message-ID: <01bcf9c3$3df77de0$b1582299@default>
Source record: 88781

I have for sale Racon 24 Ghz TRX
Give me your FAX number than i send you brochure by FAX
KB6LUE Jin Lee 714 441 1002 (Phone)714 441 1214(FAX)
ninagugu@msn.com

# 4786. RF Microdevices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: mellob@alumni.rpi.edu
Message-ID: <65fgv2$b7c@alumni.rpi.edu>
Source record: 88782

RF Microdevices makes a few integrated RF transceiver chips
for the 400 MHz. and 900 MHz. bands. I was wondering if anybody
is working with their eval boards at home or work for the
RF2905, RF2907, or RF2915.
Please reply to mellob@rpi.edu. I'm not a regular newsgroup reader.
Thanks.

Brett KD1ZF

# 4787. FR-146 & PLL ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: aziz@turnet.net.tr
Message-ID: <880494434.10829@dejanews.com>
Source record: 88783

hi there

I have FR-146 FM receiver kit from ramsey .
we want to use it to our repeater .
so I want to make modify it .
if you know ? please let me how can I make adapt
PLL to fr-146 (MC3359 chip) ?
73,s de TA2AD A . Sua TORTU .
aziz@turnet.net.tr

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 4788. 28VAC Rotors Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: jjeffers@deskmedia.com.remove.these
Message-ID: <65fsik$7gn$1@shadow.skypoint.net>
Source record: 88784

Hello Everyone - I've aquired a couple of typical TV antenna rotors and I intend to make an AZ / EL rotor out of them. I only have one control box which is very bad shape (it will turn the rotor, but makes an terible smell...) I've measured the voltage across this, and it shows up @ 28VAC.

What I need a typical pinout of a rotor (these have 4 wires). I popped one apart and it seems to have a switch of sorts (I'd assume to prevent the rotor from turn > 360 degrees.) and a open motor. There is 4 windings on the motor, but they connect to three different pins. It has me a little stumped.

Once I can figure out the pinout on these things, and get them turning on a power supply I intend to make a computer interface for them. (I'm imagining a parrell port interface, hooked to one of my linux boxes). I have little knowledge in electronics, so I intend to make a simple controller that has a couple of transitors and discret components. Would I be best off turning these things on and off with some high-power transistors, or should I use some MP2222A's to pull some automotive relays? If the earlier, can you please recomend one?

Any advice on my winter project would be much appreciated!

-Jim Jefferson KB0THN
jjeffers@deskmedia.com.remove.these
http://www.deskmedia.com/~jjeffers/

# 4789. Re: 28VAC Rotors Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: Burt Lang <burt@rocler.qc.ca>
Message-ID: <347B1F8A.4C08@rocler.qc.ca>
Source record: 88785

James Jefferson wrote:
>
> Hello Everyone - I've aquired a couple of typical TV antenna rotors and I
>
> What I need a typical pinout of a rotor (these have 4 wires).
>
> snipped

> Any advice on my winter project would be much appreciated!
> -Jim Jefferson KB0THN

TV Rotor motors are typically 2 phase AC motors. They have 3 wires, one is common, and the other two have AC at 0 and 90 degree phase shifted respectfully. The AC is phase shifted by about 90 degrees with a large capacitor (typically 100-200 uf non polarized electrolytic). The usual configuration is to place the capacitor across the two phase wires and apply the 28 volts AC to one wire or the other depending on which direction you select. The capacitor automatically give the 90 deg phase shift to the opposite wire.

As for computer control, you may find that relays would be much simplier than trying to switch AC power with semiconductors. If you want/have to use semiconductors, then triacs would be the way to go with optocoupler trigger interfaces.

Good luck with your project.

Burt VE2BMQ>>>

# 4790. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <U4xlCIAyRye0EwY2@pacsat.demon.co.uk>
Source record: 88786

In article <65dupf$8ht$1@news.ncal.verio.com>, Jim Smith
<jimsmith@2xtreme.net> writes
> Anyone have a recommendation for where to find plans for a good
>transverter?
>Jim Smith
>KF6IEG
>
>

Do you think it would have been a good idea to say what band it was for?
Just a thought!

73 Simon

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 4791. WTB: Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: Jabran Soubeih <soubeih@expert.cc.purdue.edu>
Message-ID: <Pine.SOL.3.91.971125222008.9466D-100000@expert.cc.purdue.edu>
Source record: 88787

Hello,
I am interested in purchasing a used spectrum analyzer.
My Frequency Spec is up to 7 GHz.
Does anyone have anything avail.????

Jabran
N9KZA

# 4792. Mini-fluorescent RFI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: jsm@deepcove.com
Message-ID: <347a64b5.14137804@news.van.hookup.net>
Source record: 88788

I'm thinking of installing some of the mini-fluorescent bulbs (screw-in base that replaces a regular bulb) in my new shop, right next to the radio shack...does anyone know if these critters put out any crud in the RF spectrum???

VE7SL

## 4793. Re: Help with dummy load:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19971125000700.TAA02629@ladder02.news.aol.com>
Source record: 88860

Mineral oil is the way to go. I use 35 gal of it to cool a 1.4 Megawatt Radar.Voltages here are 72,000V at 40 AMP.

# 4794. Re: 4x150 homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19971125001900.TAA05667@ladder01.news.aol.com>
Source record: 88861

Don't think these tubes were designed for grounded grid use although I have seen a schematic for it. The screen was grounded and the grid tied to the cathode. They are easy to get to work driving the the grid though. Swamp the grid with 2000 ohms or less and you will never have to worry about neutralizing it unless you do something really sloppy.

# 4795. Re: Rechargeable Alkaline Battery?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19971125002000.TAA03969@ladder02.news.aol.com>
Source record: 88862

>Jim <jsides@flash.net wrote:

>When Rayovac states on their package to "Only use Rayovac Alkaline Rechargable battery rechargers", YOU BETTER BELIEVE IT !!

Yes sir, Jim. The Rayovac web site indicates that the correct way to charge these batteries is to charge at a rather high current level, stop the charge, check the cell voltage and repeat the process until the cells maintain 1.65 volts. Then the charging is complete.

So, the charging should be done by pulsing the cells and NOT continuous charging as with nicads.

I have seen the chargers for less than $20, which is not bad for a charger that can handle 8 cells (from size AAA to D) at once.

Regards,

Bill

Note: on the Rayovac site go to the OEM section to get the real skinny. The other stuff belongs in a commercial!

# 4796. Re: Matching Sweep Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19971125002501.TAA04539@ladder02.news.aol.com>
Source record: 88863

I built an amp a long time ago with 6LQ6's that had independent bias adjustment for each tube. With the way that the supply of sweep tubes has gotten this is the way I would go.I think the plans for this are in one of the ARRL handboooks.

# 4797. WTB: 8236 Tubes for Clegg Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: RZVB03A@prodigy.com
Message-ID: <65dfl9$161c$1@newssvr03-int.news.prodigy.com>
Source record: 88864

Folks.....

Looking for a pair of 8236's for my Clegg Apollo amp.......

If you can help... please email me at RZVB03A@Prodigy.com......

Thanks... Pat KA9LNP DN 30 Utah

# 4798. Re: HP 8505A, HP 8503A/B, HP 8501A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: David Gil <kewldave@ix.netcom.com>
Message-ID: <01bcf959$408e3b80$2f705ecf@default>
Source record: 88865
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

WHAT CAN YOU PAY??????REGARDS DAVE

Alan Tabourian <71203.1307@CompuServe.COM> wrote in article
<ugvRvmT#8GA.333@nih2naab.prod2.compuserve.com>...
> I would like to buy an HP 8505A Network Analyzer with the HP
> 8503A/B S Parameter test set and the HP 8501A Storage Normalizer
> complete with manuals and interconnect cables.
>
> Pls email offers.
>
> Alan+
>

# 4799. Re: Quartz Crystal products supplier from China

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: vanlong@mei.ceic.gov.cn
Message-ID: <MPG.ee5288b3a57c371989691@news.vic.com>
Source record: 88866

In article <65apog$34c@basement.replay.com>, nobody@REPLAY.COM says...
> In article <MPG.ede18af18e3df2e98968a@news.vic.com>,
> vanlong@mei.ceic.gov.cn (Su Yan) wrote:
>
> : =-=-=-=-=-=-=-=-=-=-=-=-=
> : http://www.vanlong.com
> : =-=-=-=-=-=-=-=-=-=-=-=-=
> :
> :Your future partner in China, and I'm sure you can
> :get more benefit from us!
> :
> :Vanlong Technical Co., Ltd.
>
>
> China Sucks. Everything made there is pure crap. The military there
> stinks of feces. I won't help participate in your labor camps.
>
Dear Gentleman,

I'm sorry to call you Gentleman, because I don't know your real name, not
"nobody", and I believe you have not sufficient courage to sign your name
on your public remarks.

From you I learned what is the Democracy you often said to us, but I still have
some questions to ask you:

? Have you ever been to China?
? Do you understand China History?
? Have you ever told with some Chinese?
? Do you understand Chinese real life now?
? Have you ever used China products? maybe your shirt, shoes are made in China.
? Who give you the right to malicious calumniation China?
? Are you the descendant of the Eighth-Countries-Army whom malicious aggression
against China in 18th century?

I'm waiting for your answers here if you are not a Craven!

Su Yan
Vanlong Technical Co., Ltd.
Tel: +86 10 6834-7389
Fax: +86 10 6831-6745
Email: sales@vanlong.com
http://www.vanlong.com

# 4800. Re: Need help with Lithium Ion Battery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: "V. L." <vincent.lomba@art.alcatel.fr>
Message-ID: <347B3618.618D@art.alcatel.fr>
Source record: 88867

Allan wrote:
>
> Hi there, I recently purchased a radio with Lithium Ion rechargeable
> batteries.
> I am familiar with Ni-Cd and Ni-Mh batteries. Can someone help me with
> the care and feeding of Li-Ion batteries. Do they like to be cycled?
No, its doesn't matter after the 3 firsts.
> Can they be damaged by temperature extremes?
Yes, as NiCd and NiMH
> Can they be floated for
> long periods without damage?
Yes, they can, if no current (less than 1uA) is fed from them.

> What type of charging do they like(constant voltage, constant current, > neither)?

Constant voltage (with very good accurate), limited current (max is
about the nominal charge, e.g. 600mAh, 600 mA max of charge current),
and time-out circuitery.

> Thanks
> Allan VE6XK

Hope it'll help you.

Vincent.

# 4801. Re: Best Design For Tuner Open Wire 450 Feeding Doublet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <347a2ff1.48638602@news.crosslink.net>
Source record: 88868
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Mon, 24 Nov 1997 12:54:41 -0600, "Craig B. Johnson"
<craig.johnson@unisys.com> wrote:
>How about the Balanced-Balanced tuner by Rich Measures (AG6K) that is
>described
>in December 1990 QST? It uses two roller inductors and a single variable
>capacitor.
>I am building one now too.
Hello Craig,

I wish you would build two - one for you and one for me. I've seen
one that was well made, following Measures' plans precisely, and works
like a charm, but I'm just too lazy to try to scrounge up the parts.
Want to make some money?

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4802. HT1000/GP300 WANTED!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-25 00:00:00 UTC
From: Randy/DeeDee/Robin <dc@citynet.net>
Message-ID: <347AE42E.44F5@citynet.net>
Source record: 88869
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.amateur.equipment,rec.radio.swap,rec.ham-radio.swap, rec.radio.amateur.misc,comp.sys.ibm.ps2.hardware

Hi guys, as u know, I'm looking for an HT1000 or GP300 VHF 16ch. radio! Have been watching the posts, and am ready to buy. I've noticed a lot of GP300's going in pairs, this would be nice as well. Will offer $300 for good HT1000/batt/rpd. chrgr. and roughly same for pair of GP300's in good shape. will also offer partial trade of items previously posted by me! Prefer newer models 'c' or so (ht)... Please email and let me know what u have and we'll talk. remember to remove the spam filter as listed below when replying!
thanks!
Randy

--
>>To reply, remove the dot between 'city' and 'net'<<

>>Randy- KC8CPK, CRTT, NREMT-P, ICQ 4455106<<
>>Robin- RN, MICU<<
>>DeeDee- CCC,SLP<<

# 4803. Re: Premier 2-valve radio: any info greatly appreciated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: "J.P.F. STESSEN" <joop-pa3ggp@wxs.nl>
Message-ID: <347B5FD0.27C@wxs.nl>
Source record: 88789
Cross-posted to: alt.ham-radio,rec.radio.amateur,rec.radio.amateur.homebrew,uk.radio.amateur

Chris Venables wrote:
>
> I have recently acquired a 2valve/3waveband radio, which seems to date fron
> the '50s. It appears to have been built from a kit and has 'Premier Radio'
> on the tuning dial. It is of simple constuction based on an aluminium front
> panel with two sub-chasses for the coils and valves respectively. The
> controls consist of an uncalibrated tuning dial, ? reaction, ? aerial
> trimmer, a volume control and waveband/on-off switch. The valves (octal base
> and aluminised) are Ex.WD, only one is marked (VR130A), appear to have 6.3v
> heaters. Screw terminals for aerial, earth and headphones are on the front
> panel. My example has been built into a metal (approx 150x150x150cm), Ex WD
> valve box with a hinged lid.
> Does this ring any bells with anyone? I would very much appreciate any info,
> HT/LT voltages, circuit data, reminiscences etc, mainly because I am itching
> to fire it up.
best OM, the vr130 is an voltage regulator. I use in my old tranceiver
the vr150. that is the same tube only for 150volt dc. You can olso try
the OB2 the base of this tube is different. many succes with the hobby
joop pa3ggp

# 4804. Re: RF Matching Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <347b8761.7292061@news.crosslink.net>
Source record: 88790

>>> Hi All
>>>
>>> Does anyone know of any shareware program for RF matching that has
>>> smith chart display. Motorola did one I think and there is one called
>>> EEZ Match

There is a copy of the SCHART.BAS program on my Web site:

http://www.qsl.net/w9dmk
ftp://qsl.net/pub/w9dmk

Bob

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4805. C. I. C 10-10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: "Ralph C. Noll" <rcnoll@ix.netcom.com>
Message-ID: <65fvpe$6qd@dfw-ixnews4.ix.netcom.com>
Source record: 88791

Try pointing your homebrew antennas toward Oxnard, Ca to the CHANNEL ISLANDS CHAPTER 10X INTERNATIONAL. Net is every Wednesday at 28.400 MHZ.
UCT time is 18:00-20:00 again at 02:00-04:00. PST at 10am-12noon again at 6pm-8pm. Swap your 10-10 numbers, nonmembers are most welcome. Information e-mail rcnoll@ix.netcom.com.
73

# 4806. For sale 8791\v power tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <65g8m9$sh1$1@newsfeed.smartt.com>
Source record: 88792

Hi! I have for sale 2 8791 used power tubes(check like new)
they do the same job as the 4cx1000 but need differents sockets
they come with all the datas and infos.
Asking: $200.00 can.

If interested contact me at: PH/FAX: (250)868-1182 Thanks ....Eric
Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4807. RF power X-sistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: Tony Hwang <oolong@netcom.ca>
Message-ID: <347BCD38.5820@netcom.ca>
Source record: 88793

Hi, all
Where is the best place to buy/order RF power transistors?
Specifically, at the moment, I need a pair of matched 2SC2904
in a hurry. Thanks for the tips or pointers.
73,
Tony, VE6CGX

# 4808. Re: Small Electrolytics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <347BE5CC.3F24B8CC@calweb.com>
Source record: 88794

Hi Mates,
Just received a box of 100Ufd/450 volt electrolytics from Mouser Electronics. These are American made CDE 380LX series units rated at 85 degrees C and are of the snap mount can variety. They are not specified as energy storage or Photo Flash caps. My question is how did they make 'em so small? These rascals are not much larger than my thumb, about 25mm diameter and maybe 30 mm tall. I am not complaining as they are fairly inexpensive as well, but as I am overhauling a half dozen or so tube transceive AC power supplies for Swans and Galaxies etc, I am curious if any of you folks have had any experience with these smaller form factor capacitors in medium voltage circuits and especially voltage doublers in the 600-700 volt range.
Tnx

Bob, KE6F

# 4809. FS: Ramsey Kits closeout 40% off !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: "Radiodan.com" <radiodan@earthlink.net>
Message-ID: <347bed9c.0@news.randori.com>
Source record: 88795
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

Hi guys, I still have some great Ramsey kits I got from buying out a distributor at a hamfest this summer. They are all current late model kits, many HAM kits and some general electronics.
Great for that Christmas gift or to built with your son, just like the old days!
LIMITED STRICKTLY TO WHAT I'VE GOT LEFT!
See them all at http://www.radiodan.com

--
Radiodan W7RF, Portable Clinic **WebMasters please link **
Two-Way Radio, Business & Ham, RF Power Amplifiers
http://www.radiodan.com radiodan@earthlink.net
New, used, unusual, classic radios & RF POWER!
A trip to my web site is worth the click!

# 4810. need data for transistor msc2327-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: Zlatko Miocevic <sbeop@alf.tel.hr>
Message-ID: <65gqgl$2e@argos.tel.hr>
Source record: 88796

Need data sheet for microwave semicondutors corp. transistor msc2327-3. I have some of them and I want to built amplifier for 2,3ghz amateur band.Please if anybody have some data like max.voltage,curent,gain,ft.....thanks in advance. de 9A2SB.

# 4811. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <347C82F7.57AF@mwt.net>
Source record: 88797

Jim Smith wrote:
>
> Anyone have a recommendation for where to find plans for a good
> transverter?
> Jim Smith
> KF6IEG

If you're looking to get on 6M or 2M, the TEN-TEC transverters would seem
a good choice. A buddy has the 6M version and it works great so I assume
the 2M would be just as good or better.
73, Scott

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

amended 8-29-97: Now after feeling the "Need for Speed", building an
RV-4!
No, the Super Chief is NOT for sale :)

# 4812. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <DEEgdRAIA+e0Ew4G@pacsat.demon.co.uk>
Source record: 88798

In article <europa-ya023580002511972326010001@news.primenet.com>,
europa@primenet.com writes
<snip>

Try looking at Hands Electronics from the links on my website below.
They have two DDS VFO kits!

73 Simon GM4PLM
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 4813. Re: Wanted pic´s Ham Project´s !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: melus@www.esi.us.es
Message-ID: <slrn67o16k.i0c.melus@bart.us.es>
Source record: 88799

On Sat, 22 Nov 1997 23:20:22 GMT, CORTICOL@MAIL.TELEPAC.PT <CORTICOL@MAIL.
TELEPAC.PT> wrote:
> Hi
>
> Thanks for read my massage, i want know any sites with Pic
> (Microchip) Projets for Ham Radio or general projects.
> I�m try found projects for :
>
> --RadioControl Clock
> --Frequencie counter
> ---DDS Vfo ( for my old Ft902dm)

Try http://www.esi.us.es/~melus/gwlelec.html

There is a general purpouse PIC 16c71/84 board for an Application note
from Microchip.

--

73's de Luis

mail: melus@esi.us.es
Ampr: eb7gwl.ampr.org [44.133.41.18]
AX25: EB7GWL@EA7MU.EACA.ESP.EU
http://www.esi.us.es/~melus/

# 4814. FS:TUBES PACKAGE DEAL!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <65hhnf$e30$1@newsfeed.smartt.com>
Source record: 88800

Hi! I do have for sale the following tubes(package):

QTY # PRICE
5 31LQ6 $35.00
5 17DQ6 $17.50
5 15DQ8 $12.50
12 22JF6 $72.00
10 10DQ6B $70.00
5 16A8 $20.00
---
total 42 $227.50 (shipping included)

If interested contact me at : PH/FAX: (250)868-1182

REGARDS.....Eric
Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4815. TS-790

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: Richard LANDRAUD <rlandraud@wanadoo.fr>
Message-ID: <65hjke$bm1$1@peuplier.wanadoo.fr>
Source record: 88801

Hello,
I am looking for any mods for my new transceiver KENWOOD
TS 790 . Any info on this TRX will be much appreciated!
73 from France
F1ULK Richard

# 4816. Need Copy May '82 QST, W7ZOI XTAL FILTER DESIGN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: n4ij@aol.com
Message-ID: <19971126204501.PAA21670@ladder02.news.aol.com>
Source record: 88802

Subject says it. An article "A unfied approach to xtal ladder filter design" by W7ZOI.... All costs paid of course.

Doug N4IJ
85 Wildcat Run
Maggie Valley, NC 28751

# 4817. Re: Homebrew frustration/1 transistor freq synrthesiser/tuna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m4t4zz5pi.fsf@spinner.ecofe.com>
Source record: 88803

Now just put it into a sardine tin and you've got a real QST technical article.

Close. At least the tradition at the Norcal QRP club is to put it in an Altoids box. I have a box waiting ...

I've been working on an unusual 1 transistor VXO circuit that covers 28.420 - 28.500 MHz in a single range. It was designed by LZ1BB (for 3.5 MHz) with changes by VK1PK. Basically you start with a normal colpitts VXO. In my case I used 10.240 MHz xtals - easily obtainable from ex-commercial VHF transceivers. Then put a second xtal in parallel to increase the freq shift (as per the JA "Super VXO" circuit. You should get about 80 kHz shift.

Now here's the ingenious bit. From the base of the transistor to earth, wire a 18.3 MHz (or thereabouts) crystal. Also take the output (from the emitter) through a small capacitor and couple it to a tuned circuit on 28 Mhz. Would you believe that there is in fact a tunable output on 28 MHz? Somehow the one transistor works as two oscillators and a mixer - all in one! This could be a good basis for an 10m DSB rig.

Could you do this with a 40 MHz microprocessor crystal? What about using two active devices and a "10.7 MHz" ceramic resonator to increase the frequency shift?

Drawings, please! [Either ASCII graphics or URL, no attachments, please]

-- KD6PAG (Networking Old-Timer, RF newbie)

## 4818. Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: stras@spark28.ecf
Message-ID: <wkgd8jnuvkp.fsf@spark28.ecf>
Source record: 88804

I've been looking at a number of RF circuits, and I quite often see inductors with taps (centre and otherwise). Now, the electronics course that I took didn't cover this sort of situation, and neither have the 10 or so books that I looked at (this includes the ARRL handbook and the Art of Electronics). So my question is this:

What are the equivalent circuits for this sort of thing?

Thanks.

Luke Stras
VA3LNS

# 4819. Re: RF power X-sistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: wa6gsd@ix.netcom.com
Message-ID: <347CCB9B.7115@ix.netcom.com>
Source record: 88805

Tony Hwang wrote:
>
> Hi, all
> Where is the best place to buy/order RF power transistors?
> Specifically, at the moment, I need a pair of matched 2SC2904
> in a hurry. Thanks for the tips or pointers.
> 73,
> Tony, VE6CGX

RF Parts in the San Diego area... hey have an 800 number that
may work from Canada..

Steve - WA6GSD

# 4820. Re: Need Copy May '82 QST, W7ZOI XTAL FILTER DESIGN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-26 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971126221546.13689B-100000@Ocean.CAM.ORG>
Source record: 88806

You can get back issues of QST from the ARRL, and if they don't have it,
they will photocopy the specific article for a reasonable fee.

You can also find this particular article in "W1FB's Design Notebook"
published by the ARRL in 1990. I passed over this book when it was first
published, believing the material to be too simple, but looking over it
a few years ago, I realized it did have some interesting material, and
being written by Doug DeMaw, it was enjoyable in itself.

To make it even more interesting to crystal filter builders, it also
includes a followup article by Wes Hayward "Designing and Building Simple
Crystal Filters" (originally in QST for July 1987), and an article
by Doug DeMaw (originally in QST for January 1990) on building a jig
for evaluating crystals so you can build the filters properly, "A Tester
for Crystal F, Q and R".

Michael VE2BVW

On 26 Nov 1997, N4ij wrote:

> Subject says it. An article "A unfied approach to xtal ladder filter design" by
> W7ZOI.... All costs paid of course.
>
> Doug N4IJ
> 85 Wildcat Run
> Maggie Valley, NC 28751
>
>
>

# 4821. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <347b97a9.218422127@news.atl.bellsouth.net>
Source record: 88720

On Wed, 26 Nov 1997 22:41:42 GMT, stras@spark28.ecf (Lukas Stras) wrote:

>I've been looking at a number of RF circuits, and I quite often see
>inductors with taps (centre and otherwise). Now, the electronics
>course that I took didn't cover this sort of situation, and neither
>have the 10 or so books that I looked at (this includes the ARRL
>handbook and the Art of Electronics). So my question is this:
>
>What are the equivalent circuits for this sort of thing?

It's an auto-transformer. For visualization purposes, select the
tap as circuit common. Then take the part of the coil below the
tap as the transformer primary, and the part above the tap as
the transformer secondary. Then treat it as a normal transformer.
Actual circuit topology may vary from this, but it is a start as a way
to visualize how it works.

You're inducing the field with a current through a part of the coil, and
recovering it through another part of the coil (with one common topology,
through the entire coil). You can use the transformer equations to determine
what the step up (or step down) ratios for voltages, currents, or impedances
will be.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 4822. Re: 6M Amplfiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <347DB670.1DC7@earthlink.net>
Source record: 88721

Brian Chesire wrote:
>
> Does any one know of plans for a class C solid state amp for 6M. 1-5
> watts in 25-5W out. Or something in that general range. I seem to
> remember some stuf from HR.
>
> WA5PPO

Look in any Motorola RF Xstr Data Book....they always have test ckts
in there that cover 6m and easy to build..may need to add a LP filter
before using it on air..

Chris
WB5ITT

# 4823. Re: Need Copy May '82 QST, W7ZOI XTAL FILTER DESIGN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <65kt78$ncp@nntp02.primenet.com>
Source record: 88722

n4ij@aol.com (N4ij) wrote:

>Subject says it. An article "A unfied approach to xtal ladder filter design" by
>W7ZOI.... All costs paid of course.

This is available in _W1FB's Design Notebook_. It also contains
_Designing and Building Simple Crystal Filters_ and _A Tester for
Crystal F, Q, and R_. The "tester" was mentioned in W7ZOI's article
but not described so W1FB built one.

The Design Notebook is available from ARRL for $10.

# 4824. Re: How to Increase bandwidth?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19971127215805704 32@zetnet.co.uk>
Source record: 88723

> I have a pair of Maxon 49-FX 2-way radios. I tried to use then for
> remote voice input to my computer. After much experimenting, I have
> found that the audio bandwidth is too limited.
> How do I increase the bandwidth of a factory radio? I have search the
> web for info on these radios but I have only found bried sales info. I
> can't even find the manufacturer, none the less a schematic.
> Ray
==========
Maxon Systems Inc.
8610 NW 107th Terrace
Kansas City , Missouri 64153 USA phone (816) 891-1093 fax
(816) 891-9340

In UK : Maxon Systems , Inc (London) Ltd
Bensham House , 324 Bensham Lane
Thornton Heath , Surrey CR7 7EQ phone (081) 684-8323 fax
(081) 684-8329

73 Frank GM0CSZ / KN6WH

# 4825. Re: Matching sweep tube for use in RF applications.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19971127223323704 32@zetnet.co.uk>
Source record: 88724

> Does anyone have experience at matching sweep tubes for use in parallell RF
> amps. I have read a couple articles saying the proper method is to place a
> single tube in the amp at a time and observe parameters to pick a matched
> pair. Others have advised that they were matched using transconductance/mutual
> conductance using tube testers. Anyone out there having used either or both
> methods advise their results.
> Thanks Bob, W4RLC
==========
Subject valves to same test conditions as per manufacturer's
parameters (found in any valve manual ) . If anode currents of the
valves do not differ by more than 5 mA ,they can be considered as matched.

73 Frank GM0CSZ / KN6WH
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

# 4826. Re: 6M Amplfiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19971127234044704 32@zetnet.co.uk>
Source record: 88725

The message <65jpv8$g10@bgtnsc02.worldnet.att.net>
from Brian Chesire <BCChesire@worldnet.att.net> contains these words:

> Does any one know of plans for a class C solid state amp for 6M. 1-5
> watts in 25-5W out. Or something in that general range. I seem to
> remember some stuf from HR.

==========
There is an excellent article on a solid state , 'contest proof'
linear amp for 50 MHz , involving a 150 Watts power transistor ,Philips BLX 15.

Power gain : 14 dB ie 6 watts in -----> 150 Watts out at V= 50V-DC
Power consumption (max) 6 Amp.

Reduced power at lower supply voltage.

Price of BLX 15 in the Netherlands : Nfl 115.- (approx US $ 55.-)

Source : 'Electron' ,December '97 ,pages 522-523-524
Author : Berry Rosenkamp , PE1ORN.

Electron is the monthly journal of VERON ,the IARU affiliated society
in the Netherlands.

73 Frank GM0CSZ / KN6WH
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

## 4827. ignore

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: ma5ter <ma5ter@ix.netcom.com>
Message-ID: <347E16CB.DE137142@ix.netcom.com>
Source record: 88726

```
-----BEGIN PGP MESSAGE-----
Version: PGP for Personal Privacy 5.0
MessageID: h+06CpISIoNKbl0tI8EG6wkQ5acssoTh

<encoded_portion_removed>
ZdWpSCReubTtOhdKn3Z7/8hK8vez/w==
=7NzD
-----END PGP MESSAGE-----
```

# 4828. Plans for HF Linear using dual 811A tubes in parallel...College project????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Mike Porch <vatek@esva.net>
Message-ID: <347E48C9.366A@esva.net>
Source record: 88727

Hi,

I am looking for plans for a HF Linear Amp using dual 811A's in Parallel. this is a final exam project for Electronic Communications(ETR241) College Course. please help....If you have plans for another type of tube that could be modified for use with the 811A's, this would be good also. I also, could change direction and build an AM reciever using RCA-CA3123E Linear IC or Signetics 546 Linear IC..If someone has plans for that. Please help a desparate College student and future Hammer.
I will gladly pay for mailing cost and printing. Thanks in advance.

Thanks
Mike Porch

# 4829. Re: Plans for HF Linear using dual 811A tubes in parallel...College project????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <347E36C7.7C4C@ix.netcom.com>
Source record: 88728

Mike Porch wrote:
>
> Hi,
>
> I am looking for plans for a HF Linear Amp using dual 811A's in
> Parallel. this is a final exam project for Electronic
> Communications(ETR241) College Course. please help....If you have plans
> for another type of tube that could be modified for use with the 811A's,
> this would be good also. I also, could change direction and build an AM
> reciever using RCA-CA3123E Linear IC or Signetics 546 Linear IC..If
> someone has plans for that. Please help a desparate College student and
> future Hammer.
> I will gladly pay for mailing cost and printing. Thanks in advance.
>
> Thanks
> Mike Porch
---
Howdy Mike -- Try URL:
http://www.vcnet.com/measures/
For Amplifier Theory and possible help on your project.

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
70 PAGES AND OVER 2000 LINKS TO DX AND HAM RADIO!
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 4830. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Mike <bad@email.adr>
Message-ID: <347E6430.79EF@email.adr>
Source record: 88729

Malcolm Loudon wrote:
>
> Hi,

> I have been experimenting using EHT recrifiers/beam triodes as X-Ray
> sources and a 20keV geiger counter as a detector. I was wondering if
> there are any other amateur X-Ray enthusiasts (loonies...) out
> there who would like to swap info and experience with me.
> My Email address is PsyTech@massey.ac.nz

> See Ya, ^^^ ^^^

You have put new meaning into an old phrase :)

> Malcolm

You may find it difficult getting girls to join in your new hobby!

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

## 4831. REQ: Packet software without TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: ma5ter <ma5ter@ix.netcom.com>
Message-ID: <347E4A52.A8D14802@ix.netcom.com>
Source record: 88730

Is there any software to replace the TNC, i.e., a setup to hook my rig
to the serial port and use the sound card for packet?

please reply to the list
thx in advance

# 4832. Re: $$DON'T PASS THIS UP!$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: johnny <johnny@codenet.net>
Message-ID: <01bcfae1$bf409e80$877988d1@default>
Source record: 88807
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap

get a life. this has no place on this list

uboocgmb@midas.com wrote in article <651g9a$ssq$534@news.highertech.net>...
>
> $$$MONEY DOES GROW ON TREES$$$
> When you actually read the contents of this posting you have to realize how easy it is to make a GREAT DEAL OF CASH!!!
> My wife and I are making our way through school, weighed down with considerable debt from student loans, etc. When I
> came across this plan, I knew it had to work...it only makes perfect sense. Just remember: HONESTY WILL MAKE YOU
> RICH!!!! This is what I found:
>
> IT ACTUALLY WORKS!!! MAKE A FORTUNE...AND THIS IS THE ABSOLUTE TRUTH!!!
> IF YOU HAVE READ THIS FAR YOU HAVE ALREADY PROVED IT WORKS!!!
>
> Take just five minutes to read and consider this plan. This is the newest updated version. As I was surfing the net, I read all
> these postings on how you can make over $50,000, even $800,000. Well, I believe that if all goes well, and you follow these
> instructions EXACTLY, it will work. Just follow the instructions given in this posting, and you can make over $800,000,
> perfectly legally according to US POST OFFICE LAWS (read on for specifics). Don't look at this as a money-making scam,
> but rather a TRUE-TO-LIFE EXAMPLE to test the above statement. It will only cost you $6 and the cost of postage to send
> 6 mail items, plus a few hours of your time. THAT'S ALL. Of course there is some personal effort involved; nothing in life is
> absolutely free. But, the results will ASTOUND YOU!!! Are you ready and willing to accept that you deserve t receive a fair
> amount of money? If so, please continue reading. But if you think you're being tricked, don't try it. However, you will see this
> is an OBVIOUS OPPORTUNITY!!!
>
> PLEASE NOTE: THIS IS A 6-PERSON LIST, NOT THE USUAL 5.
> PLEASE DO NOT TRY TO CHEAT THIS PROGRAM. JUST ADD ONE NAME AND REPOST THE ARTICLE. IF YOU DO
> NOT, IT WILL NOT WORK OUT FOR YOU, AND YOU WILL BE REMOVED FROM THE LIST! FOLLOW THESE
> DIRECTIONS AND JOIN US IN A GREAT OPPORTUNITY!
>
> The program has been revised and you will notice six names instead of

five. The reason for this is the flood of five name
> programs and the sixth name will add $50-100 thousand more to your
earnings. This can be shown mathematically and in my
> bank account. I NEVER REALLY THOUGHT THIS PROGRAM WOULD WORK, BUT IT
DOES and it will FOR YOU TOO!
> Just be patient and follow the instructions EXACTLY! PRINT THIS ARTICLE
NOW, so you have all the information for your
> version. REMEMBER TO KEEP THE NAMES RIGHT! LET'S GO!
> STEP 1
> Invest your $6 by writing your name and address on six separate pieces of
paper along with the words: "PLEASE ADD ME
> TO YOUR MAILING LIST." (This way, you are not just sending a dollar to
someone; you are paying for a legitimate service).
> People have asked if this is legal. OF COURSE IT IS LEGAL! You are
using the Internet to advertise your business. What is
> that business? You are assembling a mailing list of people who are
interested in home-based and on-line businesses and
> methods of generating income at home. Remember, people are sending you a
small fee of $1 to be added to your mailing list.
> IT IS A LEGAL TRANSACTION. What will you do with your list of thousands
of names? That's up to you, but this is how it
> becomes legal. To be legal you must actually sell a product or service
in return for $1. Anyone sending $1 must receive
> something in return. That something is this very plan you are reading.
It was generated by the six persons listed below. The
> letter and the plan outlined within this letter are a "product" that you
have received. Thus, you will be sending just $1 to
> each of the six persons below in exchange for receiving this letter and
for asking them to provide the "service" of adding you
> to their mailing list.
>
> THIS IS A SERVICE AND IS A 100% LEGAL BUSINESS ENDEAVOR COVERED IN TITLE
18, SECTION 1302 AND 1342
> OF THE POSTAL AND LOTTERY LAWS. Now please follow the given steps
EXACTLY to receive your DESIRED AMOUNT
> OF MONEY:
> Immediately send $1 US cash (a one dollar bill, no checks, no money
orders) to each of the six people on the list below.
> Wrap this dollar in a note with the words "Please add me to your mailing
list" to make this a legitimate business transaction.
> Also, to discourage those who prey on cash in the mail, be sure the bill
is completely hidden by the note. A woven envelope
> is recommended. Include your address. You do not need to include your
name. THIS IS THE KEY TO THE PROGRAM!
> Also, let each person know the number they are on the letter so they know
what cycle they are receiveing the dollar from.
> Make sure that you retain EVERY name and address sent to you, either on
computer or hard copy, but do not discard the
> names and notes that people send to you. This is PROOF that you are
providing a LEGAL SERVICE, and should the IRS

> or some other government agency question you, you can provide them with this proof. Therefore, you will start a list of all
> the people who send you a dollar requesting to be sent to your mailing list. Actually, you will want to safeguard this list
> because it can generate even better responses and much more money later! Fold a $1 bill inside each paper, and mail
> them by standard mail to the following six addresses:
> 1) Direct
> 39, Syngrou ave.
> 11743 Athens
> Greece
> 2) A.C.T.
> 23-25 Raidestou str.
> 17122 Athens
> Greece
> 3) N. Athanassopoulos
> 15, Alyos str.
> Ilissia, Athens
> Greece
> 4) Eleni Lolidou
> 29 S. Venizelou str.
> Kavala
> Greece
> 5) Maro Matthia
> 10, Ravine str.
> Kolonaki, Athens
> Greece
> 6) S. Ice
> PO Box 50855
> Provo, UT 84605
> USA
> STEP 2
> Now remove the top name from the list, and move the other names up. This way #6 becomes #5 and so on. Put you name
> as the #6 slot in the list. (Remember to take #1 off and shift the names up one slot so #2 becomes #1, #3 becomes #2, #4
> becomes # 3, #5 becomes #4, and #6 becomes #5 with your name and address at the #6 slot).
> STEP 3
> LET ME TELL YOU HOW MUCH MONEY YOU CAN MAKE.
> How do the nombers work for potential income earnings? Assume for the sake of argument that you get a 7.5% return rate.
> This is very conservative; my first attempt was about 9.5%, and my second was over 11%
> 1. You send out 200 letters, and 15 people (7.5% x 200) will send you $1 each. You make $15.00
> 2. Those 15 send out 200 letters, and 225 people send you $1 each. You make $225.
> 3. Those 225 send out 200 letters each, and 3,375 people send you $1 each. You make $3,375.

> 4. Those 3,375 people send out 200 letters each, and 50,625 people send you $1 each. You make $50,625.
> 5. Those 50,625 send 200 letters each, and 759,375 people send you $1 each. You make $759,375.
> 6. Those 759,375 send out 200 letters each, and 11,390,625 people send you $1 each. You make $11,390,625.
> TOTAL= $12,204,240!!!
> HELLO, THAT'S 12 MILLION DOLLARS!!! If those figures sound incredibly high, figure that even with half the return rate, or
> even a quarter, the total is still spectacular. It works every time, but how well depends on how many letters you send. In the
> above example you posted out 200 letters. This sounds like "pie in the sky," but the numbers add up, and with over 40 million
> people on the NET, it works!
> TIP: For an even greater return, post to MORE than 250 newsgrous initially; try for 300-350. When your name drops off a list,
> simply access another message and start the process over again. Post the new article to at least 250 newsgroups.
> Remember, the more you post, the more people see, and the more you make. There are at leats 25,000 news groups at any
> one time. This is at least a $7.92 investment (maybe a little more for foreign stamps--whoopeedoo). It takes about a week or
> so to start seeing a return--so be patient. The money should flow for about three months. At that point, simply add your name
> to a new list and start over. I've done this three times and now I can quit my job and start investing in real estate full time. I
> assure you this can work. If you mailed out 500 letters, you could receive even more! Check the math yourself, I guarantee
> it's correct. WITH THIS KIND OF RETURN YOU HAVE TO GIVE IT A TRY!!! Try it once and you'll do it again. Just make
> sure you send a dollar to each of the above addresses asking to be added to the mailing list. Together we will all prosper
> and we will be able to share our wealth with those less fortunate than ourselves.
> GOOD LUCK!!!
>
---
---
---
> GENERAL STEPS ON AUTOMATING THE PROCESS
> If you have Netscape 3.0 do EXACTLY the following:
> 1) Click on any newsgroup like normal, then click on "TO NEWS" which is on the far left when you're in the newsgroups
> page. This will bring up a box to type a message in.
> 2) Leave the newsgroup box like it is, Change the subject box to some thing flashy like "NEED CASH $$$ READ HERE$$$"
> or "FAST CASH"!!!
> 3) Tab once and you should be ready to type. Now, retype (ONLY ONCE, DON'T WORRY) this entire article WORD FOR
> WORD, except INSERT YOUR NAME AT #6, AND REMOVE #1 OFF THE LIST, plus any

other small changes you think
> you need to make. Keep almost all of it the SAME.
> 4) When you're done typing the whole article, click on FILE in THIS BOX,
RIGHT ABOVE SEND, NOT WHERE IT SAYS
> NETSCAPE NEWS ON THE FIRST BOX. Click on SAVE AS when you're under
FILE. Save your article as a text file to
> your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIL YOU DO THIS.
Once saved, move on to number 5
> below. NOTE: If you don't want to type the whole article by hand, AND
you know how to ise a plain text editor (like Notepad),
> you can edit the file ahead of time, then attach it as shown in step 6.
> 5) If you still have all of your text, send or post it to this newsgroup
now by just clicking SEND, which is right below FILE and
> right above Cc:.
> 6) Here's where you're going to post all 200. Click on any newsgroup
then click on 'TO NEWS', again in the top left corner.
> Leave the NEWGROUPS BOX alon, put a flashy subject title in the SUBJECT
BOX, hit TAB once you are in the body of the
> message. Click on ATTACHMENTS, which is below the SUBJECT BOX. You will
get another box to come up. Click on
> ATTACH FILE, then find YOUR file that, if you did it right, should be
named in the attachments box. NOTE: If you don't
> want to type in the whole article and you know how to use a plain text
editor (Notepad), you can edit the file ahead of time,
> then attach it.
> **********
>
> 1) IF YOU USE I.E. EXPLORER IT'S JUST AS EASY... Holding down the left
mouse button, highlight this article. Then
> press the 'ctrl' key and the 'c' key at the same time to copy this
article. Then print this article for your own records, to have
> the names of those you will be sending $1 bills to.
> 2) Go to the newa groups and press 'post an article'. A window will
open. Type in your headline in the subject area and
> then click in the large window below. Press 'ctrl' and then 'v' and the
article will be placed in the window. If you want to edit
> the article, do so and then highlight and copy it again. Now every time
you post the article in a newsgroup all you have to
> repeat is "ctrl" and then "v" and press post.
> 3) That's it. Each time you do this, all you have to do is type in a
different newsgroup, so that way it posts to 200 DIFFERENT
> NEWSGROUPS, or more. You see? Now you just have 249 to go!! (Don't
worry, each one takes about 30 seconds, once
> you get used to it. Remember 250 is the MINIMUM. The more you post the
more money you will receive. AND THAT'S IT!!
> THEY ARE ONLY SMALL STEPS TO A BIG FORTUNE!!! GOOD LUCK!!!
>
>
>
>

>

# 4833. Re: Small Wonder Labs, Green Mountain xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: smurph555@aol.com
Message-ID: <19971127041000.XAA09389@ladder01.news.aol.com>
Source record: 88808

For whatever it's worth, I think the Green Mountain transceiver is probably a pretty good deal. Dave Benson, who founded Small Wonder, is an avid QRPer and he's well respected among the QRP community. It is, however, a board kit, which means you would have to package it. There was a QST review on it, and a number of other QRP rigs a couple of years ago.

# 4834. F.S. - NOS tubes, books, radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971127062201.BAA22518@ladder01.news.aol.com>
Source record: 88809

For Sale:
I have a large inventory of quality NOS tubes and a wide variety of radio related publications. Also available are radios, test equipment and misc. radio parts. My schematic service is the best price around at just $3 delivered for schematics and tuning info. Quality, tested used tubes are also available. If I don't have it, I'll try to help you find it! Hundreds of happy customers have used my service. Ask Rog42@aol.com for an e-mail copy of my latest offerings - list #1115-T

## 4835. How to Increase bandwidth?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: "Raymond T. Joseph" <rjoseph@wt.net>
Message-ID: <347D1C58.40E593E1@wt.net>
Source record: 88810

I have a pair of Maxon 49-FX 2-way radios. I tried to use then for remote voice input to my computer. After much experimenting, I have found that the audio bandwidth is too limited.

How do I increase the bandwidth of a factory radio? I have search the web for info on these radios but I have only found bried sales info. I can't even find the manufacturer, none the less a schematic.

Ray

# 4836. Re: 2N2222 Colpitts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <347D4A3B.65DB@hp.com>
Source record: 88811

Dennis Erwin Thurlow wrote:
> 
> Someone posted a link to SPICE colpitts files and a SPICE demo,
> in response to my question about making a Colpitts Oscillator with a 2N2222.
> Thanks a million. I've spent the last two days learning to use it, but I'm
> getting results somewhat like my 30MHz scope gives with the actual circuit.
> I'd written the scope results off as grounding problems, but now...?
> Could I trouble you for a tad more help?
> 
> The 1996 ARRL Handbook shows a 2N2222 Colpitts in Fig. 14-13b,
> which I have posted as a CIR at http://www.trader.com/users/5012/9019/radio.htm
> I'm trying to make a fixed 29MHz oscillator so I've modified this schematic
> from the published one in 3 ways:
> The parallel tuning caps in the tank have been replaced with a single 33 pf cap,
> L1 has been given a value of .91uH,
> and I have assumed the RFC is 135uH from elsewhere in the text.
> I'm looking at current and voltage at nodes 1 and 4, and don't understand
> why the values are volts (!) when stepped at 5ns but only pico- or femto- volts
> when stepped at .2us? In fact, different stepping rates give different resonant
> frequencies, similar to what I'm seeing at different sweep rates on the scope.
> -

If you have a look through the earlier bits of chapter 14 in that ARRL handbook, you should find some comments on computer circuit simulation, particularly with SPICE variants, of oscillator circuits.

You could use SPICE with a deliberate drive signal, to explore the frequency of resonance and find the rough value of gain for oscillation, but you'll likely hit serious difficulties in trying to get the model to exhibit the necessary amplitude controlling behaviour. With very careful hand-feeding of the Spice time increments and the hidden convergence parameters, you can find a little more about the behaviour of a circuit, but in order to do oscillator modelling and get results that are even beginning to be useful, you need either very deep knowledge of the simulator, or else a fairly high-class non-linear simulation package.

Oscillators are the absolute classic objects that exhibit chaotic behaviour from initial conditions, and will test the stability and convergence of any simulator. If you look at the equations that describe the signal in an oscillator that is starting-up, as a series of iterations in time, as a time-based simulator does, you'll see the same structure as was used to make all those infinitely detailed fractal images that became popular some time ago.

With a starting pulse, (or with a declared amount of starting energy in a capacitor) you can make a SPICE oscillator start and run for a number of cycles if you get the loop gain very close to exacly right. I very much wanted to be able to put a simulation example, possibly with the eval version of PSPICE that has become widely circulated, into that chapter, but I couldn't get anything dependable enough not to mislead people.

Many books have treatments on oscillators, but few cover their amplitude!
You could try Clarke & Hess "Communications Circuits: Analysis and Design" Addison-Wesley ISBN 0-201-10040-2

Cheers
David GM4ZNX

# 4837. Re: C5121

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Suleyman Yalcinkaya <suleyman@netas.com.tr>
Message-ID: <347D3F39.6763@netas.com.tr>
Source record: 88812
Cross-posted to: rec.radio.amateur.homebrew,,rec.radio.amateur.misc

Hi all,
I'm looking for PIN Description of C5121 syntesizer IC for CB Radio;
mailto:suleyman@netas.com.tr

--

---
Suleyman YALCINKAYA mailto:suleyman@netas.com.tr
R785 CIS/EUROPE/N.AFRICA
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NETAS, Alemdag Caddesi 81244, Umraniye, ISTANBUL, TURKIYE
---

# 4838. 6M Amplfiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Brian Chesire <BCChesire@worldnet.att.net>
Message-ID: <65jpv8$g10@bgtnsc02.worldnet.att.net>
Source record: 88813

Does any one know of plans for a class C solid state amp for 6M. 1-5 watts in 25-5W out. Or something in that general range. I seem to remember some stuf from HR.

WA5PPO

# 4839. Re: Need Copy May '82 QST, W7ZOI XTAL FILTER DESIGN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971127131700.IAA09013@ladder01.news.aol.com>
Source record: 88814

>
>Subject says it. An article "A unfied approach to xtal ladder filter design"
>by
>W7ZOI.... All costs paid of course.
>
>Doug N4IJ
>85 Wildcat Run
>Maggie Valley, NC 28751
>
>
MUCH Better served to purchase his book "Introduction to RF Design". Currently
available thru the league and has the software on a floppy in the back that
takes all the pain and agony out of ladder filter design (L.EXE and X.EXE).
Design any filter up to 48 poles with a few key strokes....And as Madison
Avenue says...AND MORE!

W4ZCB
Hendersonville, NC
johnsonhex

# 4840. Quartz Crystal products Supplier from China

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: d.NOrdquest@juno.COM
Message-ID: <19971127.105113.4823.2.d.nordquest@juno.com>
Source record: 88815

Someone posted the following:

> China Sucks. Everything made there is pure crap. The military there
> stinks of feces. I won't help participate in your labor camps.

The writer poses as a defender of human rights but he treats a billion people as indistinguishable and insults the human being before him. Beyond that, he seems to be mired in the scatological.

Let's give our friend a chance. Maybe the crystals and the firm are good ones.

Dave KE9ED

# 4841. Re: Data Needed: 2N7000 FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: lordell@aol.com
Message-ID: <19971127151001.KAA16470@ladder01.news.aol.com>
Source record: 88816

Hi Jim,

I recommend the Siliconix data book for the best specs. The
2N7000 is quite a device. Its an enchancement-mode Mosfet.
It takes 4 to 5 volts posititive on the gate to turn it on. It can be
directly coupled to 5 volt logic. Its equivalent ckt. has a diode
from drain to source. It can carry a husky drain current and can turn
on lamps and relays easily. 73---Joe---W1PNH

# 4842. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <347d8ceb.14515249@news.crosslink.net>
Source record: 88817

On Wed, 26 Nov 1997 22:41:42 GMT, stras@spark28.ecf (Lukas Stras) wrote:

>I've been looking at a number of RF circuits, and I quite often see
>inductors with taps (centre and otherwise). Now, the electronics
>course that I took didn't cover this sort of situation, and neither
>have the 10 or so books that I looked at (this includes the ARRL
>handbook and the Art of Electronics). So my question is this:
>
>What are the equivalent circuits for this sort of thing?

It gets complicated, Luke, because of mutual coupling. At first glance, a tapped inductor looks like it's the equivalent of two or more inductances that are connected in series. However, becaue of the mutual inductance coupling each segment with all of the other segments in varying degrees, it is extremely complicated to draw out an equivalent circuit.

Nonetheless, if you take a simple case of an inductor with a single tap dividing the inductor into sections "1" and "2", then you can draw 4 separated inductors in series and label them as L1, Lm12, L2 and Lm21, where:

L1 is the self inductance of part "1"
L2 is the self inductance of part "2"
Lm12 is the mutual inductance between parts "1" and "2", seen from "1"
Lm21 is the mutual inductance between parts "1" and "2", seen from "2"

In general, L1 is not equal L2 and, likewise, Lm12 is not equal Lm21, but there are some ways of determining roughly the magnitudes of these values.

Another way of getting an understanding of it is to represent the two mutual inductances as if they were the primary and secondary of a transformer. Then the series equivalent circuit would be seen as passing through L1, through the primary of the transformer, then through the secondary of the transformer and finally through the second inductor, L2. Looked at this way, allows you to visualise the effect of mutual inductance in that if the mutual inductance is nil, then the transformer has a minimal effect on total inductance, whereas when the mutual coupling is high, then the transformer can be seen as adding significant inductance in the equivalent circuit.

By the way, this subject is treated extensively in any discussion of transformers, but it is portrayed from a different perspective. There the mutual coupling is everything and the two independant inductances

are referred to as "leakage inductance" since they represent the
portions of the windings that do not couple to one another.

Bob

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4843. Re: 2N2222 Colpitts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Mike <bad@email.adr>
Message-ID: <347DC368.7B92@email.adr>
Source record: 88818

David Stockton wrote:

[...]

> 
> If you have a look through the earlier bits of chapter 14 in that ARRL
> handbook, you should find some comments on computer circuit simulation,
> particularly with SPICE variants, of oscillator circuits.
> 
> You could use SPICE with a deliberate drive signal, to explore the
> frequency of resonance and find the rough value of gain for oscillation,
> but you'll likely hit serious difficulties in trying to get the model to
> exhibit the necessary amplitude controlling behaviour. With very careful
> hand-feeding of the Spice time increments and the hidden convergence
> parameters, you can find a little more about the behaviour of a circuit,
> but in order to do oscillator modelling and get results that are even
> beginning to be useful, you need either very deep knowledge of the
> simulator, or else a fairly high-class non-linear simulation package.

Dave, you are giving the Colpitts and SPICE a bad rap.

The situation is not as bad as you think. Have you looked at

http://www.csolve.net/~add/colpitts/colpitts.htm

The demo for MicroCap V is free, and the link is in the above
URL. The CIR files are in the ZIP archive.

Careful hand-feeding of the time increment is not needed. I set
the time increment to 1/1000 of the main time sweep, and
ignored the hidden convergence parameters.

The useful results obtained are:

1. Neglecting external parasitic capacitance and inductance,
the oscillator ran very close to the target frequency.

If I had entered the inductor and capacitor values more
accurately, the oscillation frequency would have been even
closer. But there is little value in doing so - the
component tolerances would have caused much greater error in
an actual circuit.

2. Using a series base resistor, the oscillator continued to
function over a range of three orders of magnitude in bias
current.

I know of few other circuits that are as robust.

3. The di/dt is very high during clamping at the peak of the
waveform.

This means lead inductance is critical and must be kept to a
minimum.

4. For normal bias, the amplitude of oscillation is
self-limiting.

The base-collector junction forward-biases at the positive
peaks. This draws power from the tank, reducing tank "Q" and
increasing phase noise.

I could have discussed the unusual behavior as the collector
charge is swept out of the base-collector junction, but I
felt that would only confuse the intended reader.

5. With excessive loading, the Colpitts stops oscillating.

SPICE allows finding out how much loading the circuit
tolerates. This is very helpful when designing a circuit,
and tells you how careful you must be when coupling it to
other circuits.

It turns out the parallel-tuned Colpitts is not terribly
critical to any design parameter.

I have been using them in octave-bandwidth UHF VCO's for years
with no problems. These are special start-stop oscillators that
start in one cycle with a initial phase error of less than 10
picoseconds. The error is trimmable to zero. They run with 0.9V
collector-emitter voltage. You can buy the parts anywhere. No,
I can't post the circuits.

> Oscillators are the absolute classic objects that exhibit chaotic
> behaviour from initial conditions, and will test the stability and
> convergence of any simulator. If you look at the equations that describe
> the signal in an oscillator that is starting-up, as a series of
> iterations in time, as a time-based simulator does, you'll see the same
> structure as was used to make all those infinitely detailed fractal
> images that became popular some time ago.
>
> With a starting pulse, (or with a declared amount of starting energy in
> a capacitor) you can make a SPICE oscillator start and run for a number
> of cycles if you get the loop gain very close to exacly right. I very
> much wanted to be able to put a simulation example, possibly with the
> eval version of PSPICE that has become widely circulated, into that
> chapter, but I couldn't get anything dependable enough not to mislead
> people.

This is not true. Please try the CIR files included with the
above URL.

PSpice is not my favorite SPICE software. There are many other
SPICE programs that work better and are easier to use. MicroCap

and IntuSoft, to name two.

> Many books have treatments on oscillators, but few cover their
> amplitude!

I just did. See the above URL.

> You could try Clarke & Hess "Communications Circuits: Analysis and
> Design" Addison-Wesley ISBN 0-201-10040-2
>
> Cheers
> David GM4ZNX

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4844. Help with Identification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-27 00:00:00 UTC
From: Jeff James <jeffjames@carroll.com>
Message-ID: <EKBDus.2p4@nonexistent.com>
Source record: 88819

Hello all,
I recently acquired a small CW exciter with a single 807 in the final running at very low plate voltage..The tube compliment suggests that it was made in the 40's..The unit has a built in VFO,and was used as an exciter for a home-brew transmitter with a pair of 807's..
The dial reads Electro Mechanical MFG. CO. NY, NY. The model is VX 101 JR..Anyone out there know something about it?

Thankyou,
Jeff James
KC2BGK
Amateur Radio Network
http://oceanus.carroll.com/p/jeffjames

# 4845. Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: PsyTech@massey.ac.nz
Message-ID: <347e1ca6.0@news.massey.ac.nz>
Source record: 88731

Hi,

I have been experimenting using EHT recrifiers/beam triodes as X-Ray sources and a 20keV geiger counter as a detector. I was wondering if there are any other amateur X-Ray enthusiasts (loonies...) out there who would like to swap info and experience with me.
My Email address is PsyTech@massey.ac.nz

See Ya,

Malcolm

# 4846. Re: Data Needed: 2N7000 FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: LA8AK@nospam.thanks
Message-ID: <347e1f21.3510970@news.online.no>
Source record: 88732

On 27 Nov 1997 15:10:45 GMT, lordell@aol.com (Lordell) wrote:

>Hi Jim,
>
> I recommend the Siliconix data book for the best specs. The
>2N7000 is quite a device. Its an enchancement-mode Mosfet.
>It takes 4 to 5 volts posititive on the gate to turn it on.
In practice - less. It is an important advantage for this transistor
compared to many other VMOS transistors, they cause several problems
because they start to draw some current with only .5V gate voltage!
I have used many 2N7006..., they are ufb for dead-bug mounting
> It can be
>directly coupled to 5 volt logic. Its equivalent ckt. has a diode
>from drain to source. It can carry a husky drain current and can turn
>on lamps and relays easily. 73---Joe---W1PNH
>

---
Eschew Obfuscation; Espouse Metrication

Email: LA8AK at online dot no

# 4847. HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bcfba2$6c17bce0$0a8a92d0@bitnet.bit-net.com>
Source record: 88733
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have scratched around the Net, but not come upon a tube listing that contains this tube. Is it rare? What does it cost? Are there direct (or simple mod) substitutes?
This tube is used in a 100w amp I am looking at - need to know if I am getting something that will be more expensive to retube than to buy!
Thanks in advance for info or leads!
--
73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

# 4848. repost: Looking for plans for HF Linear Amp using 811A tubes in Parallel....????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Mike Porch <vatek@esva.net>
Message-ID: <347E5EF0.613D@esva.net>
Source record: 88734

Hi,

I am looking for plans for a HF Linear Amp using dual 811A's in
Parallel. Must work form 3 -30 Mhz....This is a final exam project for
Electronic
Communications(ETR241) College Course. please help....If you have plans
for another type of tube that could be modified for use with the 811A's,
this would be good also. I also, could change direction and build an AM
reciever using RCA-CA3123E Linear IC or Signetics 546 Linear IC..If
someone has plans for that. Please help a desparate College student and
future Hammer.
I will gladly pay for mailing cost and printing. Thanks in advance.

Thanks
Mike Porch

# 4849. FOR SALE HIGH POWER TRANSMITTING TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Norman Hockler <norsan@bright.net>
Message-ID: <65le4v$pg0$1@cletus.bright.net>
Source record: 88735

Hi All,
I have for sale some Eimac YC-156 tubes. These are the same as
the 3CX5000A7. The tubes are from the medical industry and operate
to full output up to 110 MC. The tubes need no socket. I have Eimac
specs. Tubes make one heck of an amp, Norm N8RGR

# 4850. 1 transistor freq synrthesiser/tuna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <347e3f68.0@newshost.pcug.org.au>
Source record: 88736

John Mock <kd6pag@nospam.mocha.ecofe.com> wrote:

>
>Could you do this with a 40 MHz microprocessor crystal?

The oscillator is a fundamewntal mode circuit. I assume a 40 MHz xtal would be 3rd overtone. I don't know if the technique would work with overtone oscillators.

What about using
>two active devices and a "10.7 MHz" ceramic resonator to increase the
>frequency shift?

This could be a possibility, though I haven't tried it. I did try a circuit with a 3.58 MHz xtal and a 10 MHz xtal but it didn't work. Also using a ceramic resonator and an xtal didn't work. It seems the xtals have to be fairly close in frequency (10 & 18 MHz is OK, but 3 and 17 Mhz might not).

>
>Drawings, please! [Either ASCII graphics or URL, no attachments, please]
>
>

It's so simple I'll describe it. Get a normal NPN transistor (BC548, 2N3904, 2N2222, etc). Wire a 1k resistor from emitter to earth. In parallel with this 1k, wire 120 pF capacitor. Also connect one end of 22pF to emitter. Between emitter and base connect a 470pF. Between base and collector connect 100k. Connect 0.01uF between connector and earth. Wire a 22 ohm resistor to the collector. Connect the other end to +12v power connection. From base to earth wire in an 18.3 MHz xtal. Connect a 100pF variable capacitor to earth. To other side of it wire in a RF choke (10 to 25 uH - need to experiment with this). To the free side of the RF choke and the base, connect a 10.245 Mhz xtal. To get more range wire in an extra 10.245 MHz xtal in parallel.

With a 1uH RF choke and trimmer capacitor (5-50pF) add a parallel tuned circuit to the free end of the 22pF capacitor. Take the 28 MHz output off this tuned circuit. Apply power, tune around 28.5 Mhz and set trimmer to resonate on 28 MHz. A signal whose frequency will be variable will be audible. My unit covers 28.420 - 28.500 MHz in a single tuning range! Freq stability is better than +/- 200Hz in 2 hours.

73,

--
_____

Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

---

# 4851. WTB TUBES.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <65lh74$2s7$1@newsfeed.smartt.com>
Source record: 88737

Hi! I am looking for someboby who is retired or thinking about it,
or simply cleaning your shack..ect. Who could sell me his whole inventory

or a large amount of any kind of vaccum tubes.you can email me
or contact me to give me an idea of what you have that we can
make a fair deal,.....thanks

ERIC PH/FAX:(250)868-1182 KELOWNA B.C

Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4852. Re: The Great Capacitor Capper

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <65ljmc$1me@news.Hawaii.Edu>
Source record: 88738
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Contact All Electronics Corporation, allcorp@allcorp.com
http://www.allcorp.com; they might have what you need.
Ask 'em for a free catalog, too.
73,
Jeff KH2PZ / KH6

In article <659lq0$euj$1@defiant.america.com>,
Conrad Hoffman <hoff@america.com> wrote:
>Hi All,
>
>All I wanted was a .15 uf axial lead 2000 volt capacitor. I'm
>solving the problem with three .47 uf 600 volt jobs in series.
>
>Just as a challange, however, I'm still trying to see if one can't buy
>what I originally wanted at a reasonable price. Allied Electronics
>has them if you can hack the $50 min order for a $3.56 item. GE makes
>them as part # 42L3152, but try and buy one. There business customer
>service gave me a couple of distributers. The first one suggested a
>$100 min, but didn't stock them anyway. Still working on the second
>one.
>
>Found a couple of companies on the web that make them. One in CA who
>told me they don't sell to people, only to manufactures. Another one
>in Vermont, but so far I haven't found a distributer they list who
>stocks them.
>
>I have also looked in several electronic catalogs that will sell
>without a minimum but none are listed.
>
>Be interested to hear from anyone who thinks they know how to buy one.
>
>Thanks for your time
>
>---------
>Conrad W8MHH hoff@america.com
>

# 4853. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: wespeed@airmail.net
Message-ID: <7989F649A5BEC9A5.22BD1171F6E814D7.745F3EE2699C5446@library-proxy.airnews.net>
Source record: 88739
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On 28 Nov 1997 02:05:34 GMT, "DavidC" <davidc@bit-net.com> wrote:

>I have scratched around the Net, but not come upon a tube listing that
>contains this tube. Is it rare? What does it cost? Are there direct (or
>simple mod) substitutes?
>This tube is used in a 100w amp I am looking at - need to know if I am
>getting something that will be more expensive to retube than to buy!
>Thanks in advance for info or leads!
>--
>73, DavidC AA1FA
>"Now may the God of hope fill you with all joy and peace in believing, that
>you may abound in hope by the power of the Holy Spirit." Romans 15:13
>
Sounds like a 6JB6A tube to me.

Bill KF5SK

# 4854. TEN-TEC MANUAL

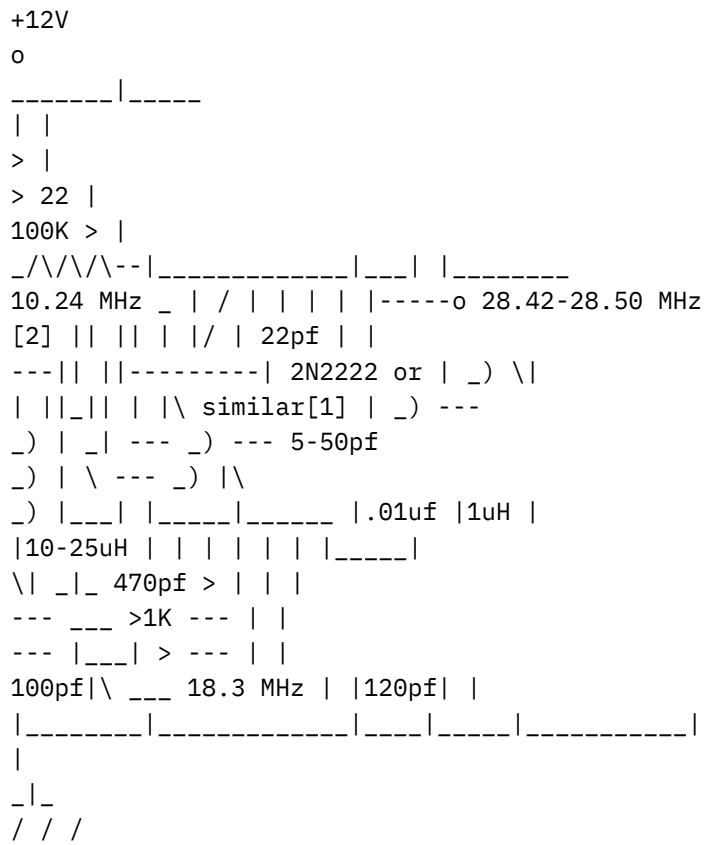
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: JRJRT <JRJRT@Prodigy.Net>
Message-ID: <347E9F35.342E@Prodigy.Net>
Source record: 88740

LOOKING FOR A DIAGRAM OR MANUAL
FOR A TEN-TEC CORSAIR II RIG
E-MAIL ME AT J.JARRETT@JUNO.COM
THANKS KQ4TX

# 4855. Re: 1 transistor freq synrthesiser/tuna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4m4t4xxuvu.fsf@spinner.ecofe.com>
Source record: 88741

Let see, Peter (VK1PK), did i translate your description correctly?




Apply power, tune around 28.5 Mhz and set trimmer to resonate on
28 MHz. A signal whose frequency will be variable will be audible.
My unit covers 28.420 - 28.500 MHz in a single tuning range!
Freq stability is better than +/- 200Hz in 2 hours.

[1] A normal NPN transistor (BC548, 2N3904, 2N2222, etc)
[2] Use two 10.245 MHz crystals in parallel for more range

Now DigiKey and Mouser have HC-49/UA microprocessor crystals for less than
$2 each [and Mouser has no minimum]:

18.432 + 11.0592 = 29.4912 MHz

Derating by .04 as you did above, i presume that the frequency range should
go from 29.370 - 29.450 MHz, covering all of the current passband of RS-12,
and almost half of the passband of RS-15! If you succeed in hearing RS-15,
then a 11.046 MHz crystal should cover most (if not all) of its passband as
well:
Uplink Downlink

RS-12 145.91-145.95 MHz 29.41-29.45 MHz
RS-15 145.858-145.898 MHz 29.354-29.394 MHz

By the way, the entire space sub-band for 2 meters is 145.80-146.00 MHz.

And when correcting for doppler, i would think that +/- 200Hz in 2 hours would be completely inconsequential...

-- KD6PAG (Networking Old-Timer, RF newbie)

# 4856. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <347e7aca.2000600@news.lin.foa.se>
Source record: 88742
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Accordingly to General Electric catalogue dated 5/1946 (yes I know its not the A-model):

6J5
General Description
Principal Application : The type 6J5 is a general purpose triode amplifier designed for service as a detector, amplifier or oscillator tube. Its electtical characteristics are identical to the type Gj5-GT except for lower interelectrode capacitances.

Mounting Position: Any
Direct interelectrode Capacitances
Grid to Plate 3.4 pf
Input 3.4 pf
Output 3.6 pf
pin 1 Shell
Pin 2 Heater
Pin 3 Plate
Pin 5 Grid
Pin 7 Heater
Pin 8 Cathode

Maximum Ratings
Design center Absolut
Plate Voltage 300 330
Grid Bias Never Positive
Plate Dissaipation 2.5 2.75 Watts
Total Cahode curr 20 22 milliAmps
D_C Heater-Cathode voltage 90 100 Volts

Characteristics and typical operation
Heater Voltage 6.3 Volts 6.3 Volt
Plate Voltage 90 250 Volt
Grid Bias 0 -8 Volt
Amplificaion Factor 20 20
Plate resistance 6700 6700 Ohm
Transconductance 3000 2600 Micromhos
Plate Current 10 9.0 Milliamps

Notes:
The d-c resistance in the grid circuit should not exceed 1.0megohm, under maximum rated conditions
Direct connection between heater and cathode is recommended

On 28 Nov 1997 02:05:34 GMT, "DavidC" <davidc@bit-net.com> wrote:

>I have scratched around the Net, but not come upon a tube listing that
>contains this tube. Is it rare? What does it cost? Are there direct (or
>simple mod) substitutes?
>This tube is used in a 100w amp I am looking at - need to know if I am
>getting something that will be more expensive to retube than to buy!
>Thanks in advance for info or leads!
>--
>73, DavidC AA1FA
>"Now may the God of hope fill you with all joy and peace in believing, that
>you may abound in hope by the power of the Holy Spirit." Romans 15:13
>

# 4857. Need repeater schematic.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Andre Antunes <andre.antunes@mail.eunet.pt>
Message-ID: <65m9e0$1md@news.EUnet.pt>
Source record: 88743
Cross-posted to: alt.ham-radio.marketplace,fj.rec.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

Hello everybody,
I need the electric schematic of the following VHF repeater:

PYE Communications Equipment
F25FM

I anyone can help, please contact by e-mail. All the mail/courier expenses
will be on me.
Thanks to all.

CT2GEU
Andre Antunes
andre.antunes@mail.eunet.pt

# 4858. Where is Heatkit ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Daniel Trillaud <daniel@netscape.com>
Message-ID: <347ED302.6F237890@netscape.com>
Source record: 88744

Hello,

Is Heatkit is still around or did the went out of
business ?

73, Daniel.

--

---
* Daniel TRILLAUD - Netscape Communications Tel : (331) 41 97 55 55 *
* Pre-sales Manager, European Channels Fax : (331) 41 97 55 81 *
* CNIT Paris la Defense *
* France mailto:daniel@netscape.COM *
---
Talk to me on 431.725MHz / 430.125MHz - Daniel is F1TDI / N2FNB

## 4859. Re: Where is Heatkit ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: jlcmas <jlcmas@phoenix.net.nospam>
Message-ID: <01bcfc07$5d667e60$4379f1cd@default>
Source record: 88745

Heathkit is, alas, no longer with us. I believe that the Heath company lives on in some form - maybe under another name but the kits are gone.

<snip> Is Heatkit is still around or did the went out of
> business ?
<snip>

# 4860. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971128145400.JAA18286@ladder01.news.aol.com>
Source record: 88746

>
>I have scratched around the Net, but not come upon a tube listing that
>contains this tube. Is it rare? What does it cost? Are there direct (or
>simple mod) substitutes?
>This tube is used in a 100w amp I am looking at - need to know if I am
>getting something that will be more expensive to retube than to buy!
>Thanks in advance for info or leads!
>--
>73, DavidC AA1FA

That isn't a "normal" tube number, and probably why you are having trouble identifying it. Take a closer look and see if you don't find the number 5 to be a letter. Like maybe G.

W4ZCB
johnsonhex

# 4861. Re: Plans for HF Linear using dual 811A tubes in parallel...College project????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971128150801.KAA17458@ladder02.news.aol.com>
Source record: 88747

>
>I am looking for plans for a HF Linear Amp using dual 811A's in
>Parallel. this is a final exam project for Electronic
>Communications(ETR241) College Course. please help....If you have plans
>for another type of tube that could be modified for use with the 811A's,
>this would be good also. I also, could change direction and build an AM
>reciever using RCA-CA3123E Linear IC or Signetics 546 Linear IC..If
>someone has plans for that. Please help a desparate College student and
>future Hammer.
> I will gladly pay for mailing cost and printing. Thanks in advance.
>
>Thanks
>Mike Porch
>
Why don't we just take your final exam for you? Send the questions and 5 bucks each for the answers... There will be an extra charge to teach you how to spell desperate and receiver.

W4ZCB
johnsonhex

# 4862. Re: Where is Heatkit ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <347EDE7B.3E4C@ix.netcom.com>
Source record: 88748

Daniel Trillaud wrote:
>
> Hello,
>
> Is Heatkit is still around or did the went out of
> business ?
> 73, Daniel
-----
Hi Dan --- Heath Company is live and well - although they no longer
make kits. See them at URL:
http://www.heathkit.com/

Also the following pages feature Heathkits:
Heathkit Virtual Museum
Heathkit Page and Many Links -- By W3DX
HeathKit Collection -- By K0IMJ
HeathKit Pages -- By KB9JJA
These are linked at URL:
http://pw2.netcom.com/~ac6v/pagex.html

Also there is an excellent book publihed about the Heath History and all
their kit offerings. Find this on one of the pages above.

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
70 PAGES AND OVER 2000 LINKS TO DX AND HAM RADIO!
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 4863. Re: REQ: Packet software without TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Tom Kirksey <tkirksey@bellsouth.net>
Message-ID: <347EE732.467A@bellsouth.net>
Source record: 88749

ma5ter wrote:
>
> Is there any software to replace the TNC, i.e., a setup to hook my rig
> to the serial port and use the sound card for packet?
>
> please reply to the list
> thx in advance

Yes, I think it is called FTV. Do a search on that.

# 4864. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: stras@spark28.ecf
Message-ID: <wkgg1ohox6v.fsf@spark28.ecf>
Source record: 88750

In article <347d8ceb.14515249@news.crosslink.net> nobody@crosslink.net (Robert Lay) writes:

>What are the equivalent circuits for this sort of thing?

L1 is the self inductance of part "1"
L2 is the self inductance of part "2"
Lm12 is the mutual inductance between parts "1" and "2", seen from "1"
Lm21 is the mutual inductance between parts "1" and "2", seen from "2"

So Lm12 is k*sqrt(L1*L2), right? Where k is the coupling coefficient.

transformer. Then the series equivalent circuit would be seen as passing through L1, through the primary of the transformer, then through the secondary of the transformer and finally through the second inductor, L2. Looked at this way, allows you to visualise the

Interesting. I'll see if I can work out the math for this case.

By the way, this subject is treated extensively in any discussion of transformers, but it is portrayed from a different perspective. There

Can you recommend a textbook? I'm at a university, so the library has *walls* of books on circuit theory, and looking through that many is painful. I've scanned through a couple (I was lucky enough to find a copy of the Radiotron Designer's Handbook!!), but I was unable to find anything useful.

Thanks.

Luke Stras
VA3LNS

# 4865. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <EKD5DL.GAx@nonexistent.com>
Source record: 88751
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Sure you dont mean a 6JS6A?? If so, it's a horizontal sweep tube, probably still available from most tube sources.

DavidC wrote:

> I have scratched around the Net, but not come upon a tube listing that
> contains this tube. Is it rare? What does it cost? Are there direct (or
> simple mod) substitutes?
> This tube is used in a 100w amp I am looking at - need to know if I am
> getting something that will be more expensive to retube than to buy!
> Thanks in advance for info or leads!
> --
> 73, DavidC AA1FA
> "Now may the God of hope fill you with all joy and peace in believing, that
> you may abound in hope by the power of the Holy Spirit." Romans 15:13

## 4866. Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Toll Free <da_kang@hotmail.com>
Message-ID: <65n1jb$9ep@mercury.hiline.net>
Source record: 88752

Hi, I am looking for a schematic for a two tube amp using the 4CX250B tubes. I got a couple of them that are good, but I need a schematic. I know someone in Vegas (Paul, are you listening) has one, but I don't know how to get a hold of him. If anyone can help, please let me know. My E-Mail is da_kang@hotmail.com

thanks

# 4867. helical filter CBT 3 CHAMBER TYPE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: aziz@turnet.net.tr
Message-ID: <880744161.27961@dejanews.com>
Source record: 88753

hi dear om
I have CBT 3 CHAMBER type VHF helical filter (272MT1008)
I want to make adjust this filter
to my 2M receiver input .
but I dont know how ?
if you know please help me .
73,s de TA2AD A. Sua TORTU
aziz@turnet.net.tr

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 4868. Need Help ICOM T2A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Steve or Joanne Sunderland <ssunland@jeffnet.org>
Message-ID: <347F399F.113D@jeffnet.org>
Source record: 88754

I need a schematic for the P.C. to radio programing cable
Also need TX mods.
slsunderland@hotmail.com

# 4869. Re: Plans for HF Linear using dual 811A tubes in parallel...College project????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Mike Porch <vatek@esva.net>
Message-ID: <347F35F0.3C39@esva.net>
Source record: 88755

JohnsonHE wrote:
>
> >
> >I am looking for plans for a HF Linear Amp using dual 811A's in
> >Parallel. this is a final exam project for Electronic
> >Communications(ETR241) College Course. please help....If you have plans
> >for another type of tube that could be modified for use with the 811A's,
> >this would be good also. I also, could change direction and build an AM
> >reciever using RCA-CA3123E Linear IC or Signetics 546 Linear IC..If
> >someone has plans for that. Please help a desparate College student and
> >future Hammer.
> > I will gladly pay for mailing cost and printing. Thanks in advance.
> >
> >Thanks
> >Mike Porch
> >
> Why don't we just take your final exam for you? Send the questions and 5 bucks
> each for the answers... There will be an extra charge to teach you how to spell
> desperate and receiver.
>
> W4ZCB
> johnsonhex
For your da@# information....The project was to build, not
design...!!!!! You certainly must not represent the rest of the HAM
community, because most of the responses were helpful and polite.

Sorry, I do not use a spell checker on my email.... I guess I am human a
far cry from your most majestic perfectness..

Thanks for nothing idiot.....

Mike

# 4870. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Dan Nelson <djn@Goodnet.com>
Message-ID: <347F632B.6EEB@Goodnet.com>
Source record: 88756
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I would also note that the 6J5GT is very available and except for the GT glass envelope is the same as the older GA.
--
Daniel Nelson
djn@goodnet.com
<:)

\\\\\\\\\\\\\\\\

Lasse Mo&#65533;ll wrote:
>
> Accordingly to General Electric catalogue dated 5/1946 (yes I know its
> not the A-model):
>
> 6J5
> General Description
> Principal Application : The type 6J5 is a general purpose triode
> amplifier designed for service as a detector, amplifier or oscillator
> tube. Its electtical characteristics are identical to the type Gj5-GT
> except for lower interelectrode capacitances.
>
> Mounting Position: Any
> Direct interelectrode Capacitances
> Grid to Plate 3.4 pf
> Input 3.4 pf
> Output 3.6 pf
> pin 1 Shell
> Pin 2 Heater
> Pin 3 Plate
> Pin 5 Grid
> Pin 7 Heater
> Pin 8 Cathode
>
> Maximum Ratings
> Design center Absolut
> Plate Voltage 300 330
> Grid Bias Never Positive
> Plate Dissaipation 2.5 2.75 Watts
> Total Cahode curr 20 22 milliAmps
> D_C Heater-Cathode voltage 90 100 Volts
>
> Characteristics and typical operation
> Heater Voltage 6.3 Volts 6.3 Volt

> Plate Voltage 90 250 Volt
> Grid Bias 0 -8 Volt
> Amplificaion Factor 20 20
> Plate resistance 6700 6700 Ohm
> Transconductance 3000 2600 Micromhos
> Plate Current 10 9.0 Milliamps
>
> Notes:
> The d-c resistance in the grid circuit should not exceed 1.0megohm,
> under maximum rated conditions
> Direct connection between heater and cathode is recommended
>
> On 28 Nov 1997 02:05:34 GMT, "DavidC" <davidc@bit-net.com> wrote:
>
> >I have scratched around the Net, but not come upon a tube listing that
> >contains this tube. Is it rare? What does it cost? Are there direct (or
> >simple mod) substitutes?
> >This tube is used in a 100w amp I am looking at - need to know if I am
> >getting something that will be more expensive to retube than to buy!
> >Thanks in advance for info or leads!
> >--
> >73, DavidC AA1FA
> >"Now may the God of hope fill you with all joy and peace in believing, that
> >you may abound in hope by the power of the Holy Spirit." Romans 15:13
> >

## 4871. 2m transverter/amp experiences?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Wendell Smith <wendell@mc.net>
Message-ID: <347F9E2C.13DC@mc.net>
Source record: 88757
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I would like to explore 2m ssb and build my own equipment. I am considering the Tentec 2-10m transverter or the Hamtronics tx and rx transverters. Any experience with either? Any other sources to consider? Also, I would like to build a 2m linear amp, say 1-10 watts in, 50-100 watts out. Hamtronics can get me up to about 40watts. Again, any thoughts?

Thanks,
Wendell Smith
N9REP

# 4872. Re: If you read it here it has to be true

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: cjfruge <cjfruge@hotmail.com>
Message-ID: <347f844c.0@news4.kcdata.com>
Source record: 88758

Robert M. Ganter wrote in message <347949DD.FD187F29@ens.ascom.ch>...
>MailfrmPA wrote:
>>
>> >> Here's a prime example of the arrogant, pro-code jackasses who are
>> >> ruining Amateur Radio.
>>
>> > Demonstrating to the government that you Know the Holy Code allows
>> >> one to enter the Temple of the Holy HF, the Lower Bands Lodge Hall
>> >> where only the Good and True amateurs reside.
>>
>> What part of this doesn't make perfect sense to you?
>>
>> K0MB
>
>The whole thing is crap. People saying such nonsense have the same
>tolerance as a islamic fundamenalistic terrorist saying 'You can believe
>in anything *I* want'. Shame on people like that!
>
>Robert (HB9NBY) (working hard for the CW exam, because I want to do CW,
>not because Ihave to)

Well, here goes nothing, and why -- OH WHY! -- am I responding to this?!!! :)

The Johnson Oconner Research Foundation (A.K.A. The Human Engineering laboratory) is a company that gives scientific aptitude tests for most of the fortune-500 companies here in the U.S. of A. There are a crap-pile of aptitudes, and one of em' is called "Rhythm Memory." In other words, being able to "keep the beat." I would guess that a ton of folks having problems with the code lack this aptitude. Therefore, I think that using morse code proficiency as qualification for higher licenses is not only antiquated but down right discrimination. This is no dream. Johnson Oconner's research is based on the scientific method and is fact! (A good attorney could have one hell of a class-action suit on his hands here.) Wow. Suing the F.C.C. or whoever. What am I saying!!! :) :) :)

I love the code; however, I hate the fact that it's being used as a "pass-to-the-higher-bands filter." :) :) (I haven't been doing much of it lately -- apartment dwelling sucks!) It's great for DX and QRP work, and is very inexpensive equipment to build, especially when u compare it to the prices of the new DSP front-end rigs :).

Anywho, there's my two-cents worth. Hmmm. I'm sure some will say, "Make that 10-to-the-minus-six-cents worth!" :) :) :).

Donning asbestos underwear!!!! :) (Damn...just got back on the net after 10 years of being off and I'm already getting into trouble :) :).

Randy Jouett (AB5NI).

# 4873. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <347F975F.2763@scan.missouri.org>
Source record: 88759
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

DavidC wrote:
>
> I have scratched around the Net, but not come upon a tube listing that
> contains this tube. Is it rare? What does it cost? Are there direct (or
> simple mod) substitutes?
> This tube is used in a 100w amp I am looking at - need to know if I am
> getting something that will be more expensive to retube than to buy!
> Thanks in advance for info or leads!
> --
> 73, DavidC AA1FA
> "Now may the God of hope fill you with all joy and peace in believing, that
> you may abound in hope by the power of the Holy Spirit." Romans 15:13

That's probably a 6JS6A, used in Yaesu FT101B thru EX series
transcievers as the transmitter final amplfier (x2) and other amplifier
applications. Available but becoming increasingly scarce and expensive.
Try Antique Electronc Supply as a source.
Dick W0EX

# 4874. Chassis and Metalwork FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: Pat Bunn <pbunn624@teleplex.net>
Message-ID: <347F7B92.7FDA@teleplex.net>
Source record: 88760

I am clearing out my garage and have a long list of new and New Old Stock
Chassis and Instrument Cases for sale. Email for a list.

Pat Bunn
N4LTA

# 4875. Re: The Great Capacitor Capper

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-28 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3480d915.91348841@eskinews.eskimo.com>
Source record: 88761

someone wrote:

>>All I wanted was a .15 uf axial lead 2000 volt capacitor. I'm
>>solving the problem with three .47 uf 600 volt jobs in series.

---
You didn't mention equalizing resistors, so I assume you're not using
them -- not a good idea, if that's the case.

Capacitors never have EXACTLY the same internal resistance, so one of
them is going to have more voltage across it than the others and will
be prone to fail.

73, Bill W7TI

# 4876. Re: REQ: Packet software without TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: rah72550@aol.com
Message-ID: <19971129152700.KAA06546@ladder01.news.aol.com>
Source record: 88670

Try here this uses differant sound cards. Both WIN95 & DOS

http://dl0td.afthd.th-darmstadt.de/~flexnet/index.html

# 4877. Re: REQ: Packet software without TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: rah72550@aol.com
Message-ID: <19971129152900.KAA06723@ladder01.news.aol.com>
Source record: 88671

Look here. Its called PC Flexnet . Both WIN95 & DOS works
good.

http://dl0td.afthd.th-darmstadt.de/~flexnet/index.html

# 4878. TUBES SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <65pdbn$jol$1@newsfeed.smartt.com>
Source record: 88672

Hi! i do have for sale a lot of tubes,if you need any just contact
me with the numbers you need and I will do my best to help you out.

THANKS......ERIC PH/FAX (250)868-1182
Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4879. TUBES PACKAGE DEAL!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <65pf2j$kcc$1@newsfeed.smartt.com>
Source record: 88673

Hi! I do have for sale as a package the following:

(5) 31LQ6 , (5) 17DQ6 , (5) 15DQ8 , (12) 22JF6,
(10) 12DQ6B , (5) 16A8 All brand new in their boxes.

Asking: $225.00 can. (shipping included)

If interested contact me at : PH/FAX: (250)868-1182

THANKS, REGARDS.

Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 4880. PLL / Synthesiser chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: Nick <nick@no.spam.for.me.ta>
Message-ID: <65pks4$hhh$1@heliodor.xara.net>
Source record: 88674
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I wonder if anyone can help with this:

I have a Nova MR225 PMR rig converted to 2m (not by me). It is a synthesised rig by means of 3 BCD switches addressing an EPROM, and the EPROM outputs control the PLL, marked NJ 8820.

As far as I can see from the nth generation photocopy of the schematic the 8820 has 4 data lines marked D0,D1,D2,D3 and 3 other inputs marked DS0,DS1,DS2.

Trouble is, some of the channels are incorrect, including the packet freq. I need.

Does anyone have a datasheet for this chip? It would help greatly when re-programming the EPROM.

73
Nick g7ufg

nray at globalnet.co.uk

# 4881. Re: Homebrew Multiband Longwire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <348056b2.3724489@news.crosslink.net>
Source record: 88675

On Sat, 29 Nov 1997 09:57:42 -0500, krkirkwood@sprintmail.nospam.com
(Keith Kirkwood) wrote:
Instead of coming up with a cock-a-mamy idea like that, which no one
in his right mind would want to get into, why don't you peruse the
dozens of books on PRACTICAL antennas, pick one that meets your
constraints and needs, and try it.

Thousands of people have put millions of hours into sharing their
WORKING experience with their readers. Don't sell it short. As many
errors and myths and as much bad advice creeps into publications, they
are still 1000% better that a totally uniformed approach.

Specifics:
Long wires do not get bundled, looped around in attics or
'Multi-banded. They run straight out into fields at lengths of over
1/2 wavelength at the lowest frequency, and they have tuners to tune
them and very good ground systems.

Your questions on the type of coax to be used suggest that you don't
understand long wire antennas at all. Long wire antennas do not
attach to the end of coax - they attach to the long wire terminal on a
tuner. If you insist on using the coax and the attic, start thinking
in terms of a tuner, a balanced antenna in the attic, a balun for
connecting the coax to the antenna. Then, after you've got that out
of your system, buy some ladder line to feed it an throw the balun and
the coax back into the parts box.

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4882. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: cjfruge <cjfruge@hotmail.com>
Message-ID: <3480629f.0@news4.kcdata.com>
Source record: 88676

scott wrote in message <347C82F7.57AF@mwt.net>...
>Jim Smith wrote:
>>
>> Anyone have a recommendation for where to find plans for a good
>> transverter?
>> Jim Smith
>> KF6IEG
>
>If you're looking to get on 6M or 2M, the TEN-TEC transverters would seem
>a good choice. A buddy has the 6M version and it works great so I assume
>the 2M would be just as good or better.
>73, Scott

One of the ham rags has a review of the 6M transverter, btw. At the
office and not at home, so can't tell you which one it's in.

Glad to see that Ten-Tec is back in the kit biz!

Randy (AB5NI)

# 4883. CBT 3 Helical filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: aziz@turnet.net.tr
Message-ID: <880830852.24383@dejanews.com>
Source record: 88677

hi dear om
I have VHF (145 Mhz) CBT3 helical filter .
I want to make adapt this filter
to my 2M receiver .
but how ? I need pratical schema .
please help me .
I need this info for our city repeater .
73,s de TA2AD A . Sua TORTU

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 4884. Re: Low Power FM xmitter wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <34807BFA.73E1@earthlink.net>
Source record: 88678

RichRapp wrote:
>
> I have a low power Ramsey FM xmitter which I am VERY pleased with quality wise,
> but would like to increase the power to about 10 watts.
>
> Since my antenna is limited to my attic, I figure 10 watts would give me a
> solid punch for about 3 miles radius (Opinion?)

Again, as I told you in the other NG, what you want to do is illegal
in the US....donot ask in the NG again...

Chris
WB5ITT

# 4885. FS: 12 GHz Microwave Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: rnelson@se-iowa.net
Message-ID: <34807e54.44400546@news.lisco.com>
Source record: 88679

I have 4 video transceivers for sale.
They were taken out of video transmission service.
Connection is simple with BNC video input on the transmitter and BNC
video output on the receiver.

Please e-mail for a more detailed description.

Randy

# 4886. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <347d2fa1.322877755@news.atl.bellsouth.net>
Source record: 88680

On 24 Nov 97 15:41:38 GMT, aswNS@hamp.hampshire.edu (Al Woodhull) wrote:
>On Sat, 15 Nov 1997 15:46:13 GMT Gary Coffman (ke4zv@bellsouth.net)
>wrote in rec.radio.amateur.homebrew:
>
>: This is an interesting thought. It got me to musing about the ways we
>: look at feedback in amplifiers. When active devices were rare, expensive,
>: and marginal in performance, we used positive feedback to get the most
>: gain out of them we could. Of course positive feedback makes a circuit
>...
>: When active devices became more common, cheaper, and somewhat more
>: capable, we turned our emphasis to negative feedback to try to tame and
>: linearize them. A negative feedback system can be designed to be
>
>That's an interesting observation, Gary. How about combining the two
>approaches, using a negative feedback circuit to control the level of
>positive feedback? It seems to me that with today's technology we
>could design a regenerative detector that was automatically kept just
>below or above the threshold of oscillation, as required for the mode
>we wanted to listen to, with no critical adjustments needed in either
>production or use. Have you heard of any such design? I can't be the
>first to have thought of it.

I'm sure it could be done, but I'm not sure why you'd want to do it.
There are better approaches one could use than a regen design
once you admit the possibility of using more complex devices.
Today an active device costs millicents when encapsulated in
an IC, and an IC encapsulates thousands of them, so you might
as well make use of all that stable gain instead of fooling with
regeneration to push a single device to the edge of stability.

There might be a niche for using such a scheme as a modern
Q multiplier instead of using an off the shelf filter. But I don't
see the regenerative detector per se as bringing anything useful
to the table today.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 4887. FS "boatanchor" lab instruments, VTVMs, RF oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseEKFI6C.LBL@netcom.com>
Source record: 88681
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

```
For Sale:
--------

Square wave generator, HP 210A
VTVM HP 400D rack mount
"Measurements" Standard signal generator model 65B
Audio osc HP202D
VTVM HP 400AB
Klystron power supply PRD 809A
Standing wave indicator HP 415B
Microwave power meter HP 430C
General Radio (GR) 1218A 900-2000MHz
GR osc 1215A 50-200MHz
GR RC osc 1210C
GR osc 1209 BL 180-600MHz

Be aware this stuff is kinda heavy, so shipping will be costly.
All this stuff is in north NJ.
```

# 4888. Re: FOR SALE HIGH POWER TRANSMITTING TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: cjfruge <cjfruge@hotmail.com>
Message-ID: <3480736e.0@news4.kcdata.com>
Source record: 88682

Norman Hockler wrote in message <65le4v$pg0$1@cletus.bright.net>...
>Hi All,
>I have for sale some Eimac YC-156 tubes. These are the same as
>the 3CX5000A7. The tubes are from the medical industry and operate
>to full output up to 110 MC. The tubes need no socket. I have Eimac
>specs. Tubes make one heck of an amp, Norm N8RGR

One heck of an amp and THEN some! :)

In the good-ole days, we used to call this a "California Kilowatt." :)
Hmm. Prolly dating myself with this remark :).

Maybe you'll have better luck selling these tubes in
"rec.radio.amateur.contesting" LOL! :)

Seriously, I was just considering the power supply for this puppy. Gawd.
What kinda fil voltage? Minimum plate voltage? Minimum drive requirements?
Sumfin tells me you would be running illegal power even if u blinked at it!
:) :)

# 4889. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: stras@skule.ecf
Message-ID: <wkgwwhrux0e.fsf@skule.ecf>
Source record: 88683

In article <347f8d68.56379253@news.crosslink.net> nobody@crosslink.net (Robert Lay) writes:

>So Lm12 is k*sqrt(L1*L2), right? Where k is the coupling coefficient.

In my circuit, the inductances that I was trying to account for are adding up as L1 + L2 + LM12 +LM21 to give the total inductance across the entire coil. (This assumes that the two halves of the coil are

Ok. Second try:

Could I measure Lm12 by driving driving section 1 of the coil with a signal, and measuring the output on the second section, relative to, say, the tap? And then measure Lm21 interchaning the driven and measured points?

I have to agree with Gary's post about looking at the tapped inductor
as an autotransformer. However, I'm not sure that will take you where you want to go.

This might be interesting to look at. But what if I have a transformer with a tapped winding?

That is, a 2:1 turns ratio produces a 4:1 impedance transformation. If that's all you're interested in, you can neglect things like

This should really help me in understading what's going on.

leakage reactance, winding resistance, etc. So, it's a question of what your real curiosities and concerns are.

Well, I've seen most tapped inductors in impedance-matching situation -- antenan tuners, input circuits, and so on -- so your help has been most invaluable.

Here is the only reference that I can recommend without going to a good library:

[list snipped]
Thanks. I'll see what the library has.

d) ARRL The Radio Amateur's Handbook, 36th Edition, 1959

I have the '97 Handbook; while there is a huge section on inductors, as well as conventional transformers, their treatment of autotransformers is limited to less than a page, and they don't mention tapped inductors anywhere else in the book.. I'm going to look up some of the other books that you mentioned.

Thanks a lot.

Luke Stras
VA3LNS

# 4890. Re: The Great Capacitor Capper

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19971129233401.SAA20356@ladder02.news.aol.com>
Source record: 88684

Try Surplus Sales @ www.surplussales.com.

# 4891. Re: 6M Amplfiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19971129233700.SAA22477@ladder01.news.aol.com>
Source record: 88685

73 had a 6m solid state amp in their SEPT '89 issue.

# 4892. FREE Items!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <34809423.0@news.imaxx.net>
Source record: 88686

Cleaning shack prior to move. Getting rid
of what I didn't sell. U pick-up (local Chicago-land)
and it's your's free.

Items: 3 Functioning Open Frame Power Supplies.\
2 Answering Machines. Bags of capacitors, electrolytics,
chip capacitors, fans, transformers, etc.

Other misc items. Catch - Take it all for free!

email me first to set up time.
Trashing in 2 weeks if no one wants.

73 Chuck KD9JQ

mailto:kd9jq@imaxx.net

# 4893. Re: Please Help a Perspective HAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.971129215127.19409B-100000@oso.slonet.org>
Source record: 88687
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.space,sci.astro.amateur

Who was the ham that needs the two cassettes containing the RTTY decode program that Hamtronics put out for the Commodore 20? Cliff K7RR

# 4894. FS: NOS tubes and Microwave Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: Kevin Harlan <bob@net.com>
Message-ID: <65r2ku$31e$1@ha1.rdc1.occa.home.com>
Source record: 88688

```
NOS Tubes, large quantities of each available.
-----------------------------------------
6AZ8 Philips, $2.90 each
JAN 5751 GE, $3.50 each
6186W (6AG5WA) philips, $.25 each
JAN 6922(E88CC, 6DJ8) Philips, $2.90 each
7062 (E180CC) Amperex,$3.90 each
3-500C, Chinese, carbon plate, $120.00 each
NOS Tubes, limited quantities available.
-----------------------------------------------------
(3) JAN 3B28, $20.00 each
(5) JAN 6AH6WA, $1.50 each
(1) JAN 6BM6, $50.00
(1) JAN 6L6WGB, $14.00
(1) 6LF6/6MH6, GE, $30.00
(5) 6SH7, $2.00 each
(2) JAN 6SJ7WGT, $5.00 each
(16) JAN 6SL7WGT, $5.00 each
(2) 6X8, RCA, $2.00 each
(5) JAN 12AX7WA, $7.50 each
(1) JAN 807, RCA, $6.00
(12) JAN 5654W (6AK5W), $1.50 each
(13) JAN 5670W, $4.00 each
(1) JAN 5933WA (807W), $6.00
(3) JAN 6005W, $3.00 each
(2) JAN 6021W, $3.00 each
(1) JAN 6550A, $25.00
(2) JAN 8334, $1.50 each
(1) JAN 8532W, $4.00
(1) EL360, CEI, England, $4.00
USED, UNTESTED, quantities of each available,
Pulled from Surplus Equipment, sold "AS-IS"
-------------------------------------------
0A3, $1.00 each
0B2, $.75 each
0G3/85A2, $.75 each
2D21, $.50 each
5U4G, $2.00 each
5U4GB, $2.00 each
6A7, $2.00 each
6AH6, $0.25 each
6AL5, $0.25 each
6AN8A, $.75 each
6AS7G, $3.00 each
```

6AS7GA, $2.00 each
6AU6A, $0.40 each
6CD6GA, $1.75 each
6CL6, $.40 each
6D6, $1.25 each
6SH7, $.60 each
6SJ7, $.75 each
6SN7GTB, $2.00 each
6V6GTY, $2.50 each
6X4, $.40 each
12AT7, $1.25 each
12AU6, $.50 each
12AU7A, $1.40 each
12AX7, $2.00 each
12AX7A, $2.00 each
12B4A, $.50 each
12SH7, $1.25 each
12SJ7, $.75 each
24A, $2.00 each
27, $1.50 each
39/44, $1.00 each
76, $3.00 each
5651A, $0.40 each
5726, $.25 each
5814A, $1.00 each
5915, $1.00 each
5963, (12AU7A), $1.40 each
5965, $.75 each
6080, $1.90 each
6189, (12AU7WA), $1.40 each
6189W, (12AU7), $1.40 each
8068, $5.00 each
8136, $0.40 each
HP-45B, $12.00 each
Electronic Components, used, untested, sold "as-is"
---
Amperite, Ballast, # 13-4, $2.00 each
Amperite, Time Delay relay, # 115NO30T, $2.50 each
100 KHz Crystal (inside tube envelope), Octal Base, $5.00 each
Microwave Components, used, untested, sold "as is".
---
Anzac RB-3-MOD, VSWR Bridge, 3 to 1500 MHz, 2 in stock, $35.00 each
HP774D, Dual Directional Coupler, 20 dB, 215 to 450 MHz, $50.00
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $25.00
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $35.00
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $35.00
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $35.00
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $35.00

Free Shipping in the USA & Canada on all of the above, on orders of $25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.

For shipping cost outside of USA & Canada, e-mail your address and items you are interested in and we will provide a quotation.

All prices are in US $, Canadian dollar checks should be written at 139% of the US $ amount ( conversion rate .72 ). No minimum order.

Prices valid until 12-06-97 or while supply lasts.

To reserve any of the above items, e-mail "sales@emodus.com"

Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

## 4895. Help with dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: staylor@whpost.wh.lucent.COM
Message-ID: <c=US%a=_%p=Lucent_Technolog%l=WHPOST-971129073654Z-18170@whpost.wh.lucent.com>
Source record: 88689

Use a Teaxaco product that is sold as "turbine oil" . It has good electrical properties and is has a very high flash point. It is sold by Texaco distributors in 5 gal min. It is also sold and re-labled as transformer oil by Texaco (it's the same formulation). Vegetable oil has poor properties including a low flash point and it can also get rancid (since it is a vegetable product).

Seth KC2WE

## 4896. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEKH2x5.76x@netcom.com>
Source record: 88690

In article <wkgg1ohox6v.fsf@spark28.ecf>,
Lukas Stras <stras@spark28.ecf> wrote:
>Can you recommend a textbook?

"RF Circuit Design" by Chris Bowick, although he seems to prefer capacitive dividers.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 4897. Looking for advice about mobile installation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: travisp@bigfoot.com
Message-ID: <3480649d.3147709@news.emji.net>
Source record: 88691
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.antenna

I have a 97 Mercury Sable and I am looking to install my Alinco DR600 2m/440m mobile rig in it. I am trying to find some other hams who may have installed gear in this vehicle (or a 97 Ford Tarus). Any information on successfuly setups would be helpful. Also information about what kind of antenna setup you have would help as well. I'm looking to do either a trunk mount or glass mount. Not sure which will be the best route. My mobile rig has a remote kit which I am considering as well. I've found that there is not much room for a radio in this car. Well, any help, advice, or comments would be appreciated. Thanks.

Travis - KE4MBD

==========
Gerald Travis Phillips

Home address: travisp@bigfoot.com
WWW: http://travisp.simplenet.com

Amateur Radio Callsign: KE4MBD
Amateur Radio address: ke4mbd@amsat.org

Smile! God Loves You!
==========

# 4898. Re: helical filter CBT 3 CHAMBER TYPE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: kovar <k0var@inav.net>
Message-ID: <01bcfc5f$db272680$eb6b78c7@kovar.inav.net>
Source record: 88762

This is not the answer you want to here but:
I would use a tracking generator to tune any filters
to a needed bandpass .
I do not think I live close enough to show you how my HP8920 works.

It may be possible to inject a small rf signal into input and
measure level at output.
If you do this over a range of many frequencies you can
plot the filter response on a chart.
Everytime you make a Adjustment you should measure
the same frequencies all over to develope new chart.
LABOR INTENSIVE but a idea.
If you are asking about impedance matching and how to
design correct values then I will not attempt to go any farther.
I can tell you that if you are tring to take a Heilical filter
designed to work at a much higher frequency than desired,
rods may be Too Short to make any adjustments that are useful.

Jack

aziz@turnet.net.tr wrote in article <880744161.27961@dejanews.com>...
> hi dear om
> I have CBT 3 CHAMBER type VHF helical filter (272MT1008)
> I want to make adjust this filter
> to my 2M receiver input .
> but I dont know how ?
> if you know please help me .
> 73,s de TA2AD A. Sua TORTU
> aziz@turnet.net.tr
>
> ----------------==== Posted via Deja News ====----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet
>

## 4899. Just for fun

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: "Pieter de Boer." <phdeboer@globalxs.nl>
Message-ID: <65nmkb$3o9$1@guust.globalxs.nl>
Source record: 88763

```
Just for fun!

Pieter de Boer,
http://www.globalxs.nl/home/p/phdeboer
```

# 4900. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <347f8d68.56379253@news.crosslink.net>
Source record: 88764

On Fri, 28 Nov 1997 15:27:52 GMT, stras@spark28.ecf (Lukas Stras) wrote:

>So Lm12 is k*sqrt(L1*L2), right? Where k is the coupling coefficient.

Well, yes and no. The circuit that I tried to draw with words wouldn't be the correct equivalent circuit to be looking at when you use your formula. The formula k = M/( sqrt (L1 * L2) is the general formula for defining coefficient of coupling. It basically says that a coefficient of coupling of unity occurs when the Mutual Inductance is the geometric mean of the two inductances that are coupled.

In my circuit, the inductances that I was trying to account for are adding up as L1 + L2 + LM12 +LM21 to give the total inductance across the entire coil. (This assumes that the two halves of the coil are wound additively. If they are wound subtractively, the two mutual inductance terms would subtract and you could theoretically wind up with zero inductance).

I have to agree with Gary's post about looking at the tapped inductor as an autotransformer. However, I'm not sure that will take you where you want to go.

In order to take a simplistic approach, one would have to know the application. Since you are concerned primarily with RF circuits, you should be able to neglect losses (if the inductors have air cores), and you can assume high (0.6 - 0.7) coefficient of coupling. In order to get higher coefficients of coupling and also have low losses, you must have high quality ferrite cores. If that be the case, then the impedance transformation ratios are closely related to the square of the turns ratio - regardless of whether you are accomplishing this with an autotransformer or an equivalent conventional transformer. That is, a 2:1 turns ratio produces a 4:1 impedance transformation. If that's all you're interested in, you can neglect things like excitation current due to core losses, coefficient of coupling, leakage reactance, winding resistance, etc. So, it's a question of what your real curiosities and concerns are.

>Can you recommend a textbook?

Here is the only reference that I can recommend without going to a good library:

a) ITT Reference Data for Engineers, 4th Ed..
p140 - Power transfer between to meshes coupled reactively
p141 - Definition of coefficient of coupling
p145 - Matrix for Inductively coupled circuits.

pp237, 238 - Coupled circuits for bandpass design.
p273 - Good, generalized equivalent circuit of a transformer.
pp287-289 - Design of audio-frequency transformers - including
equivalent networks that illustrate which parameters are important in
determining frequency response for low, mid and high frequencies.

a) Electrical Engineering, Theory and Practice, by Erickson and
Bryant, Cornell University - John Wiley & Sons
pp 92-93 Effects of mutual inductance.

c) Physics, by Hausmann & Slack - D. VanNostrand & Co.
pp693-697 - Mutual Induction.

d) ARRL The Radio Amateur's Handbook, 36th Edition, 1959
pp26-27 Calculating Inductance (based on physical parameters)
pp29-30 Mutual Inductance

I hope you can find some of these references. I'm afraid my personal
library is somewhat dated.

Bob

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4901. Re: Pin-out and specs for 5899 vacuum tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: LA8AK@make.a.guess
Message-ID: <347ff9a3.4123549@news.online.no>
Source record: 88765

5899=EF71=EF731 vari mu RF amplifier pentode
1 grid1
2 katode, grid3
3 fil/Heater
4 katode, grid3
5 anode
6 filament/heater
7 grid 2
8 cathode/grid 3

conductance hfe: 4.5mmho
anode current 7mA
grid 2 : 2mA
Bias: -1,2V
6,3V 0.15A
anode and grid2 voltage : 100V

as a replacement, I would suggest 6AK5 (in case it is difficult to
find any other) - if linearity is not too important
---
Eschew Obfuscation; Espouse Metrication

Email: LA8AK at online dot no

# 4902. Re: Plans for HF Linear using dual 811A tubes in parallel...College project????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971129122300.HAA24320@ladder02.news.aol.com>
Source record: 88766

>For your da@# information....The project was to build, not
>design...!!!!! You certainly must not represent the rest of the HAM
>community, because most of the responses were helpful and polite.

Well, if you want me to build it for you too, it'll be extra.
Thanks for the excuse, and the flame.

W4ZCB
johnsonhex

# 4903. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971129122501.HAA26181@ladder01.news.aol.com>
Source record: 88767

>47F632B.6EEB@Goodnet.com>
>
>I would also note that the 6J5GT is very available and except for the GT
>glass envelope is the same as the older GA.
>--
>Daniel Nelson
>djn@goodnet.com
> <:)
>You might also note that the original post indicated that the tube was in a
100 watt amp. Most certainly not a 6J5

W4ZCB
johnsonhex

# 4904. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>
Message-ID: <3480286E.80C450E4@uiuc.edu>
Source record: 88768

Robert Lay wrote:

> On Fri, 28 Nov 1997 15:27:52 GMT, stras@spark28.ecf (Lukas Stras)
> wrote:
>
> >So Lm12 is k*sqrt(L1*L2), right? Where k is the coupling coefficient.
>
> Well, yes and no. The circuit that I tried to draw with words
> wouldn't be the correct equivalent circuit to be looking at when you
> use your formula. The formula k = M/( sqrt (L1 * L2) is the general
> formula for defining coefficient of coupling. It basically says that
> a coefficient of coupling of unity occurs when the Mutual Inductance
> is the geometric mean of the two inductances that are coupled.
>
> In my circuit, the inductances that I was trying to account for are
> adding up as L1 + L2 + LM12 +LM21 to give the total inductance across
> the entire coil. (This assumes that the two halves of the coil are
> wound additively. If they are wound subtractively, the two mutual
> inductance terms would subtract and you could theoretically wind up
> with zero inductance).

snip

> >Can you recommend a textbook

I always look in Terman, "Electronic and Radio Engineering", 1943. Terman
wrote several but the 1943 is pretty inclusive of all that pertains to
inductivly coupled circuits.

> Here is the only reference that I can recommend without going to a
> good library:
>
> a) ITT Reference Data for Engineers, 4th Ed..
> p140 - Power transfer between to meshes coupled reactively
> p141 - Definition of coefficient of coupling
> p145 - Matrix for Inductively coupled circuits.
> pp237, 238 - Coupled circuits for bandpass design.
> p273 - Good, generalized equivalent circuit of a transformer.
> pp287-289 - Design of audio-frequency transformers - including
> equivalent networks that illustrate which parameters are important in
> determining frequency response for low, mid and high frequencies.
>
> a) Electrical Engineering, Theory and Practice, by Erickson and
> Bryant, Cornell University - John Wiley & Sons
> pp 92-93 Effects of mutual inductance.
>

> c) Physics, by Hausmann & Slack - D. VanNostrand & Co.
> pp693-697 - Mutual Induction.
>
> d) ARRL The Radio Amateur's Handbook, 36th Edition, 1959
> pp26-27 Calculating Inductance (based on physical parameters)
> pp29-30 Mutual Inductance

--
Charles (Jack) Hawley
Chuck....Ham Radio KE9UW
AKA "Jack" BMW Motorcycles, MOA #224 K100RS
Wife rides...Viki, MOA #18120 K100RS
President IBMWR
c-hawley@uiuc.edu
Sr. Research Engineer Emeritus
University of Illinois, Urbana-Champaign

# 4905. Homebrew Multiband Longwire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-29 00:00:00 UTC
From: krkirkwood@sprintmail.nospam.com
Message-ID: <MPG.ee9f76eb2c7a7ee989684@nntp.a001.sprintmail.com>
Source record: 88769

Could someone please give me some feedback on this idea. Being relatively inexperienced in antenna design, I'm not sure that this idea is valid.
I want to create a "multiband" longwire antenna, tuned to each of the shortwave bands. I plan to do this by creating a longwire cut for each band, and then bundling them together, in essence, creating just one long wire antenna. My question is: will this actually give improved performance on each of the bands, or will they "combine" to give me some improvement on one band, but not the rest.
My plan is to hang this in my attic (gotta love homeowners associations...) and utilize some 18 gauge, 4 conductor shielded wire that runs from my attic down to my basement where the receiver is. Is this wire a suitable substitute for something like RG-6? Or would I be better off using the CATV coax than runs from attic to basement?

Thanks, -K2

# 4906. Re: DRAKE TR7 MOD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: LA8AK-1@make.a.guess
Message-ID: <34800c66.8926081@news.online.no>
Source record: 88692

On Wed, 19 Nov 1997 02:19:47 GMT, n7ws@azstarnet.com (Wes Stewart)
wrote:

>On 18 Nov 1997 09:20:18 GMT, geoffm@cs1.cs.huji.ac.il (Geoffrey S.
>Mendelson) wrote:
>
>>Arthur Clark (slimg29@webtv.net) wrote:
>>> I NEED THE 11 METER MODS FOR THE DRAKE TR7..ANYONE WHO CAN HELP PLEASE
>>> E-MAIL ME ANYTIME! THANKS,<ART>
>
>>Very simple, you just buy an AUX-7 board (now a rare item), get the little
>>diode array IC's from Mouser or similar, cut off exactly the right
>>pins, install them in the board, open the TR7, and plug the AUX-7 in
>>under the display board.
>
>>Or if you can't get an AUX-7, you can build one from the QST article from
>>around 1980.
>
>Or you can cut one trace on the motherboard and transmit anywhere.
>
>>If you plan to use it on AM, you need to get the 6khz filter, also
>>a rare item.
>
>
>>BTW, it is illegal to use it on CB in the US.
>
>Which is why I'm not saying which trace to cut
>
>
>N7WS

for CB: Any cut will do!

---
Occam's 2nd Rule: Eschew Obfuscation; Espouse Metrication

Email: LA8AK at on line dot no

# 4907. Antenna Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: mikea@efn.org
Message-ID: <65qgea$jtr$1@haus.efn.org>
Source record: 88693

Hi all
I am looking for the plane's for a "Screw Driver Antenna" also
plans for a 3 element beam for use in 2m. If you can help me with
this E-mail me at KC7ZFP@juno.com or MikeA@efn.org

```
___ __ ___ __ __ __ __ __
/===/// ///=\\\ |__/ / ' ' / ' / |_ |__)146.580
/// `"` /// __ | \ \__ / /_. | | 147.080+
/// \\\ /__' KC7ZFP@juno.com or mikea@efn.org
/// \\\=/// .__/ Mike Abrams in Eugene.Ore USA

`"` `"` `"`
```

# 4908. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3480d041.34848205@news.crosslink.net>
Source record: 88694

On Sat, 29 Nov 1997 22:59:45 GMT, stras@skule.ecf (Lukas Stras) wrote:
>
>Could I measure Lm12 by driving driving section 1 of the coil with a
>signal, and measuring the output on the second section, relative to,
>say, the tap? And then measure Lm21 interchaning the driven and
>measured points?
It's not quite that simple, but you're on the right track.

I will make the following assumptions in order to get more specific:

-- L1 and L2 are unknown inductances, which are connected in series with one another and have some unknown mutual inductance - i.e., there is a magnetic coupling between the two coils of some unknown amount.

-- The coils are air core coils.

-- The frequency of operation is such that all stray or parasitic capacitances are at least small, if not negligible.

-- The size of wire used is such as to make the resistive losses negligible (Hi Q coils).

I will try to give you practical procedures for measuring the important parameters of the circuit, but be advised that your measurement devices may not be adequate to the task - especially for frequencies above 10 MHz. When making measurements at audio frequencies, one can usually find simple, inexpensive test equipment that is more than adequate, but the higher you go in frequency the more sophisticated is the necessary equipment.

Ideally, an impedance bridge would be used for the measurements. However, the use of an oscilloscope and judiciously chosen current sampling resistors could also be used.

Define the circuit connectivity as follows:
-- Inductance L1 connects from Terminal 1 to Terminal 2.
-- Terminal 2 is circuit common.
-- Inductance L2 connects from Terminal 2 to Terminal 3.

Two impedance measurements can be made across Terminals 1 and 2, as follows:
Measure Z1sc with Terminal 3 shorted to terminal 2.
Measure Z1oc with Terminal 3 open.

Likewise, two impedance measurements can be made across Terminals 3 and 2, as follows:
Measure Z2sc with Terminal 1 shorted to terminal 2.

Measure Z2oc with Terminal 1 open.

The laws of lumped, linear, passive circuits allows us to characterize the circuit by means of the above measurements. ( There are more sophisticated characterizations of the circuit into its equivalent T or Pi section using matrix theory.) However, for our immediate interests, it should be seen that the inductances of the two coils, L1 and L2 are measured as Z1sc and Z2sc respectively. Likewise, the inductances (L1 + L12) are measured as Z1oc, while the inductances (L2+L21) are measured as Z2oc. From these measurements the isolation of L12 should be Z1oc - Z1sc and the isolation of L21 should be Z2oc - Z2sc.

Obviously, if the two coils are identical, then the two inductances should be equal and the two mutual inductances should be equal.

I don't know if this will help, because it all seems so abstract. In my opinion, the impedance transformation that is brought about through transformer action is all that matters (at least in the case of ideal transformers) and the issue of mutual inductances and how to measure them seems relatively unimportant. When the coupling becomes low and the "leakage" reactances become significant, that's when you need to become concerned, because those effects will cause you to see undesirable phase shifts and mismatches. Similar, but different effects, would be caused by losses in magnetic core materials, but we are not considering anything other than air core transformers in this discussion.

Bob

73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4909. Re: Quartz Crystal products supplier from China/troll troll troll

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: n4xy@bellsouth.net
Message-ID: <3483091c.43031946@news.atl.bellsouth.net>
Source record: 88695

I don't know what a "troll" is (I'm sure you'll tell me)... but I DO know a coward when I see one: nobody@REPLAY.COM lacks the courage or character to identify himself as the author of his comments. Just a nameless face in the crowd hurling insults at people he doesn't know. I would not retract his right to make his remarks, if reasonably owned up to... but throwing insulting words around without a name attached invalidates those words without regard for content. It's just like hiding under a sheet with eyeholes. Of course, whether we know who he is or not, we all know what he is.
73

---
Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX
---

# 4910. Re: Hallicrafters S-53A- any advice?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: "David Barth"
Message-ID: <65r59h$j0d@mtinsc04.worldnet.att.net>
Source record: 88696
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.audio.tubes

I can't help you with the technical details, but the rig was made between 1951-1957 according to the Shortwave Receivers Past & Present Book by Fred Osterman. I have an SX-71 that still works. Beautiful Audio quality.

73,

Dave WA2SVM

Michael Salmons wrote in message <65a175$d1$1@news.more.net>...
>Hello,
>
>
>I have a Hallicrafters S-53A in pretty good shape. It has all original
>tubes (which are still working well, I think). I have had to replace the
>speaker, but that's it. I would like to upgrade some parts to improve its
>performance in general, and its resistance to drift and an increase in
>sensitivity, specifically. Is this a feasible goal with this unit? Can
>anyone suggest any upgrades or modifications to achieve this goal?
>
>I am also interested in general info about this model- when it came out,
>whether its top or bottom of the line, etc. Any info would be appreciated.
>I really like the ergonomics of this model and am resisting upgrading to a
>newer radio.
>If I should really be using another model from this period or style, I
>would be interested in that as well.
>
>If it helps, in general, I prefer listening to the major international
>broadcasters and some tropical band stuff and live in the midwestern US.
>
>Thanks!
>
>Michael Salmons
>msalmons@mail.coin.missouri.edu
>

# 4911. NEW 20 METER SSB AND HUGE PARTS SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: jparker@fix.net
Message-ID: <65r4kb$23u$6@zinger.callamer.com>
Source record: 88697

Dan's Small Parts and Kits

Dan has announced the release of the 20 Meter Centennial SSB Kit.

He has also added some more great buys to his HUGE End of the Year

Sale!

Check it out!

http://www.fix.net/dans.html

Enjoy,,,72,,,Jerry...WA6OWR...K

# 4912. Re: REQ: Packet software without TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: john.c@btinternet.com
Message-ID: <3481325b.1043817@news.btinternet.com>
Source record: 88698

ma5ter <ma5ter@ix.netcom.com> wrote:

>Is there any software to replace the TNC, i.e., a setup to hook my rig
>to the serial port and use the sound card for packet?
>
>please reply to the list
>thx in advance
>

Also take a look at; http://www.ife.ee.ethz.ch/~sailer/pcf/winsm/
This gives a more straightforward explaination, but you'll need a
little knowledge in configuring Windows 95, or access to someone who
is SUFFICIENTLY EXPERIENCED to help you!
73's John G3VRF

# 4913. Re: REQ: Packet software without TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: rah72550@aol.com
Message-ID: <19971130141901.JAA22963@ladder02.news.aol.com>
Source record: 88699

Try here.

http://dl0td.afthd.th-darmstadt.de/~flexnet/index.html

# 4914. Re: 2m transverter/amp experiences?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: "Joseph S. Keer KU3T" <keer@voicenet.com>
Message-ID: <3480D799.14D2@voicenet.com>
Source record: 88700
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello Wendell,

I have the TenTec 6m-2m transverter and it works fine. Another good source is Down East Microwave in NJ. They carry a complete line of transverters and just about everything else for VHF-UHF. They carry the Teletec line of solid-state amps. I use the 2m and 70cm versions and they are very clean as far as intermod distortion. The 2m amp will produce about 175W out with around 40-50W of drive. Good luck and hope to hear you on next sporadic E or Meteor scatter opening.

73 de Joe

KU3T

# 4915. Re: repost: Looking for plans for HF Linear Amp using 811A tubes in Parallel....????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971130152501.KAA27762@ladder02.news.aol.com>
Source record: 88701

In the October, 1970 issue of QST, there is an article titled "The Junker Amplifier" by Lew McCoy, W1ICP. This amp could be configured to use an 813, 803 or a pair of 811As. Lots of good ideas and about as simple as you can get. Haven't built one, but all the McCoy ideas I've tried have worked out very well.

73 de N2EY

# 4916. Re: PLL / Synthesiser chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: Martin Farrell <Martin@hobbit.demon.co.uk>
Message-ID: <xaxd7JAxCag0EwO9@hobbit.demon.co.uk>
Source record: 88702
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <65pks4$hhh$1@heliodor.xara.net>, Nick
<nick@no.spam.for.me.ta> writes
>Does anyone have a datasheet for this chip? It would help greatly when
>re-programming the EPROM.
>
It's in GEC/Plessey May 1992 Personal Comms IC handbook
Do you have a fax or address? It's only 5 pages long or I'll Email the
programming table.
--
Martin G8ASG

# 4917. Re: Low Power FM xmitter wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <3481A42D.748D@emily.net>
Source record: 88703

RichRapp wrote:
>
> Thanks, what is the legal limit in the US??? I have the Ramsey kit which puts
> out between 0.05 and 0.1 watt. Is this legal?
>
> My antenna is a simple dipole hanging in my attic. Right now my range is about
> two blocks.
>
> Thanks for pointing out 5 watts is illegal.
>
> Where can I find out the rules?
>
> Rich

The applicable regulations are in the Code of Federal Regulations, Title 47 (Telecommunications), Chapter 1 (FCC), Part 15 (Radio Frequency Devices). A starting point to access the government printing office on-line database for Title 47 is:

http://www.access.gpo.gov/cgi-bin/cfrassemble.cgi?title=199647

Section 15.239 (reproduced below) covers unlicensed intentional emitters operating in the FM broadcast band. Although the rules are stated in terms of field strength at a given distance, you can work backwards to find out what kind of transmitter power might be legal. Assuming an isotropic (zero dB gain) antenna with no transmission-line losses, the power which will produce a field strength of 250 uV/meter at 3 meters is only 0.019 microwatts. At that radiated power level, with a good receiver, you are lucky to get a reliable range of 100 to 200 feet. There are a lot of FM transmitter kits out there that will exceed that range with a good antenna, but they are *not* legal!!

On the other hand, you can build your own transmitter for the AM broadcast band, where the Part 15 rules allow 100 milliwatts and an antenna length of 3 meters. A local range of a mile or more is possible with AM modulation; experimental "MedFER" CW beacons can sometimes be heard at distances greater than 1000 miles.

Regards,

Lyle, K0LR

----- Excerpt from Part 15 rules ------

Sec. 15.239 Operation in the band 88-108 MHz.

(a) Emissions from the intentional radiator shall be confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the frequency range of 88-108 MHz.
(b) The field strength of any emissions within the permitted 200 kHz band shall not exceed 250 microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in Sec. 15.35 for limiting peak emissions apply.
(c) The field strength of any emissions radiated on any frequency outside of the specified 200 kHz band shall not exceed the general radiated emission limits in Sec. 15.209.
(d) A custom built telemetry intentional radiator operating in the frequency band 88-108 MHz and used for experimentation by an educational institute need not be certified provided the device complies with the standards in this part and the educational institution notifies the Engineer in Charge of the local FCC office, in writing, in advance of operation, providing the following information:
(1) The dates and places where the device will be operated;
(2) The purpose for which the device will be used;
(3) A description of the device, including the operating frequency, RF power output, and antenna; and,
(4) A statement that the device complies with the technical provisions of this part.

## 4918. Butler Oscillator with FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: OZ3TRO
Message-ID: <34823A66.32E3@inet.tele.dk>
Source record: 88704

I am at the moment working an a 2 meter project and i need a reliable
xtal osc on 48 MHz

I read most of the ARRL handbook and came over a socalled
Butler-oscillator, but it used NPN-transistors.

Does anyone have a "drawing" of a Butler-oscllator with FET's?

Vy 73 De OZ3TRO

(Let the fingers do the talking try a CW QSO..... or write an EMAIL!)

# 4919. Ferrite Rod LOOPSTICK RX Ant at HF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: "P. Singh" <singhpk@AT.exit109.AT.com>
Message-ID: <3481B174.5950@AT.exit109.AT.com>
Source record: 88705

Hello guys,

Does any one have some experience with ferrite ROD LOOPSTICK
antenna at HF frequencies in the range of 3.5 MHZ to 10MHZ.

It seems that they can works well enough if the following
conditions are satisfied:-

1. The ROD is of sufficiently high quality at the frequency involved
One out of three old Ferrite Rods worked well.
2. The rod is about 7-8 inches long
3. A J-FET is used as source follower to match the impedance to the
input of the radio.

I think that some people have done some work on this , I think in
elektor magazine in 1980's or so. If some one knows more about
this topic please let me know.

73

P. Singh

(My Reply address is <singhpk AT exit109.com >)

## 4920. resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: ne2e@aol.com
Message-ID: <19971130193501.OAA23396@ladder01.news.aol.com>
Source record: 88706

Hi thanks for reading this.
I am trying trying to find some 16 omhs 1% tolorence10 watts resistors.
I looked in the mouser, digkey catalogs but no luck, i have one that im trying to reference, it has these numbers on it VC5E then 207443, any ideia who the manufacter is?
Its wirewound and enamel.
thanks for any help.

FRED.

# 4921. Re: resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: Alan Wolke <kc2bog@spamicide.worldnet.att.net>
Message-ID: <65sgi0$r68@mtinsc05.worldnet.att.net>
Source record: 88707

NE2E wrote:
>
> Hi thanks for reading this.
> I am trying trying to find some 16 omhs 1% tolorence10 watts resistors.
> I looked in the mouser, digkey catalogs but no luck, i have one that im trying
> to reference, it has these numbers on it VC5E then 207443, any ideia who the
> manufacter is?
> Its wirewound and enamel.
> thanks for any help.
>
> FRED.
Hi Fred,

That resistor sounds like a Clarostat number. Another source for
wirewound enamel resistors is Ohmite.

--
Alan Wolke, KC2BOG
"i usta cuDn't speL enjinere, noW i ar wuN"
(ATTENTION: Remove the "spamicide." from the
email address when sending me email)

# 4922. Re: PLL / Synthesiser chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: Nick <nick@no.spam.for.me.ta>
Message-ID: <65sh6e$3ur$1@heliodor.xara.net>
Source record: 88708
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Thanks.. someone has already offered to send me the details shortly.

If you have some details in electronic form you could email in the interim
that would be great. If it's available on the 'net anywhere as a pdf file
that would be better.

email address is nray @ globalnet.co.uk (remove spaces)

73
Nick G7UFG

Martin Farrell wrote in message ...
>In article <65pks4$hhh$1@heliodor.xara.net>, Nick
><nick@no.spam.for.me.ta> writes
>>Does anyone have a datasheet for this chip? It would help greatly when
>>re-programming the EPROM.
>>
>It's in GEC/Plessey May 1992 Personal Comms IC handbook
>Do you have a fax or address? It's only 5 pages long or I'll Email the
>programming table.
>--
>Martin G8ASG

# 4923. FS: Frequency Synthesizer PTS-160

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <65si38$7ph@camel19.mindspring.com>
Source record: 88709
Cross-posted to: alt.ham-radio.eme,alt.ham-radio.uwave,alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.swap

I have a couple of PTS160 MHz synthesizers asking $450 shipped US48.

Specs

Frequency Range: .1000000MHz to 159.9999999 MHz
Frequency Resolution 1Hz
Control local by 10 position dial, TTL BCD or GPIB
Switching time 20 microseconds to 5 microseconds
Output level +3 to +13 dBm
Flatness +/- 0.5dB
Impedance 50 Ohms
Spurious Outputs -75 dBc
Harmonics -40 dBc
Broad Phase Noise -63 dBc (.5 to 15 KHz)
(1 Hz) -105 dBc @ 100Hz, -115 dBc @ 1KHz
Frequency Std. TCXO
External drive 5 or 10 MHz
Dimensions 19 x 5.25 x 18 inches
Weight 35 lbs

Check the pictures and specs at my page:

http://www.mindspring.com/~wave/sale.html

Thanks
Pieter N4IP

# 4924. Reducing power output on FT102

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: steve@nospamthanks.tenchy.demon.co.uk
Message-ID: <3484ca3e.710827@news.demon.co.uk>
Source record: 88710

Hi,

A friend has asked if there is a way to reduce the output power on an
FT102 to about 10W, particularly on CW, but hopefully SSB as well.

Thanks, 73's

--

Steve. FOR SALE: Suzuki GSX1100EFE, D Reg, 12500 miles, MOT'd.
See http://www.tenchy.demon.co.uk

# 4925. FS: Assorted Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: djb@coos.dartmouth.edu
Message-ID: <65sn18$qfp$1@dartvax.dartmouth.edu>
Source record: 88711
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Are you're into homebrew electronics, or need a replacement chip for
a piece of hardware that you'd like to repair?

As part of my fall/winter cleaning, I am clearing out my collection
of electronic parts and supplies.

Most of these chips are early-mid 1980's vintage, which is when
I was involved in hardware design work, so if you're looking for
AMD K6's or Intel Pentium II's, you won't find them here.

All the chips were functional when I stored them away a number of
years ago, and they are all packaged in anti-static foam or tubes.
Unfortunately, I don't have any means of testing these chips,
but if you buy one and it is DOA, you may return it within 10 days
for a refund.

I have not priced any of these chips, so all reasonable offers will
be considered. All chips are packaged as DIP's unless otherwise
specified. Numbers is parentheses are quantity of chips available.
Sorry, I don't have datasheets for any of these. Buyer to pay shipping
costs.

I also have hundreds of TTL chips and assorted other goodies too
numerous to inventory right now. Please e-mail me with your requirements
and I will tell you what I have available.

Thanks for looking!

Dan Blumenfeld, MD
Dartmouth-Hitchcock Medical Center

Advanced Micro Devices
(1) D8088
(1) P8251A
(1) AM8253-5PC
(1) AM8255A-5DC
(2) AM9511ADC
(3) AM9513DC
(2) AM9516DC
(1) AM9519DC
(2) AM9519APC
(1) AM9568DC

Burr-Brown
DAC71-CSB-V

Fujitsu
(1) MB8866

Hitachi
(17) HM6167P-8
(5) HM6116P-3
(1) HN462716

Intel
(13) C2716
(6) D2716
(1) D27128
(3) D2764
(1) P8035
(1) P8085A
(2) D8086
(1) D8088
(1) P8212
(3) P8251A
(2) P8253
(1) D8155
(1) D8255A
(1) D8255A-5
(2) P8255A
(1) P8257
(1) D8259A
(9) D8282
(2) D8284
(6) P8286
(1) D8288
(1) C8748
(1) C8755A-8

Mostek
(5) MK2716T-7

Motorola
(1) MC14411P
(1) MC14515CP
(1) MC6840L
(1) MC6845L
(1) MC6847P
(1) MC6850P
(1) MC6860P
(9) MCM6665AL20

NEC
(2) D7220D
(36) D4164D-2

National Semiconductor
(46) MM2114N
(1) MM5311N

(1) MM58167AN

OKI
Speech Synthesizer Kit:
(1) MSM5204RS
(1) MSM5205RS
(1) MSM6912AS
(9) MSM5128-15RS
(2) ALP2Y

RCA
(1) CDP1852CE
(2) CDP1855CD

SGS
(1) Z80A
(1) Z80B

Signetics
(1) 2651

Texas Instruments
(1) TMS2516JDL
(8) TMS4416-20NL

TRW
(1) MPY-8HJ

Western Digital
(1) WD9918-PL-00
(1) WD9928AL-00

Zilog
(1) Z8681-PS

# 4926. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: stras@skule.ecf
Message-ID: <wkg1zzyf3f3.fsf@skule.ecf>
Source record: 88712

In article <3480d041.34848205@news.crosslink.net> nobody@crosslink.net (Robert Lay) writes:

important parameters of the circuit, but be advised that your measurement devices may not be adequate to the task - especially for frequencies above 10 MHz. When making measurements at audio

One of the advantages of being at a university (and schmoozing with profs) is that one can often beg access to high-end test equipment that would be otherwise prohibitively expnsive.

The laws of lumped, linear, passive circuits allows us to characterize the circuit by means of the above measurements. ( There are more

These would be somehow related to the y-parameters, no?

[calculation snipped]

Thanks a lot for the information.

I don't know if this will help, because it all seems so abstract. In

I have no problem with abstract. That's one of my beefs the the ARRL handbook -- not enough theory to go along with the applications.

# 4927. Re: Any Successful DDS Builders ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971130232200.SAA15993@ladder02.news.aol.com>
Source record: 88713

Howdy,

I have built a DDS circuit that I used as the back bone of a simple trnasceiver. It was a direct conversion scheme, and was CW only. It operated on 80, 40, 30 , and 20 meters. I was not overely impressed with Receiver circuit, so for my senior design project in EE here at Montana State Univ, I am build ing a 20 meter superheterodyned receiver, the L.O. still uses essentially the same DDS oscillator I used in my previous projects. I have been very pleased with simplicity of using the AD7008JP50 along with the 87C51 microcontroller. I had a 4 button keypad as my control panel, my new design will incorporate a 16 button keypad, a Grey Code tuning shaft, and will be tuneable via a serial connection to any terminal. The possibilities with an oscillator that tunes from 0 to 25MHz in 1 Hz step is endless. I have been fascinated with DDS technology for the last 3 years, and I keep getting more and more ideas for projects. What I suggest when using a DDS chip though, for example the AD7008JP50, is to use it well below the Nyquist rate. At 25MHz, the signal is a triangle wave, down at 5 MHz though, is is a beautiful sine wave.
73's

de AA7YQ
Kevin Ames
Bozeman, MT

# 4928. PC- monitor 2 mac? /SM0UGT -sweden

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: FREDRIK ANDSTR&#65533;M <fredrik.andstrom@swipnet.se>
Message-ID: <01bcfd1e$38da2d40$c44af482@alfabin-one>
Source record: 88714

Like to build an pc-monitor adapter for MAC.. So.. Is there anyone here
who have an idea about this subject?

/Regards marcel

# 4929. Re: Small Electrolytics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <34824CEB.4D1F@scan.missouri.org>
Source record: 88715

Bob Miller wrote:
>
> Hi Mates,
> Just received a box of 100Ufd/450 volt electrolytics from Mouser
> Electronics. These are American made CDE 380LX series units rated at
> 85 degrees C and are of the snap mount can variety. They are not
> specified as energy storage or Photo Flash caps. My question is how did
> they make 'em so small? These rascals are not much larger than my
> thumb, about 25mm diameter and maybe 30 mm tall. I am not complaining
> as they are fairly inexpensive as well, but as I am overhauling a half
> dozen or so tube transceive AC power supplies for Swans and Galaxies
> etc, I am curious if any of you folks have had any experience with these
> smaller form factor capacitors in medium voltage circuits and
> especially voltage doublers in the 600-700 volt range.
> Tnx
>
> Bob, KE6F

I recapped the voltage doubler in a Collins 30L1 amp using them a few
years ago and it held. They are just smaller, apparently no more
fragile.
73, Dick W0EX

# 4930. Re: Ferrite Rod LOOPSTICK RX Ant at HF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-11-30 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <v4cvYeA17dg0Eweg@lfheller.demon.co.uk>
Source record: 88716

In article <3481B174.5950@AT.exit109.AT.com>, "P. Singh"
<singhpk@AT.exit109.AT.com> writes
>Hello guys,
>
>Does any one have some experience with ferrite ROD LOOPSTICK
>antenna at HF frequencies in the range of 3.5 MHZ to 10MHZ.
>
>It seems that they can works well enough if the following
>conditions are satisfied:-
>
>1. The ROD is of sufficiently high quality at the frequency involved
>One out of three old Ferrite Rods worked well.
>2. The rod is about 7-8 inches long
>3. A J-FET is used as source follower to match the impedance to the
>input of the radio.
>
>
>I think that some people have done some work on this , I think in
>elektor magazine in 1980's or so. If some one knows more about
>this topic please let me know.

Richard Q. Marris, G2BZQ, has done a lot of work in this area, mainly
for transmitting antennas. He has had articles published in Elektor,
RadCom and Practical Wireless.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 4931. Re: Butler Oscillator with FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <34828819.4B00@mwt.net>
Source record: 88620

OZ3TRO wrote:
>
> I am at the moment working an a 2 meter project and i need a reliable
> xtal osc on 48 MHz
>
> I read most of the ARRL handbook and came over a socalled
> Butler-oscillator, but it used NPN-transistors.
>
> Does anyone have a "drawing" of a Butler-oscllator with FET's?
>
> Vy 73 De OZ3TRO
>
> (Let the fingers do the talking try a CW QSO..... or write an EMAIL!)

According to my RSGB VHF/UHF Manual, it appears a FET may be used directly in place of the bipolar oscillator transistor and the second stage must be a FET. This is on page 4.14 in the fourth edition book (1983). Hope this helps.
Scott (N0EDV)

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

amended 8-29-97: Now after feeling the "Need for Speed", building an RV-4!
No, the Super Chief is NOT for sale :)

# 4932. Tektro 7L12 & TR502 help ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Daniel Trillaud <daniel@netscape.com>
Message-ID: <34829357.2EB34120@netscape.com>
Source record: 88621
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Hello,

I just picked up at a German Hamfest this weekend a Spectrum
set made of a Mainframe 7603, a Spectrum Plugin 7L12 and a
tracking Generator TR502.
What I would like to know is how to connect the Tracking to
the Spectrum :-) Is connecting the 2 LOs enough or do I need
to connect something else ?
Also, I am looking for the Manuals for all this equipment's.
I will pay what ever and return the original via FedEx or DHL.

If you can help, please reply directly via eMail.

73 Qro, Daniel.

--

---
* Daniel TRILLAUD - Netscape Communications Tel : (331) 41 97 55 55 *
* Pre-sales Manager, European Channels Fax : (331) 41 97 55 81 *
* CNIT Paris la Defense *
* France mailto:daniel@netscape.COM *
---

Talk to me on 431.725MHz / 430.125MHz - Daniel is F1TDI / N2FNB

# 4933. Re: Tektro 7L12 & TR502 help ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <880974183snz@microvest.demon.co.uk>
Source record: 88622
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

In article <34829357.2EB34120@netscape.com>
daniel@netscape.com "Daniel Trillaud" writes:

> I just picked up at a German Hamfest this weekend a Spectrum
> set made of a Mainframe 7603, a Spectrum Plugin 7L12 and a
> tracking Generator TR502.
> What I would like to know is how to connect the Tracking to
> the Spectrum :-) Is connecting the 2 LOs enough or do I need
> to connect something else ?

That's all, it's just a couple of 50 ohm SMC terminated coax jumper leads. And I guess you know that you will need a TM502 to power the TR502, or a wider one such as TM503,4,etc if you also want to link in a counter and possible prescaler.

There may also be a provision for a control lead between the analyser and the tracking generator with LEMO connectors. This allows a bright spot to be put on the screen at a point where the sweep is paused to gate a counter, such as a DC509, through the TM backplane, but this lead is not a requirement to get the generator to track.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

# 4934. Re: Tektro 7L12 & TR502 help ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <880977756snz@microvest.demon.co.uk>
Source record: 88623
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

In article <880974183snz@microvest.demon.co.uk>
tgold@panix.com "\"Anthony R. Gold\"" writes:

> That's all, it's just a couple of 50 ohm SMC terminated coax jumper
^^^
Whoops, that should have been SMA of course. Sorry.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

# 4935. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3482BA7C.4398@pop.valley.net>
Source record: 88624
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Richard Carroll wrote:
>
> DavidC wrote:
> >
> > I have scratched around the Net, but not come upon a tube listing that
> > contains this tube. Is it rare? What does it cost? Are there direct (or
> > simple mod) substitutes?
> > This tube is used in a 100w amp I am looking at - need to know if I am
> > getting something that will be more expensive to retube than to buy!
> > Thanks in advance for info or leads!
>
> That's probably a 6JS6A, used in Yaesu FT101B thru EX series
> transcievers as the transmitter final amplfier (x2) and other amplifier
> applications. Available but becoming increasingly scarce and expensive.
> Try Antique Electronc Supply as a source.
> Dick W0EX

There are 23JS6 and 31JS6 versions, too-- there were designed for
controlled-current heater strings. In a pinch, you could use these
versions (Which oughta cost less) and an external filament transformer
or two (series-connected as appropriate).

73,
Brad AA1IP

# 4936. HELP: who has a 'Tech Trodiper' grid dipper?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Nanno van Haaften <vhaaften@ehv.sc.philips.com>
Message-ID: <3482B01C.4CC8@ehv.sc.philips.com>
Source record: 88625

I own recently a Tech Trodiper grid dipper.
The thing works ok, the problem is that I have only 1 coil.
(40-140 MHz).
I want to create the other ones myself. The coil exists of 2 components:
one resistor and the coil.
I want to know what the values are/must be for the other coils...
Who can provide me with that data?
--
Best regards,

---
Nanno van Haaften
Philips Semiconductors
System Manager
Marketing & Sales Communications

Building BE042b FAX: +31 40 2724825 (PVPN +60 24825)
P.O. Box 218 Voice: +31 40 2723251 (PVPN +60 23251)
5600 MD Eindhoven Seri: vhaaften@marcom
The Netherlands Internet: Nanno.vanHaaften@ehv.sc.philips.com

---
Private: vhaaften@iaehv.nl
pe1olq@amsat.org

---
According to the Manual: 'Use a pentium PC with W95 or better'
So I bought a PowerPC Macintosh with MacOS!

# 4937. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3482BCC5.163@pop.valley.net>
Source record: 88626

Mike wrote:
>
> Malcolm Loudon wrote:
> >
> > Hi,
>
> > I have been experimenting using EHT recrifiers/beam triodes as X-Ray
> > sources and a 20keV geiger counter as a detector. I was wondering if
> > there are any other amateur X-Ray enthusiasts (loonies...) out
> > there who would like to swap info and experience with me.
> > My Email address is PsyTech@massey.ac.nz

<snip>

Hello--

At your public library, look for an early edition of a book entitled, "The Amateur Scientist", by C. L. Stong: this book consists of reprints from older Scientific American magazines (1950s vintage?) and includes plans for an X-ray machine using a vibrator-type Ford spark coil for high-voltage AC and an old UX-201A tube as the X-ray gennie.

Some older tubes of the 201's vintage used a magnesium getter flash coating on the inside of the tubes' envelopes that produces soft X-rays when bombarded by electrons. You tie all the pins together and use an external foil electrode wrapped around a portion of the tube's envelope, and then hook the commoned pins and the foil to opposite sides of the spark coil. The HV AC does the rest. Standard cautions and disclaimers apply-- don't X-ray your children, camera or small domestic animals.

I'm working from memory on this one, so if anyone else out there recalls more details, please pass 'em along.

73--
Brad AA1IP

# 4938. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3481f643.1664974@news.crosslink.net>
Source record: 88627

On Sun, 30 Nov 1997 22:00:16 GMT, stras@skule.ecf (Lukas Stras) wrote:

>These would be somehow related to the y-parameters, no?

My mind does a blank on y-parameters - are you talking about
admittance equivalents instead of impedance equivalents?

My ref. to lumped, linear, bi-directional whatever is just to get the
standard disclaimer into the picture, so as to avoid the difficulties
attendant with non-linear or distributed circuits containing such
intractable items as transmission lines and diodes. Hi.

BTW, this conversation is beginning to strain my feeble brain that
hasn't done any serious thinking in these thingss since college, circa
1948-53.

But it's interesting and stimulating, nonetheless.

Bob
73 de W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4939. Re: Small Electrolytics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <65v0mq$oa4$1@news1.teleport.com>
Source record: 88628

>Bob Miller wrote:
>
> Hi Mates,
> Just received a box of 100Ufd/450 volt electrolytics from Mouser
> Electronics. These are American made CDE 380LX series units rated at
> 85 degrees C and are of the snap mount can variety. They are not
> specified as energy storage or Photo Flash caps. My question is how did
> they make 'em so small? These rascals are not much larger than my
> thumb, about 25mm diameter and maybe 30 mm tall. I am not complaining
> as they are fairly inexpensive as well, but as I am overhauling a half
> dozen or so tube transceive AC power supplies for Swans and Galaxies
> etc, I am curious if any of you folks have had any experience with these
> smaller form factor capacitors in medium voltage circuits and
> especially voltage doublers in the 600-700 volt range.
> Tnx
>
> Bob, KE6F

Electrolytics have been made smaller over the years by techniques to increase the surface area of the aluminum plates. Instead of smooth metal, the surface is very rough on a microscopic scale, greatly increasing the surface area and hence the capacitance.

Roy Lewallen, W7EL

# 4940. NJ8820 Synth Chip - thanks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Nick <nick@no.spam.for.me.ta>
Message-ID: <65v1re$bne$1@heliodor.xara.net>
Source record: 88629
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Thanks to those who responded to my earlier message. I got the datasheet in
PDF format from http://www.gpsemi.com from their "obsolete parts server"

73
Nick G7UFG

# 4941. variable condenser

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Jim Breeyear <jbreeyea@zoo.uvm.edu>
Message-ID: <34834756.5CD9@zoo.uvm.edu>
Source record: 88630

Hi,

I have a large variable condenser(old talk for capacitor), that I cant identify. The plate thickness changes from thick on one side to thin on the opposite. The rotor is an inverse image of the stator so that it will mesh. The spacing of the plates get closer together as the plates are meshing. Appears to have a higher breakdown as the capacitance decreases. Anyone seen this before? You gotta have been around to figure this one out. Probably made before WW2.

Jim W1HRM
--
==========
Jim Breeyear Manager Inst. Lab.
Chemistry Dept Cook Building
Univ. of Vermont
Burlington, Vt. 05405
Tel:802-656-0196

# 4942. Re: Mini-fluorescent RFI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: n1ddzrjc@aol.com
Message-ID: <19971201211700.QAA24090@ladder02.news.aol.com>
Source record: 88631

Those RF lamps really burn me up. Several of them in my neighborhood produce low and high level QRM on broadcast, 160 and on 10 meters.

The only thing worse is a touch lamp. So, yes, these lamps do produce RFI.

Bob
N1DDZ

Wrote:

>Subject: Mini-fluorescent RFI
>From: jsm@deepcove.com (Steve McDonald)
>Date: Tue, Nov 25, 1997 00:43 EST
>Message-id: <347a64b5.14137804@news.van.hookup.net>
>
>I'm thinking of installing some of the mini-fluorescent bulbs
>(screw-in base that replaces a regular bulb) in my new shop, right
>next to the radio shack...does anyone know if these critters put out
>any crud in the RF spectrum???
>
>VE7SL
>
>
>
>
>
>
>

# 4943. Re: 6M Amplfiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: LA8AK-1@make.a.guess
Message-ID: <34832c29.3905551@news.online.no>
Source record: 88632

On Thu, 27 Nov 1997 12:05:36 -0600, "Christopher (Chris) W. Boone"
<cboone@earthlink.net> wrote:

>Brian Chesire wrote:
>>
>> Does any one know of plans for a class C solid state amp for 6M. 1-5
>> watts in 25-5W out. Or something in that general range. I seem to
>> remember some stuf from HR.
>>
>> WA5PPO
>
>Look in any Motorola RF Xstr Data Book....they always have test ckts
>in there that cover 6m and easy to build..may need to add a LP filter
>before using it on air..
>
>Chris
>WB5ITT

Motorola 2N6083 and 2N6084 have 19dB gain in 6m linear amplifiers,
they may work just as easy for class C. You don't need to buy all
those high cap trimmers, use an amount of 100pF capacitors and try to
increase the number or opposite (100pF steps works fine).
Several friends has used similar design:
LA8OJ built two 2N6083 amplifier
LA8AK built one 2N6083 amplifier
SM6HYG built one 2N6084 amplifier

Since drive level from PW Meon transverter is 23dBm (0.2W), the output
is close to 43dBm (20W).

---
Occam's 2nd Rule: Eschew Obfuscation; Espouse Metrication

Email: LA8AK at on line dot no

# 4944. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: c.c.tqbssz@41.killspam.us.com
Message-ID: <65vaop$cqv$1@samba.rahul.net>
Source record: 88633

Mike (bad@email.adr) wrote:
: Malcolm Loudon wrote:
: >
: > Hi,
: > I have been experimenting using EHT recrifiers/beam triodes as X-Ray
: > sources and a 20keV geiger counter as a detector. I was wondering if
: > there are any other amateur X-Ray enthusiasts (loonies...) out
: > there who would like to swap info and experience with me.

: You may find it difficult getting girls to join in your new hobby!

Not to worry, if he sticks with this as a hobby, pretty soon he won't be
much interested in girls anyway;-)

Stephen

# 4945. Re: Small Wonder Labs, Green Mountain xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: oak@texas.net
Message-ID: <65vbl9$faa$1@news3.texas.net>
Source record: 88634

In article <3477D1B0.75E1@hotmail.com>, spike_dog@hotmail.com says...
>
>Does anyone have any experience with Small Wonder Labs and their Green
>Mountain CW transceiver? (it's a kit, see
>http://www.fix.net/~jparker/sml/gm.htm)
>
> My initial reaction is that $75 is a little much.. Am i right?
>

$75 expensive?? Not with today's value of money. Compair it to 10
years ago or 20.

Justa thought

72's
Frank
K7RMJ

# 4946. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: NOSPAMpfriedr@azstarnet.com
Message-ID: <NOSPAMpfriedr.70.00121F00@azstarnet.com>
Source record: 88635

Somewhere, I have a copy of the book you are referring to. The fellow who wrote the xray article started with one of the old time tubes, but progressed to having a local glassblower fabricate tubes of his own design for him.

The power supply was an Oudin coil--similar in basic nature to a Tesla coil, except that it is an autotransformer. His deluxe xray machine featured all sorts of lead shielding and a lead colimator. He produced some interesting photos of the bones in a frozen fish, and nails and screws driven into a block of wood.

BTW: That book is an AMAZING tribute to the ingenuity of garage-class tinkerers. It also includes plans for a linear accelerator (atom smasher!) and simple magnetic resonance electronics. No mad scientist should be without a copy of this book.

Pete

In article <3482BCC5.163@pop.valley.net> Brad Thompson <Brad_Thompson@pop.valley.net> writes:>From: Brad Thompson <Brad_Thompson@pop.valley.net>>Subject: Re: Amateur X-Rays (DX on the 100pm band...)>Date: Mon, 01 Dec 1997 08:33:57 -0500

>Mike wrote:
>>
>> Malcolm Loudon wrote:
>> >
>> > Hi,
>>
>> > I have been experimenting using EHT recrifiers/beam triodes as X-Ray
>> > sources and a 20keV geiger counter as a detector. I was wondering if
>> > there are any other amateur X-Ray enthusiasts (loonies...) out
>> > there who would like to swap info and experience with me.
>> > My Email address is PsyTech@massey.ac.nz

><snip>

>Hello--

>At your public library, look for an early edition of a book entitled,
>"The Amateur Scientist", by C. L. Stong: this book consists of reprints
>from older Scientific American magazines (1950s vintage?) and includes
>plans for an X-ray machine using a vibrator-type Ford spark coil for
>high-voltage AC and an old UX-201A tube as the X-ray gennie.

>Some older tubes of the 201's vintage used a magnesium getter flash
>coating on the inside of the tubes' envelopes that produces soft X-rays
>when bombarded by electrons. You tie all the pins together and use an

>external foil electrode wrapped around a portion of the tube's envelope,
>and then hook the commoned pins and the foil to opposite sides of the
>spark coil. The HV AC does the rest. Standard cautions and disclaimers
>apply-- don't X-ray your children, camera or small domestic animals.

>I'm working from memory on this one, so if anyone else out there recalls
>more details, please pass 'em along.

>73--
>Brad AA1IP

# 4947. FS: NOS Tubes and Microwave Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Kevin Harlan <bob@net.com>
Message-ID: <6606qo$t2i$1@ha1.rdc1.occa.home.com>
Source record: 88636

```
NOS Tubes, large quantities of each available.
-----------------------------------------
6AZ8 Philips, $3.25 each
JAN 12AT7WC, $4.50 each
JAN 5751 GE, $3.50 each
6186W (6AG5WA) philips, $.25 each
JAN 6922(E88CC, 6DJ8) Philips, $3.25 each
7062 (E180CC) Amperex,$4.00 each
3-500C, Chinese, carbon plate, $120.00 each

NOS Tubes, limited quantities available.
-----------------------------------------------------
(5) JAN 0B2WA, $2.50 each
(3) JAN 3B28, $20.00 each
(15) JAN 6AH6WA, $1.50 each
(1) JAN 6BM6, $50.00
(5) JAN 6CB6A, $1.50 each
(5) 6GM6, $2.50 each
(1) JAN 6L6WGB, $14.00
(1) 6LF6/6MH6, GE, $30.00
(5) 6SH7, $2.00 each
(2) JAN 6SJ7WGT, $5.00 each
(16) JAN 6SL7WGT, $5.00 each
(3) JAN 6U8A, $2.50 each
(2) 6X8, RCA, $2.00 each
(15) JAN 12AV7 $2.50 each
(1) JAN 807, RCA, $6.00
(15) JAN 5654W (6AK5W), $1.50 each
(13) JAN 5670W, $4.00 each
(3) JAN 5686, $5.00 each
(9) JAN 5687WB, $2.00 each
(3) JAN 5749W (6BA6W), $2.00 each
(1) JAN 5933WA (807W), $6.00
(3) JAN 6005W, $3.00 each
(6) JAN 6021W, $3.00 each
(4) JAN 6414A, $5.00 each
(1) JAN 6550A, $25.00
(3) JAN 6688 (12AU7A), $3.00 each
(2) JAN 8334, $1.50 each
(1) JAN 8532W, $4.00
(1) EL360, CEI, England, $4.00

USED, UNTESTED, quantities of each available,
Pulled from Surplus Equipment, sold "AS-IS"
-------------------------------------------
```

0A3, $1.00 each
0B2, $.75 each
0G3/85A2, $.75 each
2D21, $.50 each
5U4G, $2.00 each
5U4GB, $2.00 each
6A7, $2.00 each
6AH6, $0.25 each
6AL5, $0.25 each
6AN8A, $.75 each
6AS7G, $3.00 each
6AS7GA, $2.00 each
6AU6A, $0.40 each
6CD6GA, $1.75 each
6CL6, $.40 each
6D6, $1.25 each
6SH7, $.60 each
6SJ7, $.75 each
6SN7GTB, $2.00 each
6V6GTY, $2.50 each
6X4, $.40 each
7F8, $1.25 each
12AT7, $1.25 each
12AU6, $.50 each
12AU7A, $1.40 each
12AX7, $2.00 each
12AX7A, $2.00 each
12B4A, $.50 each
12SH7, $1.25 each
12SJ7, $.75 each
24A, $2.00 each
27, $1.50 each
39/44, $1.00 each
76, $3.00 each
5651A, $0.40 each
5726, $.25 each
5814A, $1.00 each
5915, $1.00 each
5963, (12AU7A), $1.40 each
5965, $.75 each
6080, $1.90 each
6189, (12AU7WA), $1.40 each
6189W, (12AU7), $1.40 each
8068, $5.00 each
8136, $0.40 each
HP-45B, $12.00 each
Electronic Components, used, untested, sold "as-is"
---
Amperite, Ballast, # 13-4, $2.00 each
Amperite, Time Delay relay, # 115NO30T, $2.50 each

100 KHz Crystal (inside tube envelope), Octal Base, $5.00 each

Microwave Components, used, untested, sold "as is".
---
Anzac RB-3-MOD, VSWR Bridge, 3 to 1500 MHz, 2 in stock, $35.00 each
HP774D, Dual Directional Coupler, 20 dB, 215 to 450 MHz, $50.00
HP8731A, Pin Diode Attenuator, .8 to 2.4 GHz, $25.00
HP8732A, Pin Diode Attenuator, 1.8 to 4.5 GHz, $35.00
HP8733B, Pin Diode Attenuator, 3.7 to 8.3 GHz, $35.00
HP8734A, Pin Diode Attenuator, 7.0 to 12.4 GHz, $35.00
HP X375A, Variable Attenuator, X Band, 0 to 20 dB, $35.00

Free Shipping in the USA on all of the above, on orders of
$25.00 or over. Orders under $25.00 add $4.00 for shipping & handling.

For shipping cost outside of USA , e-mail your address and items
you are interested in and we will provide a quotation.

All prices are in US $, No minimum order.

Prices valid until 12-10-97 or while supply lasts.
To reserve any of the above items, e-mail "sales@emodus.com"

Emodus, PO Box 6117, Laguna Niguel, CA, 92607-6117, USA

# 4948. Need a CTCSS tone circut

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: see@signaure.on.bottom
Message-ID: <3482d4a1.58084727@news>
Source record: 88637

Can someone help me with a CTCSS tone circuit? I know I can
get a kit for $25, but I only need one tone, and I'd rather build it
myself for a couple $. Can a 555 timer be used for this? Please
email me if you can help. Thanks a lot.

Ryan

ryan at poboxes dot com

# 4949. Help about filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: nicola priano <nipriano@mbox.vol.it>
Message-ID: <348314DD.39BE@mbox.vol.it>
Source record: 88638

Hi to all

At last ham fest I've foud these filetrs:

Plessey H-32-1870-L marked 1.0 MHz USB FILTER
Marconi H-32-1872-01
Marconi H-3218723-01
They are all mounted on the same board marked H-32-1895
Date around 1965

Any idea of the radio they were in and the specs ?

Thanks in advance and 73

Nick IK1YWF

# 4950. Re: Ferrite Rod LOOPSTICK RX Ant at HF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34823c66.421611879@news.erols.com>
Source record: 88717

On Sun, 30 Nov 1997 13:33:24 -0500, "P. Singh"
<singhpk@AT.exit109.AT.com> wrote:

>Hello guys,
>
>Does any one have some experience with ferrite ROD LOOPSTICK
>antenna at HF frequencies in the range of 3.5 MHZ to 10MHZ.
>
>It seems that they can works well enough if the following
>conditions are satisfied:-
>
>1. The ROD is of sufficiently high quality at the frequency involved
>One out of three old Ferrite Rods worked well.
>2. The rod is about 7-8 inches long
>3. A J-FET is used as source follower to match the impedance to the
>input of the radio.
>
>
>I think that some people have done some work on this , I think in
>elektor magazine in 1980's or so. If some one knows more about
>this topic please let me know.
>
>73
>
>P. Singh
>
>(My Reply address is <singhpk AT exit109.com >)

P: I think Doug DeMaw did an article on just this subject for CQ
magazine during the last few years. I will see if I can dig it up
for you. As I recall the article contained info on how to salvage the
rods from cheap little broadcast band radios.

73 de Bill N2CQR

# 4951. Re: HELP! Anyone Have Info On 6J56A Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.00000158.0034dab0@gto.gto.net.om>
Source record: 88718

They are probably 6JS6A tubes.

Hi,

6JS6A's were originally TV horizontal sweep tubes and were pushed into service as medium power linear amplifiers a number of years ago. There is a later version, the 6JS6C which I imagine is a drop-in replacement.

Cheers - Joe, G3LLV

# 4952. Re: Butler Oscillator with FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-01 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <348287CD.3B88@mwt.net>
Source record: 88719

OZ3TRO wrote:
>
> I am at the moment working an a 2 meter project and i need a reliable
> xtal osc on 48 MHz
>
> I read most of the ARRL handbook and came over a socalled
> Butler-oscillator, but it used NPN-transistors.
>
> Does anyone have a "drawing" of a Butler-oscllator with FET's?
>
> Vy 73 De OZ3TRO
>
> (Let the fingers do the talking try a CW QSO..... or write an EMAIL!)

According to my RSGB VHF/UHF Manual, it appears a FET may be used directly in place of the bipolar oscillator transistor and the second stage must be a FET. This is on page 4.14 in the fourth edition book (1983). Hope this helps.
Scott (N0EDV)

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

amended 8-29-97: Now after feeling the "Need for Speed", building an RV-4!
No, the Super Chief is NOT for sale :)

# 4953. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: bfayette@aol.com
Message-ID: <19971202031901.WAA07973@ladder02.news.aol.com>
Source record: 88639

>At your public library, look for an early edition of a book entitled,
>"The Amateur Scientist", by C. L. Stong: this book consists of reprints
>from older Scientific American magazines (1950s vintage?) and includes
>plans for an X-ray machine using a vibrator-type Ford spark coil for
>high-voltage AC and an old UX-201A tube as the X-ray gennie.
>
>

I saw this article posted on the web last spring. I don't remember where, but I was looking for info on Tesla coils, There is actually quite of bit of info on amateur X-Rays on the web. Get on Alta Vista and type "amateur xray" and see what comes up.

Brad

# 4954. Re: MFJ Hi-Q Loop Antenna Queries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: mtnclimb@aol.com
Message-ID: <19971202013100.UAA25762@ladder01.news.aol.com>
Source record: 88640

Howdy,

I am currently using an MFJ-1788, the 40 to 15 meter version. I am not overly impressed with its performance, but ate the same time I can't complain. The tuning unit is wonderful. My problem is I live in a apt. complex, that will not allow any type of antenna sticking out the windows or anything. So I use my MFJ loop by setting it up in the vertical position on a kitchen chair. I have found that if I place the chair smack in the midddle of my living room and rotate the antenna so that the null spot is towards my radio, I can usually tune it to about 1.5 : 1 or so. I run about 10 to 75 watts, depending on which neighbors are home. I have made some successfull QSOs with it, I get real good luck on 20 meters, but 40 and 30 take a bit of patience.

Anyhow, hope this helped. Good luck es 73s.

de aa7yq,
Kevin Ames

## 4955. Website moved

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: REX EMERSON <emerson5@lightspeed.net>
Message-ID: <01bcff2d$9a82b600$18de1bd1@emerson5.lightspeed.net>
Source record: 88641

We moved our amateur radio website;
http://userzweb.lightspeed.net/~emerson

# 4956. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <34842b87.13023467@news.crosslink.net>
Source record: 88642

On Mon, 1 Dec 1997 23:00:47 GMT, stras@spark16.ecf (Lukas Stras) wrote:
>Actually, IIRC (I don't have my Sedra&Smith with me right now), the
>y-parameters relate the voltages applied to a two-port network to the
>currents.

I am not familiar with the term "IIRC" nor with the works of Sedra & Smith. Perhaps this would be an appropriate place, however, for a reference to the works of Philip Geffe, with whom I am more conversant. His book "Simplified Modern Filter Design" (John F. Rider, Publisher) has some relevant material on pp 30-35. He discusses tapped coils in his discussion of bandpass filter design. Of course, his entire approach is slanted to the design of filters and not the subject of tapped inductors. However, his approach sheds some interesting light on our discussion in the area of network equivalences. If you have problems finding a copy of that reference, I could copy the few pages involved and mail them to you, if you feel that they would be of great value.

In particular, I find his "T" and "PI" equivalent circuits of an ideal transformer of turns ration 1:N to be very interesting, useful, and easy to understand for someone not familiar with the practical circuitry. I would like to be able to convert the equiv. circuits and expressions into e-mail, but my abilities fail me.

I like the fact that his equivalent circuits are so easily checked for N= 1 and for N>>1. For N=1, the circuits are trivial. For N>>1, the transformer simply transforms the impedances according to N^2 as you uld expect. I like it when theory matches what you've always depended upon as truth.

I wish I had a page scanner, because the procedures for sending TIF and GIF files by e-mail seem to be working OK for files under a megabyte.

By the way, Geffe's book has a great, 17 p chapter on inductor design (but all of his data and examples are in the audio spectrum), and he also has an interesting 10 p chapter on measurement techniques (for filters) - so, it would be a good book to have if you're really into practical filter design.

>As one of my profs says: the purpose of a lecture isn't to impart the
>material to students, but rather as a way of the prof organizing his
>thoughts. I find this to be true: as a teaching assistant for a
>first-year course myself, I find myself remembering all the basic
>stuff that I thought I had forgotten, but that turns out to be quite

>useful.

I think your professor must have had "tongue in cheek", as we say.
When I taught EE at the US Naval Academy, I would never have
approached a lesson in that way. I always enjoyed teaching far more
than anything else that I've ever done, because it's the best way to
learn a subject and also because of the instant gratification in
seeing the students comprehend a concept for the first time.

73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4957. clipperton L info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: ernie <ernie@usaor.net>
Message-ID: <34843C3C.5B93@REMOVETHISusaor.net>
Source record: 88643
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for the mods to get my Dentron clipperton L amp. running on 10m. I saw one mod that removed the FL1 filter board, this will not work as it causes a very high VSWR between the radio and amp.

Is there anyone out there with the original mod info from Dentron ?

Thanks in advance. Ernie KE3VC

""" pull the REMOVETHIS from the E:mail address """

## 4958. clipperton L info. needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: ernie <ernie@REMOVETHISusaor.net>
Message-ID: <34844359.1475@REMOVETHISusaor.net>
Source record: 88644

I am looking for the mods to get my Dentron clipperton L amp. running on 10m. I saw one mod that removed the FL1 filter board, this will not work as it causes a very high VSWR between the radio and amp.

Is there anyone out there with the original mod info from Dentron ?

Thanks in advance. Ernie KE3VC

""" pull the REMOVETHIS from the E:mail address """

# 4959. Re: Mini-fluorescent RFI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: spammers@must.die.com
Message-ID: <wsandersEKKp35.KxG@netcom.com>
Source record: 88645

Not all are bad - I have a panasonic capsule that doesn't make any noise except on startup. You'll just have to "rent" some and test. Please post your results!!!!

I did the same with lamp dimmers from Wal-Mart - I found some GE models that are completely RF-quiet.

-wiley

# 4960. Hot Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: Powerless <pwentzel@minn.net>
Message-ID: <34845030.D25@minn.net>
Source record: 88646

I had a chance to try 10 meter cw during the CQWW contest and noticed something strange. While tuning up, my swr slowly crept up from 1:1 TO 2:1 -- then started coming back down. I thought it was the antenna or feedline, but saw the same thing on a dummy load. The only thing remaining in the short feedline was an Oak Bay Technologies LP-11p Low pass filter which I noticed was getting warm. The filter is rated at 1KW and I'm running about 500 watts. The filter is assembled with many rivets and not easily opened. The rig is an TS-830 /Ameritron AL80B. The filter is as cold as stone on all other bands. If any of you fellows have an idea what's going on, I'd sure like to hear from you.

73,
K0PW

# 4961. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: PsyTech@massey.ac.nz
Message-ID: <34846443.0@news.massey.ac.nz>
Source record: 88647

In article <NOSPAMpfriedr.70.00121F00@azstarnet.com>,
NOSPAMpfriedr@azstarnet.com says...
>
>Somewhere, I have a copy of the book you are referring to.

'The Scientific American Book of Projects for the Amatateur Scientist'
Great stuff!

The fellow who
>wrote the xray article started with one of the old time tubes, but progressed
>to having a local glassblower fabricate tubes of his own design for him.
>The power supply was an Oudin coil--similar in basic nature to a Tesla coil,

I have been using EHT rectifiers and beam triodes connected back to front
driven by an flyback tfmr + tripler. Drives a geiger counter mad two or
three metres away - I haven't tried exposing film yet, thats next on the
agenda. Not all the tubes can handle the EHT though, some are gassy and
break down internally, others only produce low x-ray flux.

Bye

Malcolm

# 4962. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: PsyTech@massey.ac.nz
Message-ID: <34846523.0@news.massey.ac.nz>
Source record: 88648

I
>At your public library, look for an early edition of a book entitled,
>"The Amateur Scientist", by C. L. Stong: this book consists of reprints
>from older Scientific American magazines (1950s vintage?) and includes
>plans for an X-ray machine using a vibrator-type Ford spark coil for
>high-voltage AC and an old UX-201A tube as the X-ray gennie.

Yup, great article. Someone has put it on the web. I haven't been using this method though as I have had success with eht tubes + flyback tfmr + tripler.

Thanks,

Malcolm

## 4963. kenwood computer interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: Steve Carniglia <steve@cds1.net>
Message-ID: <348472bd.0@neptune.cds1.net>
Source record: 88649

Has anybody had any success interfacing a Kenwood TS940 to a computer. We have had some difficulty using the interface in the ARRL handbook.

Any info would be appreciated...especially regarding the pinout to acc1

73
Steve

steve@cds1.net

# 4964. fs-Military Manuals!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19971202224800.RAA03232@ladder01.news.aol.com>
Source record: 88650

Hi Fellas;
Someone has got to need these, make an offer!

Hi Fellas:
I have these Military Manuals for SALE, but have no idea of thier values.
I would like to sell them as a set, Army, Navy and Air Force, total of three sets!
I am looking for best offer for each set and plese include shipping from LI, NY.
Army
TM 11-459 Instructions for learning Int. Morse Characters, june 1943.
TM 11-455 Radio Fundementals, july 17, 1941
TM 9-1575 WATCH's, wrist, pocket, stop & Clocks April 6, 1945
TM 11-666 Antennas & Radio Propagation, Feb. 1953
TM 11-4000 Troubleshooting and repair of radio equipment, Apr.1958
TM 11-662 Basic Theory & Application of Electron Tubes, Feb. 1952
TM 11-690 Basic Theory & applications of Transistors, March 1959
TM 11-668 FM xmtrs & rcvrs, Sept. 1952
TM 11-664 Theory & Use of Electronic Test Eq. Feb. 1952
TM 11-681 Electronic Fundementals(AC) Dec. 1951
TM 11-661 Electronic Fundementals (DC) June 1951
TM 11-665 CW & AM Rcvrs and Xmtrs, Sept. 1952
NAVY
Navpers 10188 Electronic Technician 3, 1954
Navpers 10087 Basic Electronics, 1955
Navpers 10784 Principles of Guided Missles & Nuclear Weapons 1959 NEAT BOOK!
AIR FORCE
AF Manual 100-5 Radio Rcvrs 1961
AF Manual 101-8 Fundementals of Electronics 1963
AF Manual 100-6 Radio Xmtrs Nov. 1958
AF Manual 100-5 Radio Rcvrs 1958
AF Manual 100-6 Radio Xmtrs 1957
AF Manual 52-19 Antenna Systems 1953

Abe & William Marcus "Elements of Radio", Hardbound 3rd Edition, 1954.

Thanks es 73....Rich WA2RQY (1961)
RLUCCH2098@aol.com
"Keep those heaters on"

# 4965. Re: kenwood computer interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <348490B9.5350@onramp.net>
Source record: 88651

Steve Carniglia wrote:
>
> Has anybody had any success interfacing a Kenwood TS940 to a computer. We
> have had some difficulty using the interface in the ARRL handbook.
>
> Any info would be appreciated...especially regarding the pinout to acc1
>
> 73
> Steve
>
> steve@cds1.net

Have you installed the internal interface inside the radio???
--
Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

# 4966. Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: n4ij@aol.com
Message-ID: <19971202231701.SAA04992@ladder02.news.aol.com>
Source record: 88652

I wonder if there is a compilation of various commercialy available crystal filters? I am looking for ones that are usable for 9mhz IF for homebrewing. I suspect that most (like Yaesu, Kenwood) are other than 9mhz. Who makes these jobbies now days?

Thanks, Doug, N4IJ

# 4967. Radio Shack HT-202 For Sale + extras

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: mixman@wwisp.com
Message-ID: <34889567.33610898@news.wwisp.com>
Source record: 88653

Radio Shack HT-202 (Excelent! Contition) not even a year old
External Mic
2 Batteries (1 NiCad, 1 Alkaline)
30 Amp (+ cables)
Manual (for the 202)
2 Antennas (1 Standard Rubberduck, 1 1/4wave Rubberduck)
$195.00 for all!

kf4pfxwx@wwisp.com.com with out the extra .com (spammers)

# 4968. Re: Tapped Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: stras@skule.ecf
Message-ID: <wkgoh2zmk3z.fsf@skule.ecf>
Source record: 88654

In article <34842b87.13023467@news.crosslink.net> nobody@crosslink.net (Robert Lay) writes:

I am not familiar with the term "IIRC" nor with the works of Sedra &

"If I Remember Correctly".

Smith. Perhaps this would be an appropriate place, however, for a

Sedra and Smit, "Microelectronic Circuits", 3rd. ed. Oxford University Press, ISBN 0-19-510370-X

This is *the* basic and intermediate electronics textbook here at UofT. Of all the textbooks I've looked at, I like this one the best. While the book doesn't have quite as many applied examples as, say, Art of Electronics, the explanation of the theory is unsurpassed.

approached a lesson in that way. I always enjoyed teaching far more than anything else that I've ever done, because it's the best way to learn a subject and also because of the instant gratification in

Perhaps this is what he meant -- I guess approaching a lecture disorganized and unprepared is not a good thing, especially for the students, but the act of preparing for the lecture -- creating course notes, problem sets, and such -- appears to be a great technique for organizing one's thoughts. And who knows -- maybe looking at the basic equations and concepts can stimulate the brain in a new way, and one can approach an advanced problem from a new direction.

But this is straying far from the original discussion. Thanks for the help you've given me on the inductor front, Robert. I'll have a look at some of the books that you've recommeded after exams.

Luke Stras
VA3LNS

# 4969. Re: PC- monitor 2 mac? /SM0UGT -sweden

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: Nanno van Haaften <vhaaften@ehv.sc.philips.com>
Message-ID: <3483B72C.7894@ehv.sc.philips.com>
Source record: 88655

FREDRIK ANDSTR&#65533;M wrote:
>
>
> Like to build an pc-monitor adapter for MAC.. So.. Is there anyone here
> who have an idea about this subject?
>
> /Regards marcel
>
It's rather simple. The basic cable should be:

```
APPLE 15p sub-D VGA 15p HD-subD
red gnd 1 6
red video 2 1
green video 5 2
green gnd 6 7
blue video 9 3
sync gnd 11 4
V sync 12 14
blue gnd 13 8
sync gnd 14 10
H sync 15 13

SENSE
sense 0 4 4 (sync gnd)
sense 1 7 4 (sync gnd)
sense 2 10 4 (sync gnd)

The more difficult part are the sense pins that are used to select the
resolution and mode.
E.g.
640 x 480 VGA connect pin 7-10, don't ground the sense pins at all
1152 x 870 all sense pins grounded

In general with multiscan codes pin 4 is always grounded. 7 and 10 are
connected with a wire or a diode.
Wire: 'code 3' (multi 13")
Diode: K-7 and A-10 'code 35' (multi 21")
Diode: A-10 and K-7 'code 11' (multi 17")

--
Best regards,
-----------------------------------------------------------------
Nanno van Haaften
Philips Semiconductors
System Manager
```

Marketing & Sales Communications

Building BE042b FAX: +31 40 2724825 (PVPN +60 24825)
P.O. Box 218 Voice: +31 40 2723251 (PVPN +60 23251)
5600 MD Eindhoven Seri: vhaaften@marcom
The Netherlands Internet: Nanno.vanHaaften@ehv.sc.philips.com

---

Private: vhaaften@iaehv.nl
pe1olq@amsat.org

---

According to the Manual: 'Use a pentium PC with W95 or better'
So I bought a PowerPC Macintosh with MacOS!

# 4970. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <3484590e.0@news.imaxx.net>
Source record: 88656

>>> Anyone have a recommendation for where to find plans for a good
>>>transverter?
>>>Jim Smith
>>>KF6IEG
>
>>Do you think it would have been a good idea to say what band it was for?
>>Just a thought!
>>
>>73 Simon

>Och, DUH!
>Is this TYPICAL of the great intellect of microwave enthusiasts?
>When he said PLANS, he means he wamts to build one!
>No BRAND involved!
>
>Long live homebrewing!
>
>Bry, G3XLQ

Bry,
Read it again. He said "what band?"
(No Flame)

Chuck KD9JQ

# 4971. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3484960f.12297963@news.buller.se>
Source record: 88657
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send _AND_ receive serial data over the power lines. For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

# 4972. Schematic? NEC VCR IF Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <662ga3$qo7@bgtnsc01.worldnet.att.net>
Source record: 88658

Am rebuilding an ATV repeater and need to replace the 45 MHz
IF/video/audio module. Have module from VCR: Model NEC N915U.
PCB is: Tuner/IF NHE-86 72378782 PWV-878
Can anyone email a schematic of this module? Looks like exactly what I
need to use, but have no documentation.
Thanks, Woody
--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the
Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing
stuff.
http://www.geocities.com/capecanaveral/3722
.

# 4973. Re: Help with HP851B filter alignment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-02 00:00:00 UTC
From: Giovanni Mazzola <it9xxs@exit.it>
Message-ID: <660jet$374@everest.vol.it>
Source record: 88659

>I'd like to hear from anyone who has successfully aligned the 20 MHz IF...

If you hear about it, please forward it.

On the while, have a look at my home page (there's something about the '851)

Giovanni, IT9XXS

HomePage: http://www.qsl.net/it9xxs
E-Mail: it9xxs@exit.it

# 4974. Re: Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: Laura HALLIDAY <ve7ldh@direct.ca>
Message-ID: <3485A6DD.7C7C39DE@direct.ca>
Source record: 88570

How badly do you want a 9 MHz IF? It's easy to find large quantities - cheap - of crystals at surplus places. Even if a bag of (say...) 200 3.6864 MHz crystals only produces a handful worth making a filter out of, for 5 bucks, who cares?

You'll know you're really into this when you start lusting after sweep generators. :-)

...laura

# 4975. FS: EQUIPMENT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: JP <restar@idir.net>
Message-ID: <01bd0021$914ff8a0$6af3efcf@restar.idir.net>
Source record: 88571
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
HAM RADIOS
FOR SALE
FT 757GXII= $900
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net
```

# 4976. Wanted info on duplexers QST ARTICLES ect any info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: tandt@townsqr.com
Message-ID: <881166378.31969@dejanews.com>
Source record: 88572

Wanted any info on homebrewing duplexers QST articles ect
has anyone tried this. homebrewed 6 cavity in arrl handbook
ect thxs Terry N0WJH

--------------------==== Posted via Deja News ====-----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 4977. WANTED... LF Antenna project, maybe with amp or regen circuit !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: Jacqui Swenson <Jacqui@realestateady.com>
Message-ID: <3486226A.741CFAA3@realestateady.com>
Source record: 88573

Besides Ham Radio I enjoy being a SWL and would like to get into some
low frequency (150-500kc) listening. Anyone have any nice home-brew
projects for this band ? Maybe a directional loop with or without an
amp or regenerative circuit to increase gain and sensitivity ?
Thanks for any help in advance ! Happy holidays ! Jacqui, N1DVE

# 4978. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: bry@NOSPAMmnsinc.com
Message-ID: <3484b2af.5631062@news.mnsinc.com>
Source record: 88660

On Tue, 25 Nov 1997 19:18:10 +0000, Simon Lewis
<pacsat@pacsat.demon.co.uk> wrote:

><jimsmith@2xtreme.net> writes
>> Anyone have a recommendation for where to find plans for a good
>>transverter?
>>Jim Smith
>>KF6IEG

>Do you think it would have been a good idea to say what band it was for?
>Just a thought!
>
>73 Simon
>
>+---------------------------------------------------------------------+
>| Simon Lewis GM4PLM Editor - EMN |
>| European Microwave News - Supporting Microwave Radio Across Europe |
>| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |

Och, DUH!
Is this TYPICAL of the great intellect of microwave enthusiasts?
When he said PLANS, he means he wamts to build one!
No BRAND involved!

Long live homebrewing!

Bry, G3XLQ

# 4979. Hot mod site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: PE1KHP <pe1khp@wxs.nl>
Message-ID: <34851E90.7D16@wxs.nl>
Source record: 88661

Hi all,

See the mods site of radioamateurs from Apeldoorn.
With Kenwood, Alinco and a lot more.

Cuagn, Adriaan
.oooO
( ) Oooo. VHF DX AmateurRadio Station
---\ (----( )--
_) ) / PE1KHP JO22XE
(_/
---
Ham site Apeldoorn http://home.wxs.nl/~adpe1khp/home.htm
Veron Afdeling Apeldoorn http://home.wxs.nl/~adpe1khp/v05.htm
VERON VHF-UHF commissie http://home.wxs.nl/~adpe1khp/vhf.htm
---
Ik wou dat ik een vulkaan was. Dan lag ik in de zon te roken.
En dan zou men zeggen: "Kijk, hij werkt!"
---

# 4980. Re: Hot Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: kovar <k0var@inav.net>
Message-ID: <01bcff81$df416440$add0a0cd@kovar.inav.net>
Source record: 88662

This if a fun one HA!

I would call Oak Bay!

If it is out of waranty and you want better understanding here is a idea!

Drill out the rivots and find a can of freeze mist/ cooling spray.
You have a component that is changing it's value as it increases in heat.
Yes! it only heats up on the highest frequency used, 10 meters.
Reactance is a hard thing to understand at times.
I wonder if a Capacitor is a gremlin here.
Hey! Make sure you remove this filter and run same test with it removed
first.
The Amp or rig can do the same dance.
Interested in your findings?

Jack
Powerless <pwentzel@minn.net> wrote in article <34845030.D25@minn.net>...
> I had a chance to try 10 meter cw during the CQWW contest and noticed
> something strange. While tuning up, my swr slowly crept up from 1:1 TO
> 2:1 -- then started coming back down. I thought it was the antenna or
> feedline, but saw the same thing on a dummy load. The only thing
> remaining in the short feedline was an Oak Bay Technologies LP-11p Low
> pass filter which I noticed was getting warm. The filter is rated at
> 1KW and I'm running about 500 watts. The filter is assembled with many
> rivets and not easily opened. The rig is an TS-830 /Ameritron AL80B.
> The filter is as cold as stone on all other bands. If any of you fellows
> have an idea what's going on, I'd sure like to hear from you.
>
> 73,
> K0PW
>

# 4981. Re: Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3484f05c.598752035@news.erols.com>
Source record: 88663

On 2 Dec 1997 23:17:01 GMT, n4ij@aol.com (N4ij) wrote:

>I wonder if there is a compilation of various commercialy available
>crystal filters? I am looking for ones that are usable for 9mhz IF
>for homebrewing. I suspect that most (like Yaesu, Kenwood) are other
>than 9mhz. Who makes these jobbies now days?
>
>Thanks, Doug, N4IJ
>
>
Doug: Don't do it OM! If you're going to Homebrew, homebrew the filter too! I found that this was one of the most fun parts of my recent receiver project. I too was briefly tempted by a commecially made filter, but I'm glad I rolled my own. Learned a lot too.

I simplified the process described in the W7ZOI and W1FB articles by not getting too hung up on determining the precise electrical characteristics of my crystals. I just decided that my color burst crystals were pretty much similar to those used by DeMaw. I was careful to make sure that all the rocks in the filter were very close in frequency. It all worked out well.

One other option: Order the rocks from JAN crystal, and ask them to provide the data you need to do the calculations described in the HB crystal articles.

Good luck, 73, Bill N2CQR

# 4982. Re: kenwood computer interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <3484a2a9.18752126@news.crosslink.net>
Source record: 88664

On Tue, 2 Dec 1997 12:39:19 -0800, "Steve Carniglia" <steve@cds1.net>
wrote:

>Has anybody had any success interfacing a Kenwood TS940 to a computer. We
>have had some difficulty using the interface in the ARRL handbook.
>
>Any info would be appreciated...especially regarding the pinout to acc1

Hello Steve,

I have the TS-450 rather than the TS-940, but I would be very
surprised if there were any differences in the 6 pin connector ACC-1.

In fact, the User's Data for the IF-232C, itself, says that it is
designed for transceivers capable of computer control, such as the
TS-940S and the TS-811/711 series.

I have used the Kenwood IF-232C External Control Interface with it,
and it works fine.

Here's the pinout per my data sheets:

1 Signal Ground
2 Transmit Data (Output) (TXD)
3 Receive Data (Input) (RXD)
4 Transmit Enable (Input) (CTS)
5 Receive enable (Output) (RTS)
6 N/C
Note that the meaning of "Transmit" and "Output" refer to signals from
the transceiver to the PC.

The data sheet also indicates that whereas the PC's serial port is
RS-232C (-12v to + 12v), the Transceiver uses TTL (0 to +5). I guess
that explains why it is you can't just connect the two ports directly
together - Hi.

One other point of interest. As is the case with almost all RS-232
devices, remember that the connection between the Transceiver and the
PC MUST connect Transmit Data to Receive Data and vice versa.
Likewise the CTS/RTS lines are also cross connected. Well, that's
consistent, isn't it?

Don't forget which pins are which on the PC side. Depending on whether
you have a 9 pin or 25 pin connector, as follows:

Signal 9pin 25pin

TXD 3 2
RXD 2 3
CTS 8 5
RTS 7 4

GND 5 7

I should point out that the IF-232C unit uses a 4 circuit Opto-isolator chip, a power regulator chip, and two chips for line driver/conversion functions. It does a great job with a cable length of 100 feet, so I'm satisfied that it is noise free. I can't remember for sure what software I used but there were two shareware programs that work fine, and I got them from the QRZ CD-ROM.

I couldn't find any reference to such a controller in my 1994 ARRL Handbook, so I can't comment on that.

If there's anything else you need, don't be bashful.

73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 4983. Re: Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971203024000.VAA02955@ladder01.news.aol.com>
Source record: 88665

>
>I wonder if there is a compilation of various commercialy available
>crystal filters?

Not that I know of, most of the manufacturers (Radio not filter) don't want you to know how really poor they are. Hi-ripple in the passband, high insertion loss, and really lousy intermod characteristics. Ultimate rejection poor to fair.

I am looking for ones that are usable for 9mhz IF
>for homebrewing.

You can build one far better than you can purchase...at any price.

I suspect that most (like Yaesu, Kenwood) are other
>than 9mhz. Who makes these jobbies now days?

Thanks, Doug, N4IJ

Mostly Japanese folks, and everyone in Phoenix AZ.
>
W4ZCB

# 4984. Crystal Grinding and Frequency Standards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: Mike <bad@email.adr>
Message-ID: <34852F38.1273@email.adr>
Source record: 88666

Hi Gang,

A short while ago there was a thread on grinding your own crystals. It appears to have expired off my newsserver, but I just stumbled across an excellent site on frequency standards, crystal processing, and the history of FT-243 and FT-241 crystals during WW2.

The main site is:

http://bul.eecs.umich.edu/uffc/uffc_fc.html

A wonderful page on crystal manufacturing and the problems caused by lapping and polishing is at:

http://bul.eecs.umich.edu/uffc/fc_history/bottom.html

There is a lot of information in this article (50 years old!) Some references were made in various postings that touched on some of it, but you might find it interesting reading if you plan to do it yourself.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 4985. Pactor MBO & Gateway list

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: Albert AERTS <albertaerts@nospam.innet.be>
Message-ID: <34850A64.AD0EA8F2@nospam.innet.be>
Source record: 88667
Cross-posted to: nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
The " Pactor MBO & Gateway list " which is accessible from
the
" ON6TS Fact Sheet " has been UPDATED.

http://www.club.innet.be/~pub01234

73's de Albert

--
Amateur Radio Callsign: ON6TS
HF Pactor: 14076.5, 18106.5 or 21076.5 mark carrier
Email: albertaerts@innet.be
URL: http://www.club.innet.be/~pub01234
```

# 4986. What if I build a balcony antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: Carlo Consoli <consoli@info.utovrm.it>
Message-ID: <34858A2F.4959@info.utovrm.it>
Source record: 88668

Hi everybody,
I am going to change home, and I have some urge to build up my radio shack a.s.a.p.
Before drilling everything up to the roof, to set up antennas, does anyone of you know about an antenna suitable for the balcony ?
I have a 7mt long balcony, what if I try to build an antenna for it ?
Many thanks,
IK0YGJ, Carlo

# 4987. Re: Need a CTCSS tone circut

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-03 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <9ZyPHIAmTah0EwnG@falstaf.demon.co.uk>
Source record: 88669

In article <3482d4a1.58084727@news>, Ryan <see@signaure.on.bottom>
writes
>Can someone help me with a CTCSS tone circuit? I know I can
>get a kit for $25, but I only need one tone, and I'd rather build it
>myself for a couple $. Can a 555 timer be used for this? Please
>email me if you can help. Thanks a lot.
>
>Ryan
>
>ryan at poboxes dot com
IF someone replies to this then could they EMail me as well?.

Regards

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

# 4988. HP Rack mounting "ears".

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971204004600.TAA17810@ladder02.news.aol.com>
Source record: 88574

Need a pair of 7 inch rack ears for an HP 8405, and a pair of 10.5 inchers for an HP-312.

W4ZCB

# 4989. FS: Motorola RNet 9600 Telemetry Radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: rnelson@se-iowa.net
Message-ID: <3486213a.697108@news.lisco.com>
Source record: 88575

I have 5 radio/modems for sale. They are on 464.550 and have 4 watts
output.
Radio and DataRadio modem all in one small case.
BNC antenna port and DB-9 serial port.
3 units in cases, 2 without.
Service manual included.
200.00 each OBO
for all 5 units.

# 4990. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3486CBC5.163E@trader.com>
Source record: 88576

> >C.L. Stong's "The Scientific American Book of Projects for the Amateur
> Anyone know where we can get copies of this masterpiece?

My local library has 1 copy. It's old and falling apart. It's also out of print.
Who has a scanner?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

## 4991. Voice syn chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: PAW <73457.650@CompuServe.COM>
Message-ID: <eLuhv4LA9GA.198@ntawwabp.compuserve.com>
Source record: 88577

Looking for infor on voice synth chip and scematics for project
to make a talking volt meter.

--
PAW

# 4992. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <rsYudDAj4ph0Ew32@lfheller.demon.co.uk>
Source record: 88578

In article <3486d1b1.721972263@news.erols.com>, Bill Meara
<wmeara@erols.com> writes

[deleted]

>Anyone know where we can get copies of this masterpiece? I went to
>Amazon.com. They listed a version of the book from the mid-80's but
>I fear that this edition may be a watered down version of the book we
>remember (tamed down by the influence of the nanny-state). They were
>out of stock, but I put in an order anyway.

I remember many years ago seeing a design for a DIY dye laser in the
mag. It was *very* dangerous in terms of the power output, and I think
that the dye used was carcinogenic.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 4993. Re: Need a CTCSS tone circut

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3480d0e9.560809915@news.atl.bellsouth.net>
Source record: 88579

On Mon, 01 Dec 1997 15:17:24 GMT, see@signaure.on.bottom (Ryan) wrote:
>Can someone help me with a CTCSS tone circuit? I know I can
>get a kit for $25, but I only need one tone, and I'd rather build it
>myself for a couple $. Can a 555 timer be used for this? Please
>email me if you can help. Thanks a lot.

The frequency tolerance for CTCSS is very tight. I very much doubt
that you can get a free running 555 to stay on frequency closely
enough to work for long. There are purpose built chips for CTCSS,
which is clearly the best way to go, but you could use a chain of
divider chips from a stable reference (crystal or ceramic resonator)
to generate the tone frequency. Clean up the divider output with an
opamp and RC filter to turn it back into a sinewave. Or you could locate
one of the old vibrating reed encoders and adapt that to your project.
That should be virtually free.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 4994. Re: Regen Receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <666nno$3n@hpcvsnz.cv.hp.com>
Source record: 88580

: On 24 Nov 97 15:41:38 GMT, aswNS@hamp.hampshire.edu (Al Woodhull) wrote:
: >On Sat, 15 Nov 1997 15:46:13 GMT Gary Coffman (ke4zv@bellsouth.net)
: >wrote in rec.radio.amateur.homebrew:
: >
: >: This is an interesting thought. It got me to musing about the ways we
: >: look at feedback in amplifiers. When active devices were rare, expensive,
: >: and marginal in performance, we used positive feedback to get the most
: >: gain out of them we could. Of course positive feedback makes a circuit
: >...
: >: When active devices became more common, cheaper, and somewhat more
: >: capable, we turned our emphasis to negative feedback to try to tame and
: >: linearize them. A negative feedback system can be designed to be
: >
: >That's an interesting observation, Gary. How about combining the two
: >approaches, using a negative feedback circuit to control the level of
: >positive feedback? It seems to me that with today's technology we
: >could design a regenerative detector that was automatically kept just
: >below or above the threshold of oscillation, as required for the mode
: >we wanted to listen to, with no critical adjustments needed in either
: >production or use. Have you heard of any such design? I can't be the
: >first to have thought of it.

Well, you could look at quality analog sinewave oscillators. They
typically use an auto-adjusting (e.g., a light bulb filament) negative
feedback path to balance a positive feedback path, to keep a stable
oscillation level which doesn't drive the active devices to clipping.
Careful construction and adjustment can get you to a few ppm distortion
levels...maybe lower if you really work at it.

(My apologies if the headers make it look like this is a reply to something
Gary C. posted; I only used his posting because I didn't find the original
from Al.)

--
Cheers,
Tom
tomb@lsid.hp.com

# 4995. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Dan Schultz <schultz@nospam.cddis.gsfc.nasa.gov>
Message-ID: <34866900.1E13@nospam.cddis.gsfc.nasa.gov>
Source record: 88581

Brad Thompson wrote:
>
> Mike wrote:
> >
> > Malcolm Loudon wrote:
> > >
> > > Hi,
> >
> > > I have been experimenting using EHT recrifiers/beam triodes as X-Ray
> > > sources and a 20keV geiger counter as a detector. I was wondering if
> > > there are any other amateur X-Ray enthusiasts (loonies...) out
> > > there who would like to swap info and experience with me.
> > > My Email address is PsyTech@massey.ac.nz
>
> <snip>
>
> Hello--
>
> At your public library, look for an early edition of a book entitled,
> "The Amateur Scientist", by C. L. Stong: this book consists of reprints
> from older Scientific American magazines (1950s vintage?) and includes
> plans for an X-ray machine using a vibrator-type Ford spark coil for
> high-voltage AC and an old UX-201A tube as the X-ray gennie.
>

C.L. Stong's "The Scientific American Book of Projects for the Amateur Scientist" is a compilation of articles that appeared in the "Amateur Scientist" column in Scientific American between the early 50's and the mid 70's when Stong passed away. The present day "Amateur Scientist" column is but a shadow of it's old self under Stong (in today's world, the magazine's lawyers would probably have a fit if it were to publish such articles). An index of these articles can be found at:
http://web2.thesphere.com/SAS/SciAm/Index/52-index.html
According to the index, an X-ray machine was published in July 1956.

A university or a big city public library should have bound issues of Scientific American in the stacks. My favorite article was the Helium-Neon laser published in September 1964, only four years after the first lasers were made in research labs. I used to drool over such articles along with a few nerd buddies in high school, but the high vacuum and glass blowing techniques were a bit beyond our technical means at the time (this was long before you could buy a He-Ne laser tube for $20 at any hamfest). You'll also want to look up the proton accelerator (August 1971, handles deuterons also but watch out for those stray neutrons that break loose!), electron microscopes (September 1973), mass spectrometer

(July 1970), and CO2 laser (September 1971). Many of the laser articles were reprinted in the book "Light and its Uses" from Scientific American.

A more modern resource for the mad scientist is a publication called "The Bell Jar", see http://www.tiac.net/users/shansen/belljar/index.htm

Their web site has an article about X-ray machines at:
http://www.tiac.net/users/shansen/belljar/xray.htm
Be sure to read the section on radiation dosimetry.

Dan Schultz N8FGV

# 4996. Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Chris Schmierer <jedichris@usa.net>
Message-ID: <3486E611.7BB9@usa.net>
Source record: 88582

Hi...
Just wondering if anyone has had any experience modifying a 2 meter radio, either a mobile or HT, so that it can transmit outside the 144-148 range. I know a lot of them will recieve outside the ham band, into to Public Safety band. I'm just curious to know if anyone has hacked the firmware on any of these so that they can transmit as well.

I'm an EMT with a local ambulance company, and I could very easily just go out and buy a pro-band radio, have it programmed our local fire-net and tac frequencys, and be completely within the law. The prob is that I'd like to have one that's console programmable; so at fire camp I can just punch in whatever frequency I need instead of trying to find someone who can program it. The convenience of direct entry of frequencys, CTCSS and DTMF tones, and all the features that are commonplace on Ham radios that they want to charge you an arm, a leg, and your firstborn for in a genuine pro-band radio is just what I'm looking for. I'm probably sure that the act of mod'ing a 2 meter and using it is probably walking the line of the law, but I figure that as long as I have authorization to transmit on the frequencys involved there shouldn't be much of a problem. All else fails, I can just go to the dispatch center a written note from the police and fire chiefs so I have something to keep with the radio (just to cover my butt legally).

I'm hoping that I can do this with maybe a rat-shack mobile; ya know, one of the 25 watt'ers that's you can car-mount.

Please, if anyone has any info on this, please let me know.
JediChris
---
Chris Schmierer
EMT, Lifeguard, Computer Tech, Radio Weenie, etc....
jedichris@usa.net

# 4997. Simple question re: HP 141T analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3486D96A.3093@pop.removethistomailme.net>
Source record: 88583

Just got one, no manuals yet. (Somewhat embarassing) question: how does one remove the pair of plugin modules from the 141T mainframe?

There are no handles in sight, and the sliding lever between the IF and RF modules doesn't appear to want to budge while the modules are in the mainframe. The modules don't want to simply pull out of the mainframe cabinet, the way they went in.

thanks for suggestions!

-- jm de KE5FX

---
Note: My E-mail address has been altered to avoid spam
---

# 4998. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3486d1b1.721972263@news.erols.com>
Source record: 88584

On Thu, 04 Dec 1997 08:25:36 +0000, Dan Schultz
<schultz@nospam.cddis.gsfc.nasa.gov> wrote:

>C.L. Stong's "The Scientific American Book of Projects for the Amateur
>Scientist" is a compilation of articles that appeared in the "Amateur
>Scientist" column in Scientific American between the early 50's and the
>mid 70's when Stong passed away. The present day "Amateur Scientist"
>column is but a shadow of it's old self under Stong (in today's world,
>the magazine's lawyers would probably have a fit if it were to publish
>such articles). An index of these articles can be found at:
>http://web2.thesphere.com/SAS/SciAm/Index/52-index.html
>According to the index, an X-ray machine was published in July 1956.

Wow, I remember that book! That's one of those volumes that I really
regret having lost hold of. Remember the Homebrew rocket article?
(As I recall it was pretty much a pipe bomb with a hole in the
bottom). If I had found a source for dry ice I might have actually
built the cloud chamber. And I probably missed out on making a
fortune as a hardware hacker by failing to experiment with the
relay-based computer project.

Anyone know where we can get copies of this masterpiece? I went to
Amazon.com. They listed a version of the book from the mid-80's but
I fear that this edition may be a watered down version of the book we
remember (tamed down by the influence of the nanny-state). They were
out of stock, but I put in an order anyway.

Will check out the index.

73 Bill N2CQR (former teenage mad scientist)

# 4999. Re: Amateur X-Rays (DX on the 100pm band...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3486EB99.78AD@pop.removethistomailme.net>
Source record: 88585

Leon Heller wrote:
>
> It was *very* dangerous in terms of the power output, and I think
> that the dye used was carcinogenic.

Sounds like it had all the key ingredients of a great project!

Lacking any cooperation from the Naderized magazine that once was
Scientific American, it sounds like someone needs to hit up a university
library and transfer the microfiche of all of Stong's columns to
bootleggable .PDF files.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 5000. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3480f365.569639905@news.atl.bellsouth.net>
Source record: 88586

On Thu, 04 Dec 1997 09:19:13 -0800, Chris Schmierer <jedichris@usa.net> wrote:
>I'm an EMT with a local ambulance company, and I could very easily just
>go out and buy a pro-band radio, have it programmed our local fire-net
>and tac frequencys, and be completely within the law. The prob is that
>I'd like to have one that's console programmable; so at fire camp I can
>just punch in whatever frequency I need instead of trying to find
>someone who can program it. The convenience of direct entry of
>frequencys, CTCSS and DTMF tones, and all the features that are
>commonplace on Ham radios that they want to charge you an arm, a leg,
>and your firstborn for in a genuine pro-band radio is just what I'm
>looking for. I'm probably sure that the act of mod'ing a 2 meter and
>using it is probably walking the line of the law, but I figure that as
>long as I have authorization to transmit on the frequencys involved
>there shouldn't be much of a problem. All else fails, I can just go to
>the dispatch center a written note from the police and fire chiefs so I
>have something to keep with the radio (just to cover my butt legally).

That will not "cover your butt legally". Local police and fire authorities
have no jurisdiction to waive federal law. And if they acknowledge that
they know you are operating illegally, they put their department's license
in jeopardy. Do you really want to be responsible for getting your
department's license revoked?

Ok, with the present lack of FCC enforcement, it isn't likely to happen,
but it could. To give you an idea of what could happen, our local police
were fined $10,000 per car by the EPA for removing the cat converters
from their cars to allow them to go faster (that cost county taxpayers
over $1,000,000).

And a few years back when the FCC still cared, the Georgia State Patrol
was fined by the FCC for operating radar with a lapsed license (and again
the taxpayers caught it in the neck). I find it particularly disgusting that
members of public safety agencies think that they can ignore the law at
whim. They don't cut the public the same slack.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5001. Re: Help with HP851B filter alignment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3486EED9.35CF@pop.removethistomailme.net>
Source record: 88587

Giovanni Mazzola wrote:
>
> >I'd like to hear from anyone who has successfully aligned the 20 MHz IF...
>
> If you hear about it, please forward it.
>
> On the while, have a look at my home page (there's something about the '851)
>
> Giovanni, IT9XXS
>
> HomePage: http://www.qsl.net/it9xxs
> E-Mail: it9xxs@exit.it

Well, I haven't received any enlightenment on the 851B filters so far!
:-( I had to replace two of the PC-board-mounted relays in mine with
conventional DPDT relays, and now the 851B meets all sensitivity
specifications in the manual on all bandwidths, where it never even came
close before. However, the IF filters are badly out of alignment, and
the alignment procedure in the manual is so poorly-written as to be
almost worthless. I've spent hours playing with the numerous
adjustments with a sweep generator but have only gotten the vaguest feel
for what I am doing. Possibly there are more electrical problems in my
unit besides the relays that I replaced -- maybe the crystals have aged
beyond the compensation range of the trimmers -- I dunno. I don't
understand the circuit well enough to troubleshoot it properly.

At any rate, I've given up on the 8551/851 for any kind of precision
work. I just bought an ancient 141T/8552B/8554L/8444A to replace it.
It looks like it served a tour of duty in Viet Nam, and is certainly old
enough to have done so, but appears to be in perfect
operating/calibration condition, and the filters are in good shape. The
parallel-port interface you did for your 851 looks intriguing -- I'd
definitely be interested in hearing about the results your friend gets
with the 141T.

-- jm (de KE5FX Austin TX)

---
Note: My E-mail address has been altered to avoid spam
---

# 5002. FS: 2 Transcription TT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Ross Lipman <rl1856@***ix.***netcom.com>
Message-ID: <666tq1$ep6@sjx-ixn2.ix.netcom.com>
Source record: 88588

For Sale:

2 Transcription TT from Radio Stations.

Both are by Rusco Electronics of CA and are about 35 years old.

12 in platter for both.
One is 33/45; other is 33/45/78.
One has base other does not.
Both without tonearms (12in)
Both solidly built with rubber isolated motor mounting
and rim drive.

Both are in good working condition.

$50.00 + shipping for both.

Please reply to: rl1856@ix.netcom.com

Thank you,

Ross Lipman
--
To reply: delete *** from address.

I refuse to accept any unauthorized or unsolicited E-mail
communications.

The sending of an unsolicited E-mail communication shall
be proof that the sender has agreed, by action, to send $500.00
US/ certified funds to me, prior to any unsolicited or unauthorized
transmission.

"By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer
meets the definition of a telephone fax machine.
By Sec.227(b)(1)(C), it is unlawful to send any unsolicited
advertisement to such equipment.
By Sec.227(b)(3)(C), a violation of the aforementioned Section is
punishable by action to recover actual monetary loss, or $500,
whichever is greater, for each violation."

# 5003. Re: Simple question re: HP 141T analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <34870020.4DFF@popd.ix.netcom.com>
Source record: 88589

Just slide that little black bar with the white arrow, that is between the rf and if sections, to the left (follow the arrow) and the bar should pop out. Put your finger in the hole that you can now see and pull. Then get a manual!
73 Dan

# 5004. RE: Info on CW IDer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: jscheetz@ix.netcom.com
Message-ID: <6675ev$93f@sjx-ixn11.ix.netcom.com>
Source record: 88590

I'm looking for info (schematic, assembly instructions) or a reference (QST article?) for a morse code identifier circuit whose board was made by Circuit Board Specialists, Boulder, CO. It contains 8 DIP ICs, including 2 24-pin chips. Thanks in advance

# 5005. Re: Simple question re: HP 141T analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34871026.6FF9@pop.removethistomailme.net>
Source record: 88591

Rae family wrote:
>
> Just slide that little black bar with the white arrow, that is between
> the rf and if sections, to the left (follow the arrow) and the bar
> should pop out. Put your finger in the hole that you can now see and
> pull. Then get a manual!
> 73 Dan

Gotcha. There isn't a little black bar with an arrow on mine -- there's a metal tab to which a little black bar might once have been attached, but I have not tried moving it to the left. Gouge marks on the end of the tab indicate that the usual means of moving the tab with this particular instrument involved the use of Vise Grip pliers. :-( I just didn't know the proper direction in which to apply the force, and didn't want to mangle the mechanism by forcing it.

Many tnx!

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

# 5006. URGENCY!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Pascual Arbona Lopez <parbona@arrakis.es>
Message-ID: <3486f3d7.0@news.arrakis.es>
Source record: 88592

Hello,
I need 10 I.C. s made by "NATIONAL SEMICONDUCTOR" type
MM-5869 (640 bits shift register).
Any indication or advice that will help me to find them will be
appreciated.Thanks in advance.
P. Arbona parbona@arrakis.es

# 5007. Re: Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: msix@rt66.com
Message-ID: <6678bb$4fb$1@news.rt66.com>
Source record: 88593

JohnsonHE (johnsonhe@aol.com) wrote:
: I am looking for ones that are usable for 9mhz IF
: >for homebrewing.

: You can build one far better than you can purchase...at any price.

: Thanks, Doug, N4IJ

: W4ZCB

Agreed. at 9MHz, a 4-xtal ladder works FB for CW. if use varicaps to change BW, they work FB for CW and SSB if you use only one carrier xtal as they are kinda assymmetrical. try it...

73 - John W7ZFB at msix@rt66.com
**********
* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
* Home of only hybrid Hammarlund SP-600 JX *
* Home of only Collins 32-S3B 160-10M HB clone *
* 1400 Catron SE Albq, NM 87123 *
**********
If you drink, don't park. Accidents cause people...

## 5008. Meadowlake?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: msix@rt66.com
Message-ID: <6679kq$4fb$3@news.rt66.com>
Source record: 88594

need current addr for Meadowlake, who sells TEC-200 pcb
transfer sheets, or used to...
who else does?

--
73 - John W7ZFB at msix@rt66.com
**********************************************************
* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
* Home of only hybrid Hammarlund SP-600 JX *
* Home of only Collins 32-S3B 160-10M HB clone *
* 1400 Catron SE Albq, NM 87123 *
**********************************************************
If you drink, don't park. Accidents cause people...

# 5009. Re: small electrolytics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: msix@rt66.com
Message-ID: <6678rn$4fb$2@news.rt66.com>
Source record: 88595

W7EL is right.
been using small 150uF and 350uF at 330V for yrs, even in linear
power supplies with no failures so far. size 2L x .7D inches.
reform carefully before using and keep V below 300 for each cap...

--
73 - John W7ZFB at msix@rt66.com
**********************************************************
* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
* Home of only hybrid Hammarlund SP-600 JX *
* Home of only Collins 32-S3B 160-10M HB clone *
* 1400 Catron SE Albq, NM 87123 *
**********************************************************
If you drink, don't park. Accidents cause people...

# 5010. fs- A few Good Tubes! B/O

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19971204225901.RAA05594@ladder01.news.aol.com>
Source record: 88596

Hi;
For SALE: ONE OR ALL! New in Boxes!
GE 6CD6GA
GE 6LU8
GE 6BK4C/6EL4A
GE 6GV5
(2)GE 6JB5/6HE5
RCA 6BG6GA
Raytheon 6JN6
Selling for B/O if you can use them! Please remember that I gotta pay shipping, so include same!
Thanks es 73.....RICH RLUCCH2098@aol.com

# 5011. Re: Need a CTCSS tone circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bd010f$b20437c0$0100005a@wa6vse>
Source record: 88597

Gary Coffman <ke4zv@bellsouth.net> wrote in article
<3480d0e9.560809915@news.atl.bellsouth.net>...
> On Mon, 01 Dec 1997 15:17:24 GMT, see@signaure.on.bottom (Ryan) wrote:
> >Can someone help me with a CTCSS tone circuit? I know I can
> >get a kit for $25, but I only need one tone, and I'd rather build it
> >myself for a couple $. Can a 555 timer be used for this? Please
> >email me if you can help. Thanks a lot.
>
> The frequency tolerance for CTCSS is very tight. I very much doubt
> that you can get a free running 555 to stay on frequency closely
> enough to work for long. There are purpose built chips for CTCSS,
> which is clearly the best way to go, but you could use a chain of
> divider chips from a stable reference (crystal or ceramic resonator)
> to generate the tone frequency. Clean up the divider output with an
> opamp and RC filter to turn it back into a sinewave. Or you could locate
> one of the old vibrating reed encoders and adapt that to your project.
> That should be virtually free.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

Many of the (semi)older CTCSS boards used opamp active filters constructed
with 1% resistors and capacitors and tuned with 10-20 turn pots. With about
4 opamps, you can get the oscillator and bandpass and notch filter outputs.

Nowadays, most probably use custom ICs.

But I agree with Gary that a 555 probably wouldn't stay on frequency well
enough to work for the long run.

--
Carl - wa6vse
wa6vse@fast.net
NCI #1052
Join No Code International!
Support the modernization of ham radio and
help to assure its survival into the 21st century!

# 5012. Re: Meadowlake?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <3487470C.2596@emily.net>
Source record: 88598

John W7ZFB wrote:
>
> need current addr for Meadowlake, who sells TEC-200 pcb
> transfer sheets, or used to...
> who else does?
>

TEC-200 film is also sold by DC Electronics; PO Box 3203, Scottsdale, AZ 85271-3203. Tel: 1-800-467-7736.

5 sheets for $3.95, 10 sheets for $5.95

73

Lyle, K0LR

# 5013. Hybrid SP-600? (was Re: Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971204211911.11538C-100000@Stratus.CAM.ORG>
Source record: 88599

Okay, I'll bite. Want to tell us about your hybrid Super Pro, and
your 32SB clone?

Michael VE2BVW

On 4 Dec 1997, John W7ZFB wrote:

> 73 - John W7ZFB at msix@rt66.com
> **********************************************************
> * Homebrewer since 1947 CW BoatAnchors Norcal #930 *
> * Home of only hybrid Hammarlund SP-600 JX *
> * Home of only Collins 32-S3B 160-10M HB clone *
> * 1400 Catron SE Albq, NM 87123 *
> **********************************************************
> If you drink, don't park. Accidents cause people...
>
>

# 5014. ft-101-E help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: MLL <mikel@tir.com>
Message-ID: <6680li$jfq$1@ramp2.tir.com>
Source record: 88600

Hi all,
I'm asking for help again....I've got a ft-101-E and it's acting up
the s-meter is not working at all on 10 and 15 meters except when the
signal is very very stong (like 60 over) the meter will move a little.
It works on alc and power out fine.
On 20-40-80-160 it works better but it moves very slow,like the agc is
set on slow.?
Another funny thing is that on 10-15 the reciever seems more much more
sensitive on lsb than usb......
I rescued this radio off 11 meters so who knows what might have been done to
it in it's life. I seem to remember a mod for this rig to help it with
strong local signals could this be causeing it to act like this?
any and all help or suggestions will be very helpful thanks....73 kb8enc
mikel@tir.com

# 5015. Ham-Homebrew Digest V97 #702 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4865123.094@pii.com>
Source record: 88601

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5016. 160 Mod Process for Henry 2KD5?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-04 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd00c4$22856740$0a8a92d0@bitnet.bit-net.com>
Source record: 88602
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Anyone install this, or another such 160 mod on a Henry 2KD5?
Your experience and/or advice is welcomed!
Thanks & 73, DavidC AA1FA

> There is no longer such thing as an effective plate choke that covers all
> 9 bands. What most quality amplifier makers (Creative, Alpha, Henry, > et
al) are doing is using two chokes; shorting one out for 80-10m. The
> B&W 800 and 802 have their resonances "parked" between bands, and > have
enough inductance to be effective on the 8 higher bands, but the > amount
of 160 meter RF current
> that gets by the choke is very great. This allows the RF to wreak havoc >
on the bypass capacitors and electrolytic caps in the power supply >
filter. (if used)
> In some cases, the RF makes it all the way out the back of the amp, and
> radiates through the a.c. power lines all over the building!

> Just mount a second choke of 130-200uh at a right angle to the 60-90uh
> choke and switch it in/out with a spst vacuum relay across its >
terminals.
> The Alpha 77DX/SX amps have an unused position on the input band > switch
(160 meter position) that can be used to ground one end of the
> coil on the vacuum relay. Other amps can be adapted with micro
> switches etc. that make when the band switch is positioned to 160m. I >
always add a .01 ceramic disk H.V. bypass cap to all the ones that are >
already there to complete the mod.

> A very good choke can be easily wound with H.V. magnet wire around > a
G-10 fiberglass tube of convenient diameter. #24 wire is good for > several
amps.

> Most modern magnet wire used by motor rewinding shops is coated
> with a silicon varnish that is good for 6000v + without having to space->
wind the turns.

> There are lots of compromises that can be used, but the circuit I
> described is the only effective way I know of to cover all 9 bands
> without a choke fire or RF where you don't want it!
> (((73))) Phil, K5PC

# 5017. Re: WANTED... LF Antenna project, maybe with amp or regen circuit !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: mlangen@earth.execpc.com
Message-ID: <669pog$mie$1@earth.execpc.com>
Source record: 88520

Jacqui Swenson (Jacqui@realestateady.com) wrote:
: Besides Ham Radio I enjoy being a SWL and would like to get into some
: low frequency (150-500kc) listening. Anyone have any nice home-brew
: projects for this band ? Maybe a directional loop with or without an
: amp or regenerative circuit to increase gain and sensitivity ?
: Thanks for any help in advance ! Happy holidays ! Jacqui, N1DVE

You REALLY need to contact the Longwave Club of America!

http://members.aol.com/lwcanews/

Now, having given you that address, I seem to vaguely remember that the site has moved. If the above address doesn't work, your web browser should steer you in the right direction using "lwca" or "longwave" as the search terms.

Good luck and have fun!

73,

Mark -- WA9ETW

# 5018. Ham-Homebrew Digest V97 #703 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4882085.057@pii.com>
Source record: 88521

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5019. Ham-Homebrew Digest V97 #704 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4881920.040@pii.com>
Source record: 88522

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

## 5020. kenwood 940

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: "Charles J. Carniglia" <kk6wn@cds1.net>
Message-ID: <3488a96d.0@neptune.cds1.net>
Source record: 88523

Looking for some info on the butternut beam compared to a 2 or 3 element yagi....any thoughts....thanks

kk6wn@cds1.net

# 5021. Low Power Attenuator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: astone@erols.com
Message-ID: <3488F560.1120@erols.com>
Source record: 88524

Hi Gurus:

I was looking for an attenuator circuit that would provide 100-130db of attenuation to permit me to measure receiver MDS. Found a circuit in my 1987 handbook (pg 25-43) and also in Solid State Design. The description of the circuit in the handbook stated that "The maximum attenuation of any single section is limited to 20 db because leak-through would probably degrade the effect of higher attenuation sections and result in inaccuracy." My question concerns the notion of "leak-through." My preference would be to build the circuit with more than 20 db of attenuation per section in order to simplify things and also avoid shielding between attenuator sections. I assume that leak through would be more evident at higher freqs. (perhaps at VHF and higher) and at higher power levels. Is this the case? How much inaccuracy would result using this at HF freqs. (7 MHz) and driving it with a signal generator that puts out less than .1 W and using let's say 3 40db sections that aren't shielded from each other? Thanks for your help.

73,

Ron (KA3J)

## 5022. voice syn chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: PAW <73457.650@CompuServe.COM>
Message-ID: <#41LddfA9GA.249@ntawwabp.compuserve.com>
Source record: 88525

Still looking for source for voice synthesizer chips and circuts
for a talking volmeter project.

--
PAW
(WA9JMN@Compuserve.com.com)w/o a.com)

# 5023. Re: IRF520 FET - similar to IRF510/511?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Burt Lang <burt@rocler.qc.ca>
Message-ID: <34883EC7.2F03@rocler.qc.ca>
Source record: 88526
Cross-posted to: aus.radio.amateur.misc;,rec.radio.amateur.homebrew

Peter Parker wrote:
>
> In the various December magazines, Dick Smith advertised that they now
sell IRF520 FETS at $3.95 a pop. Does anyone know much about these
devices? In particular, whether they are similar to the IRF510/511
series, which could put out about 2-4 watts on 80 & 40 metres and less
on
20 metres. If they are similar, it could mean that reasonably robust
PA
transistors for QRP equipment could be as close as your nearest Dick
> Smith store.

> 73,
--

_____
> Peter Parker

_____

An IRF520 has a 9 Amp rating vs 5.6 Amp for the IRF510. They are both
100 volt units. Don't know if they are equivalent in RF
characteristics.

3.95 $US (or is that 3.95 $Aust) is not a great deal. A Canadian
distributor of IR products in Toronto lists them at 1.08 $can in
singles. Unfortunately for you, they don't deal overseas - Pity!!

Burt VE2BMQ>>>

# 5024. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19971205124249704 32@zetnet.co.uk>
Source record: 88527

> > Some years ago, I used to post modif files on various ham radios to
> > extend the xmit and recieve frequencies. Oddly enough, if you put
> > "wa2ise" into a search engine like Infoseek, you'll find several
> > web sites with these modif files.

> the gentleman with the genuine question, thinking that it would be legal
> for him to use a modified ham radio under his license (a valid question
> not needing vicious attack from the respected amateur community) should
> check with the FCC to see what types of radio are allowed under his
> license. If it says "anything that works", go for it. But, if the FCC
> requires type accepted radios, as it does with the citizens band etc, it
> would be illegal to use the modified ham radio.
==========
I fully agree ,however much 'HAM' hardware involves universal
products which not only can be modified by physical changes ,but also
by means of 'soft tricks' ie without opening the equipment. I own a
legal HAM HT which can be set for wide band rx/tx by keep pushing
certain buttons while switching the unit on. It is unavoidable that
inquisitive users find these tricks , although that does not mean
they will ever be using the equipment illegally. In the end it boils
down to personal responsibility and discipline.

* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : frank.dinger@zetnet.co.uk or gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

# 5025. Re: Cristal information.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19971205125419704 32@zetnet.co.uk>
Source record: 88528

> I need to buy 2 cristals for a VHF repeater. Can anybody send me contacts of
> companies (phone or internet), specially in Europe that manufacture these
> cristals?
> Please, reply by mail. Thanks to all.
> andre.antunes@mail.eunet.pt

==========

QuartSLab Marketing Ltd
PO Box 19 , Erith
Kent DA8 1LH
UK Phone : +44 1322 330830 Fax: +44 1322 334904

* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : frank.dinger@zetnet.co.uk or gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU G-QRP 7030 * EU *
* * *

## 5026. Cristal information.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Andre Antunes <andre.antunes@mail.eunet.pt>
Message-ID: <667gvb$4rv@news.EUnet.pt>
Source record: 88603
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Hello everybody,
I need to buy 2 cristals for a VHF repeater. Can anybody send me contacts of companies (phone or internet), specially in Europe that manufacture these cristals?
Please, reply by mail.
Thanks to all.

--
Andre Antunes
andre.antunes@mail.eunet.pt

# 5027. Re: Voice syn chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3487456d.11927562@news.buller.se>
Source record: 88604

Hi,

PAW <73457.650@CompuServe.COM> wrote:

>Looking for infor on voice synth chip and scematics for project
>to make a talking volt meter.

One idea could be to use voice IC's from ISD. Check them
out at...

http://www.isd.com

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

```
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send _AND_ receive serial data over the power lines. For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

# 5028. (NOS) TUBES PACKAGE DEAL!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <667kpt$lht$1@newsfeed.smartt.com>
Source record: 88605

Hi! I do have for sale as a package the following:

(5) 31LQ6 , (5) 17DQ6 , (5) 15DQ8 , (12) 22JF6,
(10) 12DQ6B , (5) 16A8 All brand new in their boxes.

Asking: $225.00 can. (shipping included)

If interested contact me at : PH/FAX: (250)868-1182

THANKS, REGARDS.

Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 5029. (NOS)TUBES FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <667kbe$lba$1@newsfeed.smartt.com>
Source record: 88606

Hi!,I do have for sale a lot of receiving tubes,for a fair price.
For any of your need,just contact me with the numbers you need
and I will do the best to help you out.....thanks

Eric By email or PH/FAX (250)868-1182
Eric Pirtyak, Kelowna,BC

Net-Tamer V 1.09.2 - Test Drive

# 5030. FS: 19 X 24 X 70 Equipment Cabinets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: "storm@webwide.net" <kstewart@webwide.net>
Message-ID: <01bd0115$0b2bc200$8d4c29d1@kstewart.atlantech.net>
Source record: 88607

Standard 19" Single Bay Cabinets
H 76" W 23" D 24"
Available mounting space 70"

Gray in color. 16GA material. Removable doors
Weight 225lbs.
Location Dallas,TX
Price $279.00obo.
Shipping approx. $50.00 per unit depending on location.

To many features to list.

They have never been used. Perfect for hobbiest or someone expanding a radio or data network. They are nice enough to put in your living room. HONEST!

Let's make a deal.

Call 972-727-4225 or 903-455-8136
e-mail kstewart@webwide.net

## 5031. "homebrew" or modded AM radio using compactron vacuum tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseEKp63K.ABw@netcom.com>
Source record: 88608

Got some compactron tubes kicking around? Try building an AM radio
out of them. Look at the web page http://www.netcom.com/~wa2ise
or http://www.netcom.com/~wa2ise/radios/compaa3.html

# 5032. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseEKp6Lx.Axo@netcom.com>
Source record: 88609

Some years ago, I used to post modif files on various ham radios to extend the xmit and recieve frequencies. Oddly enough, if you put "wa2ise" into a search engine like Infoseek, you'll find several web sites with these modif files.

# 5033. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Bill <whagen@inreach.com>
Message-ID: <34878D1F.5681@inreach.com>
Source record: 88610

Robert Casey wrote:
>
> Some years ago, I used to post modif files on various ham radios to
> extend the xmit and recieve frequencies. Oddly enough, if you put
> "wa2ise" into a search engine like Infoseek, you'll find several
> web sites with these modif files.

the gentleman with the genuine question, thinking that it would be legal for him to use a modified ham radio under his license (a valid question not needing vicious attack from the respected amateur community) should check with the FCC to see what types of radio are allowed under his license. If it says "anything that works", go for it. But, if the FCC requires type accepted radios, as it does with the citizens band etc, it would be illegal to use the modified ham radio.

# 5034. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: joe <jedent@jedavisent.com>
Message-ID: <348799E8.2CA0@jedavisent.com>
Source record: 88611

Chris Schmierer wrote:
>
> Hi...
> Just wondering if anyone has had any experience modifying a 2 meter
> radio, either a mobile or HT, so that it can transmit outside the
> 144-148 range. I know a lot of them will recieve outside the ham band,
> into to Public Safety band. I'm just curious to know if anyone has
> hacked the firmware on any of these so that they can transmit as well.
>
> I'm an EMT with a local ambulance company, and I could very easily just
> go out and buy a pro-band radio, have it programmed our local fire-net
> and tac frequencys, and be completely within the law. The prob is that
> I'd like to have one that's console programmable; so at fire camp I can
> just punch in whatever frequency I need instead of trying to find
> someone who can program it. The convenience of direct entry of
> frequencys, CTCSS and DTMF tones, and all the features that are
> commonplace on Ham radios that they want to charge you an arm, a leg,
> and your firstborn for in a genuine pro-band radio is just what I'm
> looking for. I'm probably sure that the act of mod'ing a 2 meter and
> using it is probably walking the line of the law, but I figure that as
> long as I have authorization to transmit on the frequencys involved
> there shouldn't be much of a problem. All else fails, I can just go to
> the dispatch center a written note from the police and fire chiefs so I
> have something to keep with the radio (just to cover my butt legally).
>
> I'm hoping that I can do this with maybe a rat-shack mobile; ya know,
> one of the 25 watt'ers that's you can car-mount.
>
> Please, if anyone has any info on this, please let me know.
> JediChris
> ---------------------------------------------------------------
> Chris Schmierer
> EMT, Lifeguard, Computer Tech, Radio Weenie, etc....
> jedichris@usa.net
The problem is, "HAM" radio gear for the most part will not pass freq.
tol. as speced by the FCC for use on pubsafty freqs. Before you can
"leagally" use any radio on the public safty frequencys it must be
certified. Take to a 2-way shop or tech and have it checked out. Your
company or department would be liable if a radio used with their call
interfreared with another departments communications.
joez

# 5035. Re: Need a CTCSS tone circut

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Don Ward <don@kay-dee.demon.co.uk>
Message-ID: <jrWaVHAkh7h0Ew2p@kay-dee.demon.co.uk>
Source record: 88612

In article <3482d4a1.58084727@news>, Ryan <see@signaure.on.bottom>
writes
>Can someone help me with a CTCSS tone circuit? I know I can
>get a kit for $25, but I only need one tone, and I'd rather build it
>myself for a couple $. Can a 555 timer be used for this? Please
>email me if you can help. Thanks a lot.
>
>Ryan
>
>ryan at poboxes dot com

The FX315J chip is a CTCSS tone generator. It needs a 1MHZ ceramic
resonator and 5 components to produce 1 tone, with a dip switch tones
are selectable. The FX315J is available in the UK for 4.50 pounds from
RN ELECTRONICS.
--
Don Ward G0MDO

# 5036. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <668r1g$qjq$1@alice.walrus.com>
Source record: 88613

Chris Schmierer (jedichris@usa.net) wrote:
: Hi...
: Just wondering if anyone has had any experience modifying a 2 meter
: radio, either a mobile or HT, so that it can transmit outside the
: 144-148 range. I know a lot of them will recieve outside the ham band,
: into to Public Safety band. I'm just curious to know if anyone has
: hacked the firmware on any of these so that they can transmit as well.

: I'm an EMT with a local ambulance company, and I could very easily just
: go out and buy a pro-band radio, have it programmed our local fire-net
: and tac frequencys, and be completely within the law. The prob is that
: I'd like to have one that's console programmable; so at fire camp I can
: just punch in whatever frequency I need instead of trying to find
: someone who can program it. The convenience of direct entry of
: frequencys, CTCSS and DTMF tones, and all the features that are
: commonplace on Ham radios that they want to charge you an arm, a leg,
: and your firstborn for in a genuine pro-band radio is just what I'm
: looking for. I'm probably sure that the act of mod'ing a 2 meter and
: using it is probably walking the line of the law, but I figure that as
: long as I have authorization to transmit on the frequencys involved
: there shouldn't be much of a problem. All else fails, I can just go to
: the dispatch center a written note from the police and fire chiefs so I
: have something to keep with the radio (just to cover my butt legally).

: I'm hoping that I can do this with maybe a rat-shack mobile; ya know,
: one of the 25 watt'ers that's you can car-mount.

: Please, if anyone has any info on this, please let me know.
: JediChris
: ----------------------------------------------------------------
: Chris Schmierer
: EMT, Lifeguard, Computer Tech, Radio Weenie, etc....
: jedichris@usa.net

Some notes:
1.most ham units can be modded to cover the frequencies you require.
2.it would be a violation of your agencies license to use it, except in a
emergency.
3.you can get commercial portables that are field programmable-these would
be legal, and may very well perform better.
You need to determine how the radio you are considering is programmed-if
it needs a special programmer or a computer, you would have to carry it
with you.
The radios you are looking for can be programmed from the front
panel-either the keypad, or switches can be used for this.

Many companies make/or have made in the past, gear that can do this-you
will often have to go inside the unit once, and pull or add a jumper.
In some cases, you will need to enter a password as well.
ICOM,Kenwood,Midland are some companies that I KNOW OF that made some gear
like the above.
I believe that Regency(RELM) has made suitable gear too.
Other companies may well have them as well.

# 5037. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Chris Schmierer <jedichris@usa.net>
Message-ID: <3488326D.72A2E558@usa.net>
Source record: 88614

Ok, guys and gals, I just want to go on record as saying that I'm not trying to violate the law or anything. I appreciate all the people who pointed out that I would be stepping way over the line by operating a mod'ed radio for PS use. Call this one of those informational questions, I was just curious if it could be done, what technical details I would run into, and what legal BS I would have to go through. Apologies to any serious hams I offended with the idea of fracturing the FCC code.

As to the original question, someone mentioned that ICOM, Kenwood, Midland, and RELM (used to be Regency I think) all made actual Professional radios that could be keypad programmed. Any details on this? (Model numbers, which jumpers need to be pulled, passcodes needed). I know that the Motorola Spectra (mobile) radios we have in our ambulance rig are supposed to be able to be programmed from the keypad, (if you know the right keypad combos). If not, I've got a little palmtop PC clone (8086 equivalent w/ a 512k pcmcia flash memory disk), that I could probably upload any programming software into (depending on the size). Any info anyone has on related subjects would be helpful.

I'm still interested in any info on mod'ing the firmware on a ham rig, given that they tend to cost less than a pro band rig, some have very similar frequency tolerances, and are a lot easier to get (ask a Rat-Shack guy if any of their VHF hts are PS band compatable, can be field programed, and come standard with CTCSS/DTMF options; and watch him drop to the floor in fits of laughter). To appease the lawyers in the group, I'm requesting this info for informational purposes only. I promise that before I use it, I will deal with the legal issues.

Once again, I apologize.

Chris
jedichris@usa.net

## 5038. Any improvements for NE-4040?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: k5dh@ti.com
Message-ID: <669bm0$erc@sf18.dseg.ti.com>
Source record: 88615

Looking for hop-ups and improvements for the NE-4040 QRP rig.
I have one built up, and it works well, but you can't really
have TOO good performance! Mainly interested in pepping up
the receiver, but interested in hearing about any mods.

Dean, K5DH/QRP
"All QRP, all the time"

# 5039. Need xref on SD1127 (substitution parts)??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: kb5ylg <kb5ylg@airmail.net>
Message-ID: <8832107B9AF6CD69.FDF695EDE491D66A.A712A70AED7EF4B9@library-proxy.airnews.net>
Source record: 88616

Need cross reference substitution parts for and SD-1127 transistor...

# 5040. Re: WANTED... LF Antenna project, maybe with amp or regen circuit !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEKqBC2.AtL@netcom.com>
Source record: 88617

In article <3486226A.741CFAA3@realestateady.com>,
Jacqui Swenson <Jacqui@realestateady.com> wrote:
>Besides Ham Radio I enjoy being a SWL and would like to get into some
>low frequency (150-500kc) listening. Anyone have any nice home-brew
>projects for this band ? Maybe a directional loop with or without an
>amp or regenerative circuit to increase gain and sensitivity ?

See if you can dig up the 1983 year of Radio-Electronics magazine.
Spread throughout that year were a half a dozen articles by
R. W. Burhans on VLF Tuners, Ferrite Loopsticks, VLF convertors,
Active Antennas, messing around with Loran C and the like.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

## 5041. Re: variable condenser

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Paul Graham <paulg@imaxx.net>
Message-ID: <34886D6D.2C62@imaxx.net>
Source record: 88618

Jim,

Sounds like one of the attempts to 'linearize' frequency vs. rotation.
That capacitor would be for receiving only...
--
73 es TTYL,
Paul - K9ERG

# 5042. Re: What if I build a balcony antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-05 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34885ca8.0@newshost.pcug.org.au>
Source record: 88619

Carlo Consoli <consoli@info.utovrm.it> wrote:
>Hi everybody,
>I am going to change home, and I have some urge to build up my radio
>shack a.s.a.p.
>Before drilling everything up to the roof, to set up antennas, does
>anyone of you know about an antenna suitable for the balcony ?
>I have a 7mt long balcony, what if I try to build an antenna for it ?
>Many thanks,
> IK0YGJ, Carlo

My balcony is the length to yours. I would suggest the following (which I have up at the moment):

10m: 1.8m mobile whip on mobile base mounted on balcony

40-15m: Tuned feeder dipole fed with open wire line. Have it 15m long, have ends over side of building if possible, or bend back. My antenna is against a brick wall - still seems tro work OK though.

80m: Magnetic loop antenna of some description. Mine is indoors and 1.5m square, though the bigger the better. Some info appears on my web page.

With this set up, I've recently worked Europe on 10m, many DX stations on 20m CW QRP, USA with 5w QRP on 40m and about 3000km with the indoor 80m antenna with 20 watts SSB.

73,
--

Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

# 5043. IRF520 FET - similar to IRF510/511?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3488d608.0@newshost.pcug.org.au>
Source record: 88529
Cross-posted to: aus.radio.amateur.misc;,rec.radio.amateur.homebrew

In the various December magazines, Dick Smith advertised that they now sell IRF520 FETS at $3.95 a pop. Does anyone know much about these devices? In particular, whether they are similar to the IRF510/511 series, which could put out about 2-4 watts on 80 & 40 metres and less on 20 metres. If they are similar, it could mean that reasonably robust PA transistors for QRP equipment could be as close as your nearest Dick Smith store.

73,
--


Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

# 5044. NOS tubes 4 sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971206043700.XAA05650@ladder02.news.aol.com>
Source record: 88530

For Sale:
I have a large inventory of quality NOS tubes and a wide variety of radio related publications. Also available are radios, test equipment and misc. radio parts. My schematic service is the best price around at just $3 delivered for schematics and tuning info. Quality, tested used tubes are also available. If I don't have it, I'll try to help you find it! Hundreds of happy customers have used my service. Ask Rog42@aol.com for an e-mail copy of my latest offerings - list #1115-T

# 5045. Re: What if I build a balcony antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3488d6a6.0@newshost.pcug.org.au>
Source record: 88531

The first line of my last message came out garbled. It should read "My balcony is the same length as yours".

73,
--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

_____

## 5046. Electronic Symbols

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Roger McCarty <rmccarty@deltanet.com>
Message-ID: <66b2dc$s9m$1@news01.deltanet.com>
Source record: 88532

Is anyone aware of a web site offering Electronic Symbols for download?

Thanks

Roger KD6CC

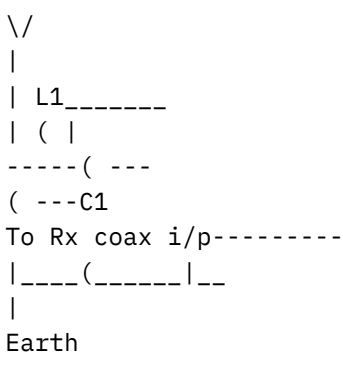
# 5047. Re: Homebrew Multiband Longwire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <HCeRPGA82Si0EwYU@southwestuk.demon.co.uk>
Source record: 88533

In article <MPG.ee9f76eb2c7a7ee989684@nntp.a001.sprintmail.com>, Keith Kirkwood <krkirkwood@sprintmail.nospam.com> writes
>
>Could someone please give me some feedback on this idea. Being
>relatively inexperienced in antenna design, I'm not sure that this idea
>is valid.
>I want to create a "multiband" longwire antenna, tuned to each of the
>shortwave bands. I plan to do this by creating a longwire cut for each
>band, and then bundling them together, in essence, creating just one long
>wire antenna. My question is: will this actually give improved
>performance on each of the bands, or will they "combine" to give me some
>improvement on one band, but not the rest.
>My plan is to hang this in my attic (gotta love homeowners
>associations...) and utilize some 18 gauge, 4 conductor shielded wire
>that runs from my attic down to my basement where the receiver is. Is
>this wire a suitable substitute for something like RG-6? Or would I be
>better off using the CATV coax than runs from attic to basement?
>
>Thanks, -K2
Hi Keith,
I am afraid your idea will not work (at least in the manner you describe). If you need an all band end fed wire antenna, your best bet is to use an ATU between the wire and the Rx. Indoor antennas 'may' suffer from pick-up of unwanted domestic rf noise, but you may well get away with it; many do. The following is an extract from an earlier posting of mine which may help:

Snip

May I suggest the following:




C1 Approx 300pF variable
L1 60 turns close wound on a 2 inch former tapped every ten turns
By trial and error, tap the wire aerial down from the top end of the

coil and the Rx i/p up from the bottom whilst tuning C1 for max signal. Generally the Rx tap will be just a few turns up from the earthy end; the Ae tap position will depend upon the length of wire and the band in use. To clarify the diagram above, the Rx coax braiding is connected to the earth end of the coil. A separate earth or counterpoise wire should be connected to the earth point but this will still work without either.

The wire aerial need not be particularly high for receive purposes, but bear in mind that a low wire may well pick up unwanted interference from domestic sources. The length of wire is immaterial but I would suggest a minimum of 33 feet preferably 66 feet upwards. On some bands you may find performance better without the tuning unit; for example: with a 66 foot wire on the 3.5MHz and 10MHz bands where it is a quarter wave and 3/4 wave length respectively. Initial setting up may take a little while but once the tapping positions are known, it is easy to reset. The taps can be connected via a switch and the unit boxed if required or the whole thing may be breadboarded and the taps changed by the use of croc clips.

Best of luck, 73 Trev G3ZYY ...-.-
PS. I used this system on 160m to 10m Tx/Rx in the 70s and it wkd extremely well.

--
Trevor Day

# 5048. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <OyJTzLAj8Si0Ewaa@southwestuk.demon.co.uk>
Source record: 88534

In article <3480629f.0@news4.kcdata.com>, cjfruge <cjfruge@hotmail.com>
writes
>
>scott wrote in message <347C82F7.57AF@mwt.net>...
>>Jim Smith wrote:
>>>
>>> Anyone have a recommendation for where to find plans for a good
>>> transverter?
>>> Jim Smith
>>> KF6IEG
Jim,
If you drop me an e-mail with your agreement, I will send you the
circuit of the PW Meon 6m transverter I have used here successfully for
the past 9 years. It is a 1 Mb jpg file!!!
Trev G3ZYY
--
Trevor Day

# 5049. Re: Low Power Attenuator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <h4DnbdA7PRi0EwPD@ifwtech.demon.co.uk>
Source record: 88535

Ron wrote:

>I was looking for an attenuator circuit that would provide 100-130db of
>attenuation to permit me to measure receiver MDS. Found a circuit in my
>1987 handbook (pg 25-43) and also in Solid State Design. The description
>of the circuit in the handbook stated that "The maximum attenuation of
>any single section is limited to 20 db because leak-through would
>probably degrade the effect of higher attenuation sections and result in
> inaccuracy." My question concerns the notion of "leak-through." My
>preference would be to build the circuit with more than 20 db of
>attenuation per section in order to simplify things and also avoid
>shielding between attenuator sections. I assume that leak through would
>be more evident at higher freqs. (perhaps at VHF and higher) and at
>higher power levels. Is this the case? How much inaccuracy would result
>using this at HF freqs. (7 MHz) and driving it with a signal generator
>that puts out less than .1 W and using let's say 3 40db sections that
>aren't shielded from each other? Thanks for your help.

Sorry, I don't think that will work. Nobody can measure 120dB
attenuation in a single swipe (1GW in -> 1mW out!) so even someone with
access to lab equipment has to divide the attenuator up into measurable
sections such as 3*40dB and has to make absolutely sure they are well
shielded from each other.

If you can't measure a 40dB section either, but are relying on accurate
resistor values, then you MUST use conservative construction methods
that you can depend upon. That means limiting each section to 20dB -
just like it says in the book - and shielding each section carefully.

The other thing you need to consider is the shielding of the signal
generator, especially if your receiver under test is not well shielded
too. Most signal generators leak much more than -120dBc, out of the gaps
in the case, out of uncapped front-panel sockets, and out of the mains
wiring. Then there's leakage through the coax between the generator and
the attenuator (you have to use hardline), and leakage out of the
coaxial connectors...

...from which you may gather that accurate MDS measurements using a
signal generator require fanatical attention to detail.

You won't get meaningful results until you change your whole mind-set
from "What can I get away with?" to "I'm gonna make absolutely certain
this is OK!"

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

http://www.ifwtech.demon.co.uk/g3sek

## 5050. Crystal information.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34896DBC.72D5@trader.com>
Source record: 88536

The Shack is closing out those crystal pairs that plug into
their old CB units. The package says nothing about their
capacitive or resistance load characteristics. Anyone know
anything about them?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5051. Ham-Homebrew Digest V97 #706 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s488e270.021@pii.com>
Source record: 88537

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5052. Re: Low Power Attenuator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <PDaX2XAmZWi0Ew50@lfheller.demon.co.uk>
Source record: 88538

In article <3488F560.1120@erols.com>, astone@erols.com writes
>Hi Gurus:
>
>I was looking for an attenuator circuit that would provide 100-130db of
>attenuation to permit me to measure receiver MDS. Found a circuit in my
>1987 handbook (pg 25-43) and also in Solid State Design. The description
>of the circuit in the handbook stated that "The maximum attenuation of
>any single section is limited to 20 db because leak-through would
>probably degrade the effect of higher attenuation sections and result in
> inaccuracy." My question concerns the notion of "leak-through." My
>preference would be to build the circuit with more than 20 db of
>attenuation per section in order to simplify things and also avoid
>shielding between attenuator sections. I assume that leak through would
>be more evident at higher freqs. (perhaps at VHF and higher) and at
>higher power levels. Is this the case? How much inaccuracy would result
>using this at HF freqs. (7 MHz) and driving it with a signal generator
>that puts out less than .1 W and using let's say 3 40db sections that
>aren't shielded from each other? Thanks for your help.

You can't do this with a single attenuator. I had endless problems with
leakage trying to do this of thing where I used to work with a couple of
military manpack transceivers. I had to use two screened rooms, lots of
attenuators and double-screened cables.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

## 5053. Re: C5121

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Wayne Fitzer <n6wf@earthlink.net>
Message-ID: <34896CB4.F54909C8@earthlink.net>
Source record: 88539
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

You might give this URL a try:

http://www.questlink.com/page.htm?proc=page&id=900001&mid=12069794602326B0A9D754B0AEC62C

wf

# 5054. PLL and DDS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: klettke@cnx.net
Message-ID: <3489998f.352508@news.cnx.net>
Source record: 88540

Looking for the addy of a small outfit in Texas thas sells schematics
etc. on disk for above, I had their address once but lost my
bookmarks.
they had three products they sold , pll, dds and a signel generator or
something.
Duan

# 5055. Re: IRF520 FET - similar to IRF510/511?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: dennyd@ibm.net
Message-ID: <34898ed1.0@news1.ibm.net>
Source record: 88541
Cross-posted to: aus.radio.amateur.misc;,rec.radio.amateur.homebrew

In <3488d608.0@newshost.pcug.org.au>, Peter Parker <parkerp@pcug.org.au> writes:
>In the various December magazines, Dick Smith advertised that they now
>sell IRF520 FETS at $3.95 a pop. Does anyone know much about these
>devices? In particular, whether they are similar to the IRF510/511
>series, which could put out about 2-4 watts on 80 & 40 metres and less on
>20 metres. If they are similar, it could mean that reasonably robust PA
>transistors for QRP equipment could be as close as your nearest Dick
>Smith store.
>
>
>73,
>--
>_____________________________________________________
>Peter Parker
>
>E-mail: parkerp@pcug.org.au
>Amateur Radio: VK1PK
>
>Home Page: http://www.pcug.org.au/~parkerp/
>The home of Novice Notes Online, the Australian QRP Home
>Page and the STWG Web Site.
>_____________________________________________________
>
>

The IRF520 is the next one up in the series - higher current, lower on R.
This comes at the price of higher input and output capacitance and slower
switching times. Don't know how it will affect 3-4Mhz operation, things will
get worse at 40M and 20M for sure.

Some data for 510 VS 520

C in 135pf typ VS 350 typ
C out 80pf typ VS 130 typ
turn on delay typ/max 8/11ns VS 9/13ns
rise time 25/36ns VS 30/45
turn off delay 15/21 VS 18/29
fall time 12/21 VS 20/30

## 5056. Wanted: NOS 6AJ6 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971206202800.PAA09963@ladder01.news.aol.com>
Source record: 88542

I am searching for some NOS 6AJ6 - nine pin miniature style tubes. This tube was also produced in an octal based variety, however, I need the nine pin miniatures. Please contact Rog42@aol.com. Thanks.

# 5057. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <YzwWQUAEaZi0Ewp4@pacsat.demon.co.uk>
Source record: 88543

In article <3484b2af.5631062@news.mnsinc.com>, bry@NOSPAMmnsinc.com
writes
>On Tue, 25 Nov 1997 19:18:10 +0000, Simon Lewis
><pacsat@pacsat.demon.co.uk> wrote:
>
>><jimsmith@2xtreme.net> writes
>>> Anyone have a recommendation for where to find plans for a good
>>>transverter?
>>>Jim Smith
>>>KF6IEG
>
>>Do you think it would have been a good idea to say what band it was for?
>>Just a thought!
>
>Och, DUH!
>Is this TYPICAL of the great intellect of microwave enthusiasts?
>When he said PLANS, he means he wamts to build one!
>No BRAND involved!
>
>Long live homebrewing!
>
>Bry, G3XLQ

I think you need to buy some glasses bry! Who mentioned 'brand'?

Again, if he tells me what BAND he wants plans for I can help!

73 Simon
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 5058. Re: WANTED... LF Antenna project, maybe with amp or regen circuit !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: jlmonk@netcom.ca
Message-ID: <3489da2a.163690399@nntp.netcom.ca>
Source record: 88544

On Wed, 03 Dec 1997 22:24:26 -0500, Jacqui Swenson
<Jacqui@realestateady.com> wrote:

>Besides Ham Radio I enjoy being a SWL and would like to get into some
>low frequency (150-500kc) listening. Anyone have any nice home-brew
>projects for this band ? Maybe a directional loop with or without an
>amp or regenerative circuit to increase gain and sensitivity ?
>Thanks for any help in advance ! Happy holidays ! Jacqui, N1DVE
>
I too would appreciate any homebrew projects for this band.

Thanks,

J.D.Monk

## 5059. WTB: noise bridge

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-06 00:00:00 UTC
From: ostertag@ezonline.com
Message-ID: <66d3ed$g19$1@news3.microserve.net>
Source record: 88545

To help me learn some radio electronics, particularly dealing with antennas, I'd like to buy a noise bridge. Preferably with manual, and certaily in perfect working condition (nothing more frustrating than trying to learn with faulty equipment!). If you have one for sale, please email me directly. Thanks, Keith N3KXZ email jko@ezonline.com

## 5060. WA state newby sks info on satellite reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: bear354106@aol.com
Message-ID: <19971207022500.VAA17163@ladder01.news.aol.com>
Source record: 88546

I listen to world band radio off and on and would like to learn about the possible reception of satellite broadcasts, such as news and program feeds, and other transmissions. I am not trying to receive scrambled stuff w/o paying. I am in South King Cvounty WA. I would like to correspond with accomplished sat listeners and need titles of relevant books. Thank you.

# 5061. Re: Low Power Attenuator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: LA8AK@reply.via.packet
Message-ID: <348a6bdb.32146558@news.online.no>
Source record: 88547

On Sat, 6 Dec 1997 14:51:18 +0000, Leon Heller
<leon@lfheller.demon.co.uk> wrote:

>In article <3488F560.1120@erols.com>, astone@erols.com writes
>>Hi Gurus:
>>
>>I was looking for an attenuator circuit that would provide 100-130db of
>>attenuation to permit me to measure receiver MDS. Found a circuit in my
>>1987 handbook (pg 25-43) and also in Solid State Design. The description
>>of the circuit in the handbook stated that "The maximum attenuation of
>>any single section is limited to 20 db because leak-through would
>>probably degrade the effect of higher attenuation sections and result in
>> inaccuracy." My question concerns the notion of "leak-through." My
>>preference would be to build the circuit with more than 20 db of
>>attenuation per section in order to simplify things and also avoid
>>shielding between attenuator sections. I assume that leak through would
>>be more evident at higher freqs. (perhaps at VHF and higher) and at
>>higher power levels. Is this the case? How much inaccuracy would result
>>using this at HF freqs. (7 MHz) and driving it with a signal generator
>>that puts out less than .1 W and using let's say 3 40db sections that
>>aren't shielded from each other? Thanks for your help.
>
>You can't do this with a single attenuator. I had endless problems with
>leakage trying to do this of thing where I used to work with a couple of
>military manpack transceivers. I had to use two screened rooms, lots of
>attenuators and double-screened cables.
>
coax sockets may carry RF in respect to chassis ground, in this case
ferrite ring cores on cables might improve the leakage, try the
clip-on types.

---
Occam's 2nd Rule: Eschew Obfuscation; Espouse Metrication

Email: LA8AK at online dot no

# 5062. Re: Transverter Plans Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: LA8AK@reply.via.packet
Message-ID: <3489f3f7.1455457@news.online.no>
Source record: 88548

On Sat, 6 Dec 1997 10:55:31 +0000, Trevor Day
<trev@southwestuk.demon.co.uk> wrote:

>In article <3480629f.0@news4.kcdata.com>, cjfruge <cjfruge@hotmail.com>
>writes
>>
>>scott wrote in message <347C82F7.57AF@mwt.net>...
>>>Jim Smith wrote:
>>>>
>>>> Anyone have a recommendation for where to find plans for a good
>>>> transverter?
>>>> Jim Smith
>>>> KF6IEG
>Jim,
>If you drop me an e-mail with your agreement, I will send you the
>circuit of the PW Meon 6m transverter I have used here successfully for
>the past 9 years. It is a 1 Mb jpg file!!!
>Trev G3ZYY
>--
>Trevor Day

I use it for 6 and 2m, but I am not pleased with the original version,
it is a lot of improvements worth doing. "Everybody I know" had
problems with instability in the output stage, BFR96 seems to be
better than 2N3866. A 1dB pad between output stage and output
connector might improve stability.
I have added a 2N6083 (19dB gain) 20W PA to the 6m transverter and a
2N6081 2,5W PA to my 2m transverter.
---
Occam's 2nd Rule: Eschew Obfuscation; Espouse Metrication

Email: LA8AK at online dot no

# 5063. Re: How Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: nc-bolchpe@netcologne.de
Message-ID: <348a74df.141421@news.netcologne.de>
Source record: 88549

rampelbergh.p@infoboard.be (Paul Rampelbergh) wrote:

>How can I build a spectrum analyzer with tracking generator?
>
>In the RSGB radio communication handbook there is a drawing with
>circuit boards who seems to be a little outdated.
>
Hi Paul,

the German UHF/SHF magazine "UKW Berichte" (Postfach 80, D-91081 Baiersdorf, Tel.: ++49-91 33 / 77 98 - 0, Fax -33) has published three spectrum analyzer circuits, one being a more complex but modular system (issues 2/87, 3/87, 1/89, 2/89, 1/90, 1/91, 3/91 and 2/91) with an optional tracking generator. At least for this circuit ( 1 MHz - 2 GHz, approx. 100 dB dynamic range) a kit is available (price is 1000 DM - 1500 DM, depending on the options).

Back issues of "UKW Berichte" are still available.

There is also an english edition of "UKW Berichte" called VHF Communication (representative: KM-Publications, Mike Wooding, 5 Ware Orchard Barby, Warks CV 23 8UF, UK ).

Three more spectrum analyzer projects have been published by the UK magazine ELECTRONICS WORLD / WIRELESS WORLD. One of these analyzers (issue 12/93) comes with a tracking generator. With this analyzer standard TV tuners are used as VCO, mixer and IF ampifier.

Peter

# 5064. WTB mint TL-922

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: darrellk@iland.net
Message-ID: <348bb363.1652477@news.iland.net>
Source record: 88550

I would like to buy a "mint" TL-922 amp. W1TXX darrellk@iland.net or call 816-826-7022

# 5065. Re: Low Power Attenuator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: William W Janssen <billj@calweb.com>
Message-ID: <348AD185.517@calweb.com>
Source record: 88551

astone@erols.com wrote:
>
> Hi Gurus:
>
> I was looking for an attenuator circuit that would provide 100-130db of
> attenuation to permit me to measure receiver MDS. Found a circuit in my
> 1987 handbook (pg 25-43) and also in Solid State Design. The description
> of the circuit in the handbook stated that "The maximum attenuation of
> any single section is limited to 20 db because leak-through would
> probably degrade the effect of higher attenuation sections and result in
> inaccuracy." My question concerns the notion of "leak-through." My
> preference would be to build the circuit with more than 20 db of
> attenuation per section in order to simplify things and also avoid
> shielding between attenuator sections. I assume that leak through would
> be more evident at higher freqs. (perhaps at VHF and higher) and at
> higher power levels. Is this the case? How much inaccuracy would result
> using this at HF freqs. (7 MHz) and driving it with a signal generator
> that puts out less than .1 W and using let's say 3 40db sections that
> aren't shielded from each other? Thanks for your help.
>
> 73,
>
> Ron (KA3J)

In addition to all the other good advice look up specifications
for "Waveguide Beyond Cutoff Attenuators". These are two sections
of coax with coupling loops and placed inside a small tube. The
attenuation can be calculated from the dimensions. They are easy to make.

Bill K7NOM

# 5066. Re: How Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: jjeffers@deskmedia.com.remove.these
Message-ID: <66est3$26b$1@shadow.skypoint.net>
Source record: 88552

>>How can I build a spectrum analyzer with tracking generator?
>>
>>In the RSGB radio communication handbook there is a drawing with
>>circuit boards who seems to be a little outdated.

You may find it interesting that there is a software spectrum analyzer using your soundblaster. I've been running the software for a couple of day and I find it fairly useful.

Do a webcrawler search for 'spec for windows' or 'software spectrum analyzer'.

-Jim Jefferson KB0THN
jjeffers@deskmedia.com.remove.these
http://www.deskmedia.com/~jjeffers/

# 5067. Re: Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971207194800.OAA03921@ladder02.news.aol.com>
Source record: 88553

International Radio (www.qth.com/inrad) sells all kinds of filters, both "drop ins" for commercial gear and 9 MHz "for experimenters". Their specs look OK but they want $100 - EACH, which is too steep for me! TenTec (www.tentec.com) uses 9 MHz and 6.3 MHz filters in their gear, and sell their filters at $80 or so, which is still out of my range. The QST articles mentioned in other posts have all the data you need to design & build your own, if you can get crystals of the right frequency, at the right price.

What do you intend to build? I'm always looking for lowcost multiband HF transceiver designs.

73 de N2EY

## 5068. Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: "kcin@whidbey.com" <kcin@REMOVEME.whidbey.com>
Message-ID: <01bd0358$150079c0$a9345ecc@kcin>
Source record: 88554
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateu

I'm trying to be a Ham and was wondering if there are any Ham Radios out of the market for about $100 new. What do used ones run for? Also, what's the average price for a good antenna? Your help is greatly appreciated!
Npb

PS: Please e-mail to reply to me!

# 5069. Re: Low Power Attenuator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <348ac488.0@news.imaxx.net>
Source record: 88555

Beware of input/output capacitive coupling of the components themseleves as
frequency goes up. Also component lead inductance to ground lowers the
effective attenuation. You defintitely need shielding between sections.
Coax shielding, RF
connector leakage has to be watched out for at VHF and beyond.

Chuck KD9JQ

http://www.imaxx.net/~kd9jq

J M Noeding wrote in message <348a6bdb.32146558@news.online.no>...
>On Sat, 6 Dec 1997 14:51:18 +0000, Leon Heller
><leon@lfheller.demon.co.uk> wrote:
>
>>In article <3488F560.1120@erols.com>, astone@erols.com writes
>>>Hi Gurus:
>>>
>>>I was looking for an attenuator circuit that would provide 100-130db of
>>>attenuation to permit me to measure receiver MDS. Found a circuit in my
>>>1987 handbook (pg 25-43) and also in Solid State Design. The description
>>>of the circuit in the handbook stated that "The maximum attenuation of
>>>any single section is limited to 20 db because leak-through would
>>>probably degrade the effect of higher attenuation sections and result in
>>> inaccuracy." My question concerns the notion of "leak-through." My
>>>preference would be to build the circuit with more than 20 db of
>>>attenuation per section in order to simplify things and also avoid
>>>shielding between attenuator sections. I assume that leak through would
>>>be more evident at higher freqs. (perhaps at VHF and higher) and at
>>>higher power levels. Is this the case? How much inaccuracy would result
>>>using this at HF freqs. (7 MHz) and driving it with a signal generator
>>>that puts out less than .1 W and using let's say 3 40db sections that
>>>aren't shielded from each other? Thanks for your help.
>>
>>You can't do this with a single attenuator. I had endless problems with
>>leakage trying to do this of thing where I used to work with a couple of
>>military manpack transceivers. I had to use two screened rooms, lots of
>>attenuators and double-screened cables.
>>
>coax sockets may carry RF in respect to chassis ground, in this case
>ferrite ring cores on cables might improve the leakage, try the
>clip-on types.
>
>---
>Occam's 2nd Rule: Eschew Obfuscation; Espouse Metrication
>

>Email: LA8AK at online dot no
>

# 5070. FS surface mount parts for experimenters and prototypers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: baggybob@elknet.net
Message-ID: <baggybob-0712971644390001@usr-ppp-6.elknet.net>
Source record: 88556
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.swap,misc.industry.electronics.marketplace

HI ! We're back again. Rehabbing an old house has taken most of my spare
time and scattered my boxes of parts. As requested b members of the QRP
mailing list here is: baggybobs' buck a bag bargain bonanza
brought to you by bob & kim
.
Surface mount parts for experimenters/prototypers
all new surplus unless otherwise noted

Shipping to the USA
Small parts orders (less than $35 usd ). I ship by priority mail. Cost is $3
Larger parts orders I will ship by UPS using an agent. Cost is $5
I ship UPS COD only upon receipt of $10 deposit. The UPS depot is 60 Km
away. I have to drive there and handle CODs myself. I cannot afford the
cost or hassle of refused COD shipments.
Really small parts orders (up to $5 surface mount parts only). Send me a
SASE with three stamps. I will put in some foam filler to prevent damage.
International orders require international money order or funds drawn upon
a US bank. We can determine together the best way to ship.
.
If you have tech questions please e-mail. I will answer in a day or two.
Address:
Kim Kelly
507 Broad St
Apt 144
Lake Geneva, WI 53147

Motorola MRF 94llL NPN hi gain low noise small signal transistor
excellent broadband linearity with typ fT = 8 GHz.
4 pin SOT-143 package data sheet available at Motorola SPS web site.
5 / $1.00 80 for $10

Toshiba 2SC3606 NPN hi gain low noise transistor. Typical fT=7GHz, noise
figure @1GHz=1.1dB. 3pin EIAJ SC59 package; slightly larger than EIA SOT-23.
8/ $1.00 100 for $10 data sheet is at Toshiba web site in .pdf format

Toshiba 2SC5084 NPN RF transistor SC-59 pkg 8/$1
data sheet available

NEC NPN RF transistor NE85634 (2SC3357) in SOT-89 package
fT= 6.5 GHz, Max power = 2W complete data at cel.com in .pdf format.
4/$1

MMBFU310 N-channel FET SOT-23 same electrical specs as J310 8/$1

MMBF5460 P-channel FET SOT-23 same electrical specs as 2N5460 8/$1

Phillips BCP51 PNP or BCP54 NPN Both are SOT 223 VCEO=45, Ic= 1
Amp, hFE 40/250, fT= 50 Mhz good for audio, DC control 8/$1.00
100 for $10

ROHM 2SB1132 PNP SOT-89 Equal to Phillips BCX51 VCEO=45,
IC=1Amp, VCEsat= .5 V data sheet included upon request. 10/$1.00

MMBT3904 NPN general purpose amp. SOT-23 version of 2N3904, one of the
most common transistors ever made.VCEO=40. fT min =200 MHz,
hFE >100<300 @ 10ma. 10/$1

MMBTA56LT1(Motorola) or PMBTA56 if you prefer Phillips. PNP driver... both
are SOT-23 version of MPSA56. VCEO=80, fT >50MHz, hFE> 50 @ 100mA 12/$1

MMBD352 Schottky (hot carrier) SOT-23 dual diode. Use for mixer or
detector at UHF and upwards. V(BR)R= 7 volts, CT= 1pf @ 0 volts 6/$1

Motorola BAV99 dual diode series connected SOT 23 package
commonly used to prevent ESD latch-up damage on MOS inputs
VBR=70 volts, IF max =100 mA, PD=500 mW 12/$1.00

Tunning diodes SOT-23 6/$1.00
MMBV109 ratio 5:1 8-40pf
MMBV2105 ratio 2.5:1 Ct 15pf @ 4v

Fujitsu FET PA Module FMC080902-20 PA module. 7 dBm in/31 out.
4-6 volt supply. Class C, optimized for 872-905 MHz but will operate
+-50MHz from this range. Can be soldered or screwed down to PWB.
I don't have data sheets for this device. $6 ea

GaAs MMIC control FET DC to 2.5 GHz in SOT-23 pkg.
Alpha Industries AF002C4=39. Complete data at Alpha web site. 4/$1

Motorola 14094B 8 stage shift/store register 16 pin soic 8/$1

Sharp CMOS 5168HN-10L 8K x8 SRAM in TSOP 28 pkg 6/$1
Samsung KM6264BLG-10 8Kx 8 SRAM TSOP 3/$1

surface mount diodes in round MELF package
Rohm RLRH100: same ratings as 1N4002 (1 AMP, 100 Volt) 12/$1.00

SMD zener diode 350mW Pd 5% tolerance in SOT 23 package
3.9 V MMBZ5228 10/$1
5.1 V MMBZ5240 10/$1
10 V MMBZ5240 12/$1
12 V MMBZ5242 10/$1
18 V MMBZ5248 10/$1

ROHM NPN digital transistor DTC114YK 10/$1


excuse the poor artwork. There is a 10K in series with the base and 47K

between base and emitter. Use as inverter with no external bias resistors required or as digital switch. IC=100 mA,VCC=50. Package is SC-59, pin spacing is same as SOT-23. data sheet available 10/$1

Surface mount 1/8 watt resistor assortment. Tape strips of 20 each of 50 different values = 1000 resistors. All parts marked with standard 3 digit code $10.00 each assortment

.24 ohm 1/2 watt resistor size 2010 30/$1

Chip capacitors --50 volt or better, mostly MuRata GRM 42 series with nickel barrier terminations. Parts are individually marked. 30/$1.00
1206 size NPO (C0G) 50 volt 5% 2.2 pf,2.7pf, 3.3, 5.6,10,16,18, 20
22, 24, 27, 30, 39, 56, 75,100,150, 180, 220, 300, 390, 560
220,1000pf, 3300 are 10% X7R ceramic size 1206
0.1uf 50 v ,tolerance range Z,Y5V size 1206

smaller size 0805 50 volt NPO also 30/$1.00
1.2, 3.3,7.5, 8.2pf, 10,11, 12, 30,100,120, 150, 560, 1000,1800
.01uF X7R

2.2uF 16 volt size 0805 Y5V ceramic from AVX 15/$1

Mica surface mount capacitor from Soshin Electric 1210 size unless otherwise noted all are 500 volt , 5% tolerance. Yeah, this is a strange one. 1pf, 3.5, 4.5pf, 5.5, 6.5, 7.5, 9.5, 11, 13, 15,16, 20, 22, 27, 30, 39, 51, 56, 62, 68, 75, 82, 91
the following are rated at 100 volt:110pf, 180, 200, 240
15/$1.00

Surface mount inductor mostly from TDK. 1210 size 47nH ,56, 82, 1.5uH, 6.8uH
smaller 1008 size 220nH, 330, 560, 680, 1.2uH 10/$1.00

1000uH 1210 size TDK ACL32255 6/$1

Surface mount ferrite chip MuRata BLM31A02. Good for supressing flight in amplifiers. Rated current 200 mA, DC resistance <0.5 Ohm. Fits same size pads as 1206 cap. 12/$1.00

Surface mount resin molded tantalums made by Panasonic, Matsuo, NEC, Sprague and possibly others.
A & B sizes 12/$1.00, C & D size 10/$1.00
A size stamping code
.1uf 35v A104
.22uf 35v V224
.33uf 35v V334
.47uf 25v E474
1 uf 16v C105
4.7uf 10v A475

B size
1uf @ 35v 4.7uf @ 10v 10uf @ 10v
C size

4.7uf @ 16v 10uf @ 16v 22uf @ 10v
Dsize
6.8uf @ 35v 33uf @ 16v
these tantalums are slightly smaller than a C size. They measure .185" L x
.1 W. 12/$1
.22uf 15v
.33uf 20v

smd LEDs 1206 size mixed mostly green with a few red or yellow or not
mixed all yellow 12/$1.00
Hewlett Packard qlmp 6523 very small dome LED with yoke leads green 15/$1

Methode surface mount socket for 32 pin PLCC ICs 3/$1

also have some common & not so common leaded parts

e-mail for more info: baggybob@elknet.net.

## 5071. FS Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: joewalsh <joewalsh@shore.intercom.net>
Message-ID: <348B38FC.73FB@shore.intercom.net>
Source record: 88557

for sale three transformers marked as follows:
Sterling Transformer Corp.
ST29205 TF5SX03ZZ
Term Rating WV
1-2 200V
1-3 220V
1-4 240V 60HZ 535
1-5 260V
6-7-8 2920V C.T. .25A 4285
9-10 2.5V 10A 535
GND E.S. Shield 0
Don't know where they came from, I inherited them with the rest of dad's junk box. I'm more interested in upgrading the old TS-820 than I am in building an amp. Approx weight 25 lbs. Please make offer to include shipping from zip 19971. Thanks
Joe KA3IXU

# 5072. Re: How Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: Mike <bad@email.adr>
Message-ID: <348B797F.1FAF@email.adr>
Source record: 88558

Peter Bolch wrote:
>
> rampelbergh.p@infoboard.be (Paul Rampelbergh) wrote:
>
> >How can I build a spectrum analyzer with tracking generator?

[... snip good SA articles]

> Three more spectrum analyzer projects have been published by the UK
> magazine ELECTRONICS WORLD / WIRELESS WORLD. One of these analyzers
> (issue 12/93) comes with a tracking generator. With this analyzer
> standard TV tuners are used as VCO, mixer and IF ampifier.

> Peter

Hi Peter,

I recall, from somewhere, that a ham documented a 26 GHz spectrum
analyzer design. Have you heard anything about this, or know where to
find the articles?

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 5073. Do You Have a MFJ-1270B TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: "Stephen T. Portell" <portell@azstarnet.com>
Message-ID: <348B89CC.2B85@azstarnet.com>
Source record: 88559
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I desperately need a copy of the owner's manual to the MFJ-1270B TNC.
Does anybody have one??!!

STeve
KA8UKB

# 5074. QTY=3900 12DZ6 TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-07 00:00:00 UTC
From: "Bruce P. Sidari" <sidarib@eznet.net>
Message-ID: <348B2CE2.F3BBD45D@eznet.net>
Source record: 88560
Body handling: HTML body converted to readable text

Thats right, three thousand nine hundred 12DZ6 tubes in original boxes,

400 to a box.
Manufactured by Phillips

$80.00 per box
$500.00 takes em all

Bruce Sidari
716 589 7373 days
716 589 9038 eve/wknd

Thats right, three thousand nine hundred 12DZ6 tubes
in original boxes,

400 to a box.

Manufactured by Phillips

$80.00 per box

$500.00 takes em all

Bruce Sidari

716 589 7373 days

716 589 9038 eve/wknd

# 5075. $500.00 USD Reward for design...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: marcianti@sprintmail.com
Message-ID: <66hb1a$2dq$4@newsfep1.sprintmail.com>
Source record: 88470

$500.00 USD REWARD!

Calling all RF designers.

I am in need of single frequency FM transmitter with the following specifications:

1. single frequency within 87.9 and 107.9Mhz
2. minimum parts
3. radiated output less than 250uv at 3 meters
4. bandwidth less than 200khz with signal centered on operating frequency
5. non-stereo
6. line-level input
7. must be able to change operating frequency easily
8. operate on 9-12VDC
9. matched telescopic antenna
10. parts must be easily obtained without special orders
11. can not be previously copywrited (stolen) design

Will pay $500.00 USD for successful design and an additional $500.00 after full FCC certification. I will retain all rights of the design without further compensation of any kind.

email to Paul J. Marcianti

marcianti@sprintmail.com

# 5076. RADIO MAGAZINE SUBS CHEAP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: edhowell@aol.com
Message-ID: <19971208174301.MAA14987@ladder02.news.aol.com>
Source record: 88471

CQ $15 yr; CQ $15 yr; Popular Communications $11 yr. Over 600 others, all categories. 1 yr subs only, USA only. New or renewal. E-mail me titles of interest for immediate price quote, Make nice Christmas gifts!

# 5077. Need Article from QEX - March 1995

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: astone@erols.com
Message-ID: <348C7429.3EF7@erols.com>
Source record: 88472

Hi -- If someone happens to have this issue of QEX, I would appreciate receiving a copy of: "Birth of a 7 MHz Transceiver" by Zack Lau. Will send SASE + cost. Thanks.

73,

Ron (KA3J)

# 5078. Power supply: improving rating?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: kb5ylg <kb5ylg%NO-SPAM%@airmail.net>
Message-ID: <4266FCE5EA673D25.FDB6D08DDA5D12F7.FBAA8D88DF4D68DE@library-proxy.airnews.net>
Source record: 88473

How can I beef up a power supply to deliver more current...?

With common parts?

I think I can put on a 3055 transistor for a 7805 circuit to deliver several amps rather than less than 1 amp, correct? And several 3055 in parallel to increase that, true?

DJ

# 5079. TUBES FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <66hmnf$7mj$1@newsfeed.smartt.com>
Source record: 88474

Hi!,I do have for sale a lot of receiving tubes,for a fair price.
For any of your need,just contact me with the numbers you need
and I will do the best to help you out.....thanks

Eric By email or PH/FAX (250)868-1182
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5080. Re: Do You Have a MFJ-1270B TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: nielsen@primenet.com
Message-ID: <slrn68oq3t.2f9.nielsen@nielsen.tus.primenet.com>
Source record: 88475
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <348B89CC.2B85@azstarnet.com>, Stephen T. Portell wrote:
>I desperately need a copy of the owner's manual to the MFJ-1270B TNC.
>Does anybody have one??!!

The TAPR assembly and system manuals for the TNC-2 (with command references updated to 1.1.8) are available on TAPR's ftp site (ftp.tapr.org in /tapr/software_lib/tnc). The MFJ manuals were adapted from these.

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
http://www.primenet.com/~nielsen

# 5081. Respirators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: martin@a.cs.okstate.edu
Message-ID: <66huq$4f8@news.cis.okstate.edu>
Source record: 88476

Am I just imagining things or is there an industrial type
respirator that works along the lines of an army-style gas mask in which
the filter is on a short length of hose such that you can hang it on your
belt?

I like to salvage circuit boards with a paint stripper gun and
I don't think it is a good idea to breathe the fumes from the flux and
conformal coating that come off when the heat is applied. I usually do this
outside, but still, the fumes get pretty strong and an air intake that wasn't
directly in the line of fire would help quite a bit.

Martin McCormick
WB5AGZ

# 5082. WWVB reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Ted Kester <tk1932ga@atl.bellsouth.net>
Message-ID: <348C99C6.541E@atl.bellsouth.net>
Source record: 88477

Some weeks ago I asked this NG for a signal report on WWVB to determine if signal strength from Boulder was good enough to consider building a receiver. I received reports from enough surrounding areas to make the project worth a try. Futher research turned up several ciruits, articles, and helpful advice from fellow amateurs. I turned up a single chip WWVB receiver from TEMIC, a subsidiary of Telefunken that produces digitized output compatible with microcontrollers. I would love to get my hands on this chip,but none of the online distributors I checked had it in stock. NOT A NEW STORY FOR HOBBYISTS!

My brother from Pennsylvania suggested I a look at a "radio controlled" clock kit he had bought but had not assembled. I had him read the description to me and I was amazed to discover that he was describing a clock that was controlled by radio from WWBV in Boulder. I immediately ordered one and I now have an operating analog clock that is self-setting and is as ACCURATE AS WWVB. The cost for the black-box module was twenty-eight ($28.00) USD. The module is a black platic box about 2 x 4 x 3/8 inches and is a self-contained analog clock driven by one (1) AA cell. There is no external antenna. For your money, you get ONLY the clock module and a set of hands... 40 cents gets you a SWEEP second hand. I bought an unfinished case for mine from a local craft hobby shop.

I completed the clock and inserted the battery at 8:30 PM EST on Sunday December 7th with all hands set at the 12. After an hour of intense "clock watching", the clock still had not set itself. However, this morning (Monday the 8th) at 5:30 AM the time was set and I assume synchronized with Boulder. I'm still going ahead with my digital project, but I thought the NG would be interested in the analog solution.

I got the clock from KLOCKIT in Wisconsin. They have an InterNet home page which is outdated... Their phone number is 800-556-2548

Cheers

Ted in Atlanta KD4EE

# 5083. Re: Power supply: improving rating?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Laura HALLIDAY <ve7ldh@direct.ca>
Message-ID: <348C70A5.416BC37B@direct.ca>
Source record: 88478

kb5ylg wrote:
>
> How can I beef up a power supply to deliver more current...?
>
> With common parts?
>
> I think I can put on a 3055 transistor for a 7805 circuit to
> deliver several amps rather than less than 1 amp, correct?
> And several 3055 in parallel to increase that, true?

Those amps have to come from somewhere before you can process
them with 2N3055s and such.

Power supply design is discussed - at length - in all the usual
reference books. People write books about it. Horowitz and Hill
discuss it particularly well in chapter 6 of _The Art of
Electronics_, a book every ham should own anyway.

...laura

# 5084. Re: How Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: LA8AK@morse.is.best
Message-ID: <348c28c3.2682042@news.online.no>
Source record: 88479

On Sun, 07 Dec 1997 20:37:19 -0800, Mike <bad@email.adr> wrote:

>Peter Bolch wrote:
>>
>> rampelbergh.p@infoboard.be (Paul Rampelbergh) wrote:
>>
>> >How can I build a spectrum analyzer with tracking generator?
>
>[... snip good SA articles]
>
>> Three more spectrum analyzer projects have been published by the UK
>> magazine ELECTRONICS WORLD / WIRELESS WORLD. One of these analyzers
>> (issue 12/93) comes with a tracking generator. With this analyzer
>> standard TV tuners are used as VCO, mixer and IF ampifier.
>
>> Peter
>
>Hi Peter,
>
>I recall, from somewhere, that a ham documented a 26 GHz spectrum
>analyzer design. Have you heard anything about this,
LA6LCA built one, and possibly OZ1HDA(?)
> or know where to find the articles?
that is the difficult side of it.....
>
---
Jan-Martin Noeding - LA8AK at online dot no
N-4623 KristiansandS

Tel.+47-380-87178

# 5085. Re: WWVB reception

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Bea and Marvin Jones <jonz@shell.rmi.net>
Message-ID: <66hs7c$sq4$2@news1.rmi.net>
Source record: 88480

Ted Kester <tk1932ga@atl.bellsouth.net> wrote:

...a damn good report about his research.

Tnx, Ted!! Good report back!

Not everybody comes back with a summary of what they
encountered in their searches.

Good show!

73
Jonesy W3DHJ

# 5086. Re: $500.00 USD Reward for design...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: geotek@flex.net
Message-ID: <348c6d74.4381840@news.zippo.com>
Source record: 88481

On 8 Dec 1997 17:33:30 GMT, marcianti@sprintmail.com (marcianti)
wrote:

>$500.00 USD REWARD!
>
>Calling all RF designers.
>
>I am in need of single frequency FM transmitter with the following
>specifications:
>
>
>1. single frequency within 87.9 and 107.9Mhz
>2. minimum parts
>3. radiated output less than 250uv at 3 meters
>4. bandwidth less than 200khz with signal centered on operating frequency
>5. non-stereo
>6. line-level input
>7. must be able to change operating frequency easily
>8. operate on 9-12VDC
>9. matched telescopic antenna
>10. parts must be easily obtained without special orders
>11. can not be previously copywrited (stolen) design
>
>Will pay $500.00 USD for successful design and an additional $500.00 after full
>FCC certification. I will retain all rights of the design without further
>compensation of any kind.
>
>email to Paul J. Marcianti
>
>marcianti@sprintmail.com
>

What a sweetheart!

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

# 5087. #10 silver plated wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Dennis Homerick <w8nw@richnet.net>
Message-ID: <348CD000.36947F@richnet.net>
Source record: 88482
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Thanks for reading this message. I am looking for 20 ft. of number 10 silver plated wire.

Thanks

Dennis

# 5088. Re: FS: Assorted Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: betif@mailmac.macbbs.com.br
Message-ID: <betif-0812972349130001@d1p2.macbbs.com.br>
Source record: 88483
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hey pal, do you know that "boatanchors" calls for people who like tubes,
not chips...?

# 5089. Re: Respirators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <66id8f$g93@bgtnsc01.worldnet.att.net>
Source record: 88484

Sure is.... We use 'em at work. Kinda pricy new, maybe you can find surplus? Meeting OSHA/NIOSH specs etc.drives up price. There are a few manufacturers, but the one I remember is MSA (Mine Safety Appliance?) - Try a search on Mine Safety *
It is like a conventional gas mask with corrugated hose connected to a battry powered blower filter. Caled a PAPR (Powered Air Purifing Respirator).

A secondary problem may be relaesing the fumes into the room at all. How about a plywood (or metal) fume hood with a blower feeding clothes dryer hose to an outside vent?

Woody

MCCORMICK MARTIN wrote:
>
> Am I just imagining things or is there an industrial type
> respirator that works along the lines of an army-style gas mask in which
> the filter is on a short length of hose such that you can hang it on your
> belt?
>
> I like to salvage circuit boards with a paint stripper gun and
> I don't think it is a good idea to breathe the fumes from the flux and
> conformal coating that come off when the heat is applied. I usually do this
> outside, but still, the fumes get pretty strong and an air intake that wasn't
> directly in the line of fire would help quite a bit.
>
> Martin McCormick
> WB5AGZ

--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing stuff.
http://www.geocities.com/capecanaveral/3722
.

# 5090. Re: IRF520 FET - similar to IRF510/511?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Don Huff <"don huff"@hp.com>
Message-ID: <348C4F2F.F5C@hp.com>
Source record: 88485
Cross-posted to: aus.radio.amateur.misc;,rec.radio.amateur.homebrew

Burt Lang wrote:
>
> Peter Parker wrote:
> >
> > In the various December magazines, Dick Smith advertised that they now
> sell IRF520 FETS at $3.95 a pop. Does anyone know much about these
> devices? In particular, whether they are similar to the IRF510/511
> series, which could put out about 2-4 watts on 80 & 40 metres and less
> on
> 20 metres. If they are similar, it could mean that reasonably robust
> PA
> transistors for QRP equipment could be as close as your nearest Dick
> > Smith store.
>
> > 73,
> --
> _____________________________________________________
> > Peter Parker
> _____________________________________________________
>
> An IRF520 has a 9 Amp rating vs 5.6 Amp for the IRF510. They are both
> 100 volt units. Don't know if they are equivalent in RF
> characteristics.
>
> 3.95 $US (or is that 3.95 $Aust) is not a great deal. A Canadian
> distributor of IR products in Toronto lists them at 1.08 $can in
> singles. Unfortunately for you, they don't deal overseas - Pity!!
>
> Burt VE2BMQ>>>

Hi Bert and Peter,

Unfortunately, the higher the rated current and lower the Rds on
(ohms),
the higher the input and output equiv capacitances. So the
higher-current
FET will have more limited frequency response. I have been unable to
get
any significant power from IRF522's on 20 meters, but a pair gives an
easy 40W
out Class C on 40 meters, with a 24 V supply. The rise and fall times
are
becoming significant fractions of an RF cycle even at 40 meters (one
cycle at

7 MHz is 143 nanoseconds).
I prefer higher voltage, lower current FETs.
I would not expect to pay over 75 cents or so for an IRF520 or the
like;
4 dollars each is not a good deal.

73,
Don, W6JL

# 5091. Christmas Special Equipment Enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: storm@webwide.net
Message-ID: <01bd042f$f5968ba0$fd4c29d1@kstewart.atlantech.net>
Source record: 88486

Standard 19" Single Bay Cabinets
H 76" W 23" D 24"
Available mounting space 70"

Gray in color. 16GA material. Removable doors
Weight 225lbs.

Price $279.00
Shipping approx. $50.00 per unit depending on location.

To many features to list.

They have never been used. Perfect for hobbiest or someone expanding a
radio or data network. They are nice enough to put in your living room.
HONEST!

Let's make a deal.

Call 972-727-4225 or 903-455-8136
e-mail storm@webwide.net

# 5092. Re: Need Article from QEX - March 1995

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <348C8C54.4B9B@earthlink.net>
Source record: 88487

astone@erols.com wrote:
>
> Hi -- If someone happens to have this issue of QEX, I would appreciate
> receiving a copy of: "Birth of a 7 MHz Transceiver" by Zack Lau. Will
> send SASE + cost. Thanks.
>
> 73,
>
> Ron (KA3J)

May have that....I'll check my QEX files

Chris
WB5ITT

# 5093. Re: Low Power Attenuator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <348ad8d2.18536800@news.crosslink.net>
Source record: 88561

On Fri, 05 Dec 1997 22:49:04 -0800, astone@erols.com wrote:
Hello Ron,

You may be missing the point on the MDS measurement. I know of no reason why one would need such a large attenuator. The idea of MDS is to know what signal level is injected at the front end. With a known attenuation from the attenuator and a known (i.e., reasonably well calibrated) signal generator output, then you can measure MDS with a wide range of signal sources and attenuations. In your case, the only reason that I can imagine why you would want to have so much attenuation is that you are starting out with too high a signal source. Let's say that you have a 1 volt rms signal generator that is going to be your signal source, but that it has an internal output attenuator that gives you calibrated outputs down in the 10's of millivolt range.

I will assume that the signal levels that you need to inject at the receiver front end are around 1 to 2 microvolts. Quick calculation there of 20 log(20 mv/1 microvolt) = 20 log (20000) = 86 db. That would not be nearly as big of a problem as the 120 db attenuator that you're speaking of.

In fact, if the signal generator is like I think it would be, the calibrated outputs would be available down in the 1 mv range, which would mean you would only need perhaps 60 db of attenuation. Are you sure that you really need 120 db?
73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 5094. FS: RF Power Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Craig Siegenthaler <kiwa@wolfenet.com>
Message-ID: <66fit1$23v$1@sparky.wolfe.net>
Source record: 88562

For Sale: RF Power Tubes

The following tubes were acquired from a local radio repair
shop that went out of business.

Prices do not include shipping.

Contact:

Craig Siegenthaler
612 South 14th. Ave.
Yakima, WA 98902

Telephone: 509-453-5492

NOS Tubes

SK606 Ceramic Chimney by Eimac for 4CX125/250 etc. $25
807 $5
829B/3E29 $7
832A $3
836 $10
837 $3
3C24 $15
4-65A $30
5894 $20
15E $4
4D32 $25
ELC1K $10

Used and in excellent condition

4CX1000A $60 or BO
803 $3
814 $10
815 $4
826 $8
828 $15
829B $3
832A $2
4F27 $5

## 5095. Homebrew pics.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: "Pieter de Boer." <phdeboer@globalxs.nl>
Message-ID: <66fahb$82v$1@guust.globalxs.nl>
Source record: 88563

Take a look at http://www.geocities.com/Area51/Chamber/7701/

You wil find there some pics of homebrew 2/14/70 PA's,a pulsepower supply
for the 14m. PA and more.
In de next i will store some more pictures.

Greatings Pieter.

# 5096. REWARD: FOR 1930s CARTOON QSL CARD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: sammac@interaccess.com
Message-ID: <66ftj4$auo$1@nntp3.interaccess.com>
Source record: 88564

REWARD: Would like to borrow or be given cartoon QSL card of 1930s showing me in prison uniform and in prison cell operating my rig. Sam W2DNN (847)695-0218

# 5097. need advice on BFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: oak@texas.net
Message-ID: <66g5j4$t2j$1@news3.texas.net>
Source record: 88565

Seasons Greetings everybody,

After success with a few QRP xmtrs and DC rcvrs, I want to build a receiver. After days of WEB cruising and reading in the library, I decided on a W1FB design, the Unversal Superhet from the W1FB QRP Notebook (see page 165). I want to use a 455 KHz IF and mechanical filters. The question is about the BFO. Is a STABLE BFO difficult to acheive at 455KHz? Should I use a variable BFO to simulate IF shifting? How about a switched BFO for USB and LSB? I have a proven VFO design for 2.155 MHz to 2.555 MHz. Any advice on the BFO will be appreciated.

73's

K7RMJ
Frank

# 5098. Re: need advice on BFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <348ba51c.0@newshost.pcug.org.au>
Source record: 88566

Frank - ideally you would use two 455 kHz xtals, one for LSB and one for USB. Their frequencies would be close to the extreme ends of the 3kh-s wide filter passband - see what the handbooks say about SSB transmitters - the same principles apply.

Alternativly you could experiment with 455kHz ceramic resonators - it may be possible to shift it to cover both USB and LSB positions. A free-running BFO should be reasonably stable also - you could experiment with VFO circuits using 455kHz IF transformers as the inductor.

73,

--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.
_____________________________________________________

# 5099. Re: need advice on BFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <348c1900.1336105@news.erols.com>
Source record: 88567

On 8 Dec 1997 06:54:28 GMT, oak@texas.net (Oak) wrote:

>Seasons Greetings everybody,
>
>After success with a few QRP xmtrs and DC rcvrs, I want to build a
>receiver. After days of WEB cruising and reading in the library, I
>decided on a W1FB design, the Unversal Superhet from the W1FB QRP
>Notebook (see page 165). I want to use a 455 KHz IF and mechanical
>filters. The question is about the BFO. Is a STABLE BFO difficult to
>acheive at 455KHz? Should I use a variable BFO to simulate IF shifting?
>How about a switched BFO for USB and LSB? I have a proven VFO design
>for 2.155 MHz to 2.555 MHz. Any advice on the BFO will be appreciated.
>
>73's
>
>K7RMJ
>Frank

Frank: You might want to consider Doug DeMaw's "Barebones Superhet"
From the July 1982 QST. It uses a 3.579 Mhz (colorburst crystal) IF.
The crystals are very cheap - just a few bucks for a bag of 50. For
the BFO you can use one of the same rocks with a small cap to shift it
700 hz or so. I've been very pleased with this set up here. Built
a three pole filter and I think the selectivity is around 400 hz.
For SSB I built a little one crystal, one resistor filter that I can
switch in. Sounds good two.

Good luck with the superhet. I found performance to be FAR superior
to the DC receivers. And not much more difficult.

73 Bill N2CQR
>

# 5100. Re: Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: Lloyd Colston <colston@viagrafix.com>
Message-ID: <348BF016.25A3@viagrafix.com>
Source record: 88568
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateu

kcin@whidbey.com wrote:
>
> I'm trying to be a Ham and was wondering if there are any Ham Radios out of
> the market for about $100 new. What do used ones run for? Also, what's
> the average price for a good antenna? Your help is greatly appreciated!

Your asking a lot! I doubt you will find a new ham radio for under $100
these days. However, you might find a used radio for under $100 (I
bought a two-meter handheld for $100 in a pawn shop once). The antenna
thing is a whole new issue and the cost could range from a few dollars
for parts to build your own or several hundred dollars to buy and
assemble one.

See http://www.arrl.org for information about all you need to know
about amateur radio and, until you get your license (and even after) see
http://ld.net/?kc5fm for low cost long distance service.

Let me know how more I can help.

--
Lloyd Colston Excellence is not an accident.
Pryor, OK USA social worker, writer, editor
KC5FM Home page http://www.viagrafix.com/colston
Auto-responder mailto:kc5fm-info@freeyellow.com
PGP Key fingerprint = CE 31 F3 D1 BD 82 64 FC 87 31 DF B1 06 12 48 71

# 5101. Re: variable condenser

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-08 00:00:00 UTC
From: k7itm@aol.com
Message-ID: <19971208145000.JAA04032@ladder01.news.aol.com>
Source record: 88569

In article <34834756.5CD9@zoo.uvm.edu>, Jim Breeyear <jbreeyea@zoo.uvm.edu>
writes:

>I have a large variable condenser(old talk for capacitor), that I cant
>identify. The plate thickness changes from thick on one side to thin
>on the opposite. The rotor is an inverse image of the stator so that it
>will mesh. The spacing of the plates get closer together as the plates
>are meshing. Appears to have a higher breakdown as the capacitance
>decreases. Anyone seen this before?

Cool! Besides changing the breakdown voltage, it also makes it a
wider ratio between min and max capacitance than might otherwise be
possible. Clearly, someone had a reason for going to all that trouble.

73, K7ITM

Cheers,
Tom
Please email to: tomb@lsid.hp.com.
The account from which this was posted is seldom checked for email.

# 5102. Re: $500.00 USD Reward for design...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bd0435$fc6cabc0$0100005a@wa6vse>
Source record: 88488

George Carlson <geotek@flex.net> wrote in article
<348c6d74.4381840@news.zippo.com>...
> On 8 Dec 1997 17:33:30 GMT, marcianti@sprintmail.com (marcianti)
> wrote:
>
> >$500.00 USD REWARD!
> >
> >Calling all RF designers.
> >
> >I am in need of single frequency FM transmitter with the following
> >specifications:
> >
> >
> >1. single frequency within 87.9 and 107.9Mhz
> >2. minimum parts
> >3. radiated output less than 250uv at 3 meters
> >4. bandwidth less than 200khz with signal centered on operating frequency
> >5. non-stereo
> >6. line-level input
> >7. must be able to change operating frequency easily
> >8. operate on 9-12VDC
> >9. matched telescopic antenna
> >10. parts must be easily obtained without special orders
> >11. can not be previously copywrited (stolen) design
> >
> >Will pay $500.00 USD for successful design and an additional $500.00 after
full
> >FCC certification. I will retain all rights of the design without further
> >compensation of any kind.
> >
> >email to Paul J. Marcianti
> >
> >marcianti@sprintmail.com
> >
>
> What a sweetheart!
>
> George Carlson KC5RCC
> Geotek Design Services
> http:www.flex.net/~geotek/hmsc/index.htm

Yea, George, I was impressed with his "generosity," too (sarcasm off).

Carl - wa6vse

# 5103. Re: Butler Oscillator with FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: LA8AK@cw.only
Message-ID: <348c8f54.3504544@news.online.no>
Source record: 88489

On Mon, 01 Dec 1997 01:49:13 -0800, scott <acepilot@mwt.net> wrote:

>OZ3TRO wrote:
>>
>> I am at the moment working an a 2 meter project and i need a reliable
>> xtal osc on 48 MHz
>>
>> I read most of the ARRL handbook and came over a socalled
>> Butler-oscillator, but it used NPN-transistors.
>>
>> Does anyone have a "drawing" of a Butler-oscllator with FET's?
>>
>> Vy 73 De OZ3TRO
>>
>> (Let the fingers do the talking try a CW QSO..... or write an EMAIL!)
>
>According to my RSGB VHF/UHF Manual, it appears a FET may be used
>directly in place of the bipolar oscillator transistor and the second
>stage must be a FET. This is on page 4.14 in the fourth edition book
>(1983).
it is an old book! see comments about it in some other threads -
particularly for this old book!!!
> Hope this helps.
>Scott (N0EDV)
>
>--
We are a group of microwave amateurs, our experience with fets in
oscillators are not good. Bipolar type butler oscillator is much
better, but it is many things which may go wrong. G4DDK has made a
very good LO design which is now copied by almost every UHF/SHF
amateurs in Europe. Some of us thought FET (J310) xtal osc was better,
but we were wrong. The FET oscillator never was as stable as the
butler oscillator. When many copies were made of similar circuit, 20%
were bad. It is two different Butler configurations, the more common
type (butler common-base as used by G4DDK) and the butler-emitter-
follower, which is difficult to design, but may work better.
....Jan-Martin
----
Jan-Martin Noeding - LA8AK at online dot no
N-4623 KristiansandS

Tel.+47-380-87178

# 5104. Re: IRF520 FET - similar to IRF510/511?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: "Michael J. Masterson"
Message-ID: <66i8rq$dl@bgtnsc01.worldnet.att.net>
Source record: 88490
Cross-posted to: aus.radio.amateur.misc;,rec.radio.amateur.homebrew

Peter:
Saw your item on newsgroup abt the IRF520 at HF. You can positively use these devices at HF! See my article in QST,Dec 1986 or reprinted in "QRP CLASSICS" from ARRL (pg 69). The IRF520 ran 16-20 watts out at 80 Meters with 12 VDC. The IRF510 will put out 12-15 watts on 40 and 30 meters. I can mail you the update to this article which basically shows a better frequency doubling scheme. Many QST readers wrote in about these, some saying that with more supply voltage (+24) they got more power. I am not this brave (yet).
Not published are 10 watts at 17 Meters and 6 watts at 10 meters, all with 12 VDC on the IRF510. The latter is used at 4 Watts for a 10 Meter Beacon at 28.2082 (AK2F).
Good Luck with your Homebrew>>>> 73's de Mike <wn2a@qsl.net>

# 5105. Heathkit SB200 or 220 Amplifier Bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: k4ejq@aol.com
Message-ID: <19971209023500.VAA13216@ladder01.news.aol.com>
Source record: 88491

I need to locate replacement for PA section or entire switch. Any ideas? tnx

Bunky, K4EJQ

## 5106. Packet Xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: niksysco1@aol.com
Message-ID: <19971209051400.AAA01340@ladder02.news.aol.com>
Source record: 88492

Anyone know of easy to get radios that make good packet-only radios? Maybe in kit form, or possibly an ex commercial band vhf, that will make a good 2400 data radio- I guess the only REAL requirement would be pin diode T/R switching, but the main thing is not to be too $$$. MAybe in the $100 range, or less
Thanks
73's
Nik
KE4CUP
NikSysco1@aol.com.nospam
Remove nospam to email me

# 5107. Variable brightness blinking Xmas lights, web page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseEKwr59.BHn@netcom.com>
Source record: 88493
Cross-posted to: sci.electronics.basics,sci.electronics.components,rec.radio.amateur.homebrew,rec.audio.tubes

simple and interesting scheme for hooking up those small Christmas
For all of you handy with electricity:

light strings to get varying and random brightness effect. Just wire
up a pair of outlets in series, and plug in at least 4 sets of lights
in one outlet, and an equal number in the other outlet.

See my web page for an anamated gif image file simulating this effect.
http://www.netcom.com/~wa2ise and click the Xmas link (find it under the
radio and clock display). Should be
http://www.netcom.com/~wa2ise/radios/xmassp.html

# 5108. Re: Variable brightness blinking Xmas lights, web page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Mike <bad@email.adr>
Message-ID: <348D1465.51F0@email.adr>
Source record: 88494
Cross-posted to: sci.electronics.basics,sci.electronics.components,rec.radio.amateur.homebrew,rec.audio.tubes

Robert Casey wrote:
>
> simple and interesting scheme for hooking up those small Christmas
> For all of you handy with electricity:
>
> light strings to get varying and random brightness effect. Just wire
> up a pair of outlets in series, and plug in at least 4 sets of lights
> in one outlet, and an equal number in the other outlet.
>
> See my web page for an anamated gif image file simulating this effect.
> http://www.netcom.com/~wa2ise and click the Xmas link (find it under the
> radio and clock display). Should be
> http://www.netcom.com/~wa2ise/radios/xmassp.html

Utterly ingenious! Thanks - that must have taken some effort.

Also, I'm really impressed - I found a 2G21 on your Pencil Tube page.

Good Job, Robert.

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 5109. TAIT 500 RADIOS, EPROM SOFTWARE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: ahd@wr.com.au
Message-ID: <348cf335.0@nachos.wr.com.au>
Source record: 88495

Hi:

I am looking for the software to set up the binary
data on the epromof the Tait 500 radios ,these
radios came in several versions the two channel
type with a diode matrix board, a 40 channel type
with a rotary selector switch and a 99 channel
type with an up and down pushbutton and seven
segment display,
Can anyone help,,,,I would be thankfull
Cheers
Alex Dampier
ahd@wr.com.au
Sydney
Ausrtalia

# 5110. Re: Anyone Got XTAL Filter Specs For Various Commercial Filters ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <lSXkpLAy4Rj0Ewlp@ddwyer.demon.co.uk>
Source record: 88496

In article <19971203024000.VAA02955@ladder01.news.aol.com>, JohnsonHE
<johnsonhe@aol.com> writes
>>
>>I wonder if there is a compilation of various commercialy available
>>crystal filters?
>
>Not that I know of, most of the manufacturers (Radio not filter) don't want you
>to know how really poor they are. Hi-ripple in the passband, high insertion
>loss, and really lousy intermod characteristics. Ultimate rejection poor to
>fair.
>
>I am looking for ones that are usable for 9mhz IF
Buy 10.7MHz preferably on the surplus market OEM prices are generally
$10 or less.
Ripple is generally a function of the termination try 910 ohms a
standard.
Amplitude ripple may be flat but group delay needs seperate
specification if you want data.
Try Toyocom monolythic duals at 10.7 mhz isolate each stage with a small
gain block then you cal roll your own (including group delay) with
great sucess

# 5111. Re: Power supply: improving rating?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <348D4A5B.7530@up.net>
Source record: 88497

kb5ylg wrote:
>
> How can I beef up a power supply to deliver more current...?
>
> With common parts?
>
> I think I can put on a 3055 transistor for a 7805 circuit to deliver
> several amps rather than less than 1 amp, correct? And several 3055 in
> parallel to increase that, true?
>
> DJ

It is usually not possible to increase the output of an already
built power supply by a factor of 2, or more, without a complete
redesign. And it generally turns out in the end to be not cost
efficient.
Roland, KB8XI

# 5112. Tube 4C35 ; autohet counter EIP model 360A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: paul@vannoni.dedal.fr.net
Message-ID: <66jk68$7o$1@vannoni.dedal.fr.net>
Source record: 88498
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Wanted any infos on this transmitting tube, and the old counter EIP 360A

Many thanks !

Paul Vannoni

# 5113. Re: FS: Assorted Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Bea and Marvin Jones <jonz@shell.rmi.net>
Message-ID: <66jv7b$3p3$1@news1.rmi.net>
Source record: 88499
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In rec.radio.amateur.homebrew Flavio Betti <betif@mailmac.macbbs.com.br> wrote:
: Hey pal, do you know that "boatanchors" calls for people who like tubes,
: not chips...?

Well, now, as time goes by the definitions must change, I suppose.
Now-a-days anything built with discrete transistors is pretty much
a (small) boatanchor.
My TS-520's are boatanchors -- just 3 tubes and the rest transistors.
My IC-22A is a boatanchor -- all transistors AND CRYSTALS!!

Run outside and locate the running board on your car. <g>

Jonesy W3DHJ

## 5114. How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: voicebox@dnai.com
Message-ID: <voicebox-0912970959590001@dnai-207-181-210-84.dialup.dnai.com>
Source record: 88500
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

In article
<voicebox-0912970944580001@dnai-207-181-210-84.dialup.dnai.com>,
voicebox@dnai.com (DaveC) wrote:

On my o'scope, I want to display ripple voltage present on a 30KHz signal.
I want to filter out the 30K signal and show only the ripple voltage. This
ripple frequency is somewhere between 20 and 40 times the 30K signal. The
voltage of the 30K signal is less than 1 volt p-p. The ripple voltage is
much smaller than this.

If I remember my basic electronics correctly, I can get a not-at-all-sharp
filter with a few components (cap and coil? cap and res?).

Component values and any other help would be greatly appreciated. Direct
e-mail replies doubly so.

Enjoy,
Dave
--
Dave Carpenter
Sound Logic

## 5115. Re: Power supply: improving rating?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: John Mock <kd6pag@nospam.mocha.ecofe.com>
Message-ID: <4mg1o2bc3m.fsf@spinner.ecofe.com>
Source record: 88501

> How can I beef up a power supply to deliver more current...?
>
> With common parts?
>
> I think I can put on a 3055 transistor for a 7805 circuit to deliver
> several amps rather than less than 1 amp, correct? And several 3055 in
> parallel to increase that, true?
>
> DJ

It is usually not possible to increase the output of an already
built power supply by a factor of 2, or more, without a complete
redesign. And it generally turns out in the end to be not cost
efficient.
Roland, KB8XI

Your limiting factor is likely to be your transformer. For example, if you were, for example, to try to build a 13.8V 15A power supply, and try to buy the transformer off-the-shelf (assuming you can find one), you'll probably pay more for it alone than for an already-built supply at a decent-sized electronics flea market (if you get there early and/or you are willing to go more than once to find it). So you'll most likely find that the transformer in your existing supply won't do what you need. If i had to build such a power supply, i'd probably look for a used battery charger at a conventional flea market and cannibalize it for parts.

Now, moderate-to-high current 5V supplies are plentiful at electronics surplus stores and pretty cheap at electronics flea markets. So, if that's what you need, go get one. Almost anything larger than a coffee cup that isn't a 'wall-wart' will probably deliver several amps at 5V, (but check the rating). But if it's really 13.8V you need, one thing that the locals have suggested is getting three comparable 5V supplies (identical if possible), crank them down to 4.6V, and run them in series. (But don't try running two "12V" supplies in parallel unless you really know what you're doing!) Good luck.

-- KD6PAG (Networking Old-Timer, RF newbie)

# 5116. FS 2 TUBES 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Ed Carpenter <k4gj@scia.net>
Message-ID: <66k4ge$e1d$1@news.utelfla.com>
Source record: 88502

Two 3-500Z's for sale, EIMAC, used only a few hours. Standbys for my SB-220,
but I don't use it enough to warrant having the spares sitting around.
E-mail me for history of tubes. $145 for the pair, plus shipping. 73,
Ed
k4gj@scia.net

## 5117. mod for Santec

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Glenn Schultz <glenn@spacestar.net>
Message-ID: <01bd04e0$b17a2740$bac0bfce@larry.spacestar.net>
Source record: 88503

Does anyone know of a mod for the old Santec ST-142? Since it goes from 142.00 to 149.995, I would assume it can go farther. I would like to use it for wideband recv. I don't necessarily want the xmit mod, just the recv.
--
Glenn
N0VYK
10X #68391
n0vyk@spacestar.net
glenn@spacestar.net
Check out the N0VYK Antique and Amateur Radio Homepage:
http://www.spacestar.net/users/glenn/index.html

By US Code Title 47, Sec.227(a)(2)(B), a computer/modem/printer meets the definition of a telephone fax machine. By Sec.227(b)(1)(C), it is unlawful to send any unsolicited advertisement to such equipment, punishable by action to recover actual monetary loss, or $500, whichever is greater, for each violation.

# 5118. Re: HP 10590A adapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: smitsp <Harke.Smits@net.HCC.nl>
Message-ID: <348E3654.2C6F@net.HCC.nl>
Source record: 88504

Hello,

Anybody out there with a HP 10590A adapter for a HP 5345A counter lying
there doing nothing at all?

I am interested to put it back into service.

Please let me know,

regards,

Harke Smits (PA0HRK)
harke.smits@net.hcc.nl

# 5119. FS: James Millen 92200 Antenna tuner $225. shipped

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: n8htv@flash.net
Message-ID: <66kjb5$6kl$2@excalibur.flash.net>
Source record: 88505
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.ham-radio.swap,rec.radio.amateur.boatanchors

James Millen 92200 Tuner 3 KW+ Coax in and coax out. Works 80-10 meters
Cabnit has been painted light gray, face is original and in good condition.
$225.00 shipped to lower 48 states UPS ground

Call (810)445-8175 or e-mail n8htv@flash.net

# 5120. Weaver type SSB transceiver - dynamic range?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <348dd3bd.6395576@news.online.no>
Source record: 88506
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Hi
I am planning to build and test S53MV Matjaz SSB direct conversion transceiver. Dynamic range is said to be a problem with this type receiver. S53MV circuit uses LM324 type op.amp in LF-stages. This is quite noisy, wouldn't TL084 have lower noise, so one may receive a weaker signal and need not have so much RF gain?
Any ideas for how to improve the dynamic range?
S53MV and other mentions that this design is more ideally suited for 23/13/6/3cm transceiver where usually it is only a few weak signals at the time
This transceiver project is described in 1997 Scriptum des Vortr�ges, Weinheim, Germany and DUBUS info nr 3/97 (october) and 4/97 (??) with PCB lay-out, DJ9BV explains the theoretical background.
73

----
Jan-Martin Noeding - LA8AK at online dot no
N-4623 KristiansandS

Tel.+47-380-87178

# 5121. Weaver type SSB transceiver - dynamic range?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: LA8AK@online.no
Message-ID: <348dd450.6542775@news.online.no>
Source record: 88507
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Hi
I am planning to build and test S53MV Matjaz SSB direct conversion transceiver. Dynamic range is said to be a problem with this type receiver. S53MV circuit uses LM324 type op.amp in LF-stages. This is quite noisy, wouldn't TL084 have lower noise, so one may receive a weaker signal and need not have so much RF gain?
Any ideas for how to improve the dynamic range?
S53MV and other mentions that this design is more ideally suited for 23/13/6/3cm transceiver where usually it is only a few weak signals at the time
This transceiver project is described in 1997 Scriptum des Vortr�ges, Weinheim, Germany and DUBUS info nr 3/97 (october) and 4/97 (??) with PCB lay-out, DJ9BV explains the theoretical background.
73

----
Jan-Martin Noeding - LA8AK at online dot no
N-4623 KristiansandS

Tel.+47-380-87178

# 5122. Re: $500.00 USD Reward for design...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <348E0668.7876@txeas.net>
Source record: 88508

Such a deal.

If I thought I could whip out the design in five hours,
I'd take a shot at it.

I ahve to wonder, though -- if he's offering rates this low,
what's to keep HIM from pirating all the winning designs we
send him? I didn't see any mention of contractural obligations
in the post other than a promise to pay.

On the other hand, why doesn't he send the design work off-shore
to Albania or some place where engineers will work for 25 cents
an hour?

Finally -- what's wrong with any of the multitude of FM
transmitter kits on the market now, in a decent tin box
with a decent output filter? I mean, we ALL remember what
a smashing success Mr. Microphone was!

Jim N6OTQ

# 5123. Re: TUBES FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <348E0924.2B30@txeas.net>
Source record: 88509

Just have to mention this...in the December 1997 QST, in "Up Front," Bob AF6V's tube bank was mentioned. He _gives away_ tubes if you pay $5 shipping. The short article didn't say if that was per tube, or per small shipment of tubes.

One tube in a box, via USPS Priority Mail, will earn Bob just under a dollar after he buys the packing materials. I think that's reasonable, especially after the last time I tried to replace a tube in a VFO and got my wallet seriously lightened.

You might give him a try. I bet Bob is good in the Callbook if you don't get QST.

Jim N6OTQ

# 5124. Re: Req: info on mod'ing a 2-meter for Fire/Med band use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <348E0C19.628D@txeas.net>
Source record: 88510

Chris Schmierer wrote:
>
> Hi...
> Just wondering if anyone has had any experience modifying a 2 meter
> radio, either a mobile or HT, so that it can transmit outside the
> 144-148 range.

Most of us have. The ADI-600 is keyboard reprogrammable
for this feature. The difficulty or availability of the mod
depends on the rig, and this may influence your buying decision.

On most 2 meter rigs (except RS), especially synthesized rigs, the mod
is easy and works FB. I modded my Azden PCS-6000 for "extended
coverage." Desolder one diode. For me, the hardest part was re-
entering all the frequencies into the memories. On this particular
rig, it opens up the receive as well as the transmit -- I wanted the
receive capabilities.

Since it's not FCC type-accepted for the extended coverage
frequencies, it's not legal to use it to transmit there.
This goes for any 2-meter rig. As always, the station operator is
responsible for ensuring legal operation. YMMV.

Jim N6OTQ

# 5125. SW Antenna , Tv Tuner & DRAM Memory

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: Nuno Sucena Almeida <slug@pc2.local.aeminium.pt>
Message-ID: <66kfov$fu0$1@aeminium.ddns.org>
Source record: 88511
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello guys,

i bought last saturday my first Amateur radio ( its a Yaezu FT-707
or FT-702 i will check it latter...) well, it has 80,40,30,12,15,10(four)
bands and i would like to *make* a simple antena, transmatch system to
start trasmiting something, preferebly on all of this bands.I have a simple
wire right now ( receive only of course :) since i didn't have the time to
even buy coaxial cable.
I have and checked 1995 ARRL Handbook and Antenna handBook and it gave me
some *ideas*, but could you give more?
I also have in mind, by some time, to build a receiver that apeared on
Elektor Electronics, which used a TV Tuner and a NE605 to cover all the
VHF/UHF FM/AM bands.
The problem is the *TV-Tuner*. I have several at my home but were can I
get the *pinouts*?
Other thing:) Can anybody tell me were can i find information on
the following chip LC324256BP-70 ? I checked Sanyo Site and they only have
the PDF for LC32464. Its a DRAM chip that i got from a Cirrus Logic 5424
VLB graphics card.I have 16 chips like this one, but i think some of them
are broken. I would like to use some to make a simple scope using it
with a Maxim ADC and some software, and some of the others to some uP stuff i
have in mind.
And about Toshiba TC5565APL-15 and NEC D43256AC-12L pinouts ?

Thank you very much for your help!

--
To reply by e-mail use *slug* as user and *student.dee.uc.pt* as domain.
My web page & PGP sig are located at the same place.
Linux , AX25, Electronics, Amateur-Radio, Laser-coms nuts
CT1FOX CQG9304 CQM9228 Eng.Electrote'cnica FCTUC

# 5126. Re: $500.00 USD Reward for design...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-09 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19971209144001.JAA01892@ladder01.news.aol.com>
Source record: 88512

Hi George--

Did they teach you that one in evening MBA class??

73

Rick K1BQT

## 5127. 10 meter beacon help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: Stanley <so@bigfoot.com>
Message-ID: <348EF88B.5BDB@bigfoot.com>
Source record: 88420

I am Stanley, KC4DPC. I need your help in keeping the KC4DPC 10 Meter Beacon List up to date. Please let me know of any 10 meter beacon you may hear and any information you might have on them. The list is available at several website including mine, which I up date as often as possible.
--
Sincerely, Stanley
Website: http://localsonly.wilmington.net/~stanley/
Nature's Vineyard: http://www.freeyellow.com/members/dixie/index.html

Unsolicited commercial e-mail is deleted by SMartMail.

## 5128. Preamp for about 1500MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: Terry Gaff <shbcommm@indigo.ie>
Message-ID: <348F1685.28FE06F9@indigo.ie>
Source record: 88421

Any kind individual out there know where I can get a circuit diagram for a preamp for about 1500MHz (1.5GHz) preferably low noice and maybe 20db or so?

Thanks a lot

Terry Gaff

## 5129. silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: mediumwave@hotmail.com
Message-ID: <mediumwave-ya02408000R1012971742000001@news.zippo.com>
Source record: 88422

What are the advantages of using solder that is 2% silver, compared
to solder that is only tin and lead?

--
They call me "Crash" because that's the only way I can get into parties.

# 5130. Fast Charger NiCd Battery charger scheme needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: alfonsog@redestb.es
Message-ID: <66n93j$dl3$1@talia.mad.ibernet.es>
Source record: 88423

Hi, I want make a fast Charger batterys for my wt, but i don't have
the scheme.

You can help me?

Thanks in advanced. 73's EB3FYJ Alfonso
e-mail: alfonsog@redestb.es
73 de EB3FYJ
Regards :-)

# 5131. Re: Low Power FM xmitter wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: mediumwave@hotmail.com
Message-ID: <mediumwave-ya02408000R1012971841290001@news.zippo.com>
Source record: 88424

In article <19971130002401.TAA27266@ladder01.news.aol.com>,
richrapp@aol.com (RichRapp) wrote:

> Thanks, what is the legal limit in the US??? I have the Ramsey kit which puts
> out between 0.05 and 0.1 watt. Is this legal?

Lyle's response is correct about the regulations. I'd like to invite
you to visit us in the newsgroup alt.radio.pirate, where you can join
the growing number of unlicensed broadcasters who are taking back the
airwaves from the tyrannical federal government and the corporate
conglomerates who have stolen the broadcast bands from the people.

--
They call me "Crash" because that's the only way I can get into parties.

# 5132. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <348f00ee.0@news.imaxx.net>
Source record: 88425
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

You might try the HP 1N5712 Microwave Diode.

Chuck KD9JQ

J M Noeding wrote in message <348f3dbf.724021@news.online.no>...
>Hi
>Tom Twist(LB8X) and I are planning to build the G3LDI 3-M antenna
>impedance bridge *) and use AD-converter and modify software, we hope
>to find a simple and inexpensive circuit for later publication.
> I need 5 equal diode RF detectors. We will prefer to use some
>commonly available diodes.
> AA118, AA119 or 1N270 germanium diodes will work satisfactorily
> beyond 1000MHz, but they are difficult to find. The only available
> germanium diode in some quantity is 1N34A (and OA85), they have
>proven not particularly good over the frequency range. So I have made
>a test circuit using 1N4148 made on a small piece of single sided pcb
>
> laminate, using short wire ends for good VHF practice.
>
>The result is shown below. I am sort of dissappointed, it seems that
> inspite of having low capacity, the 1N4148 (1N914) have not
> particularly good detected level vs frequency data.
>We will use some software program to calculate between the 5 different
> detected voltages, we may have to use some frequency calibration,
>too.
>Keeping the actual RF voltages higher than 100mV it seems possible to
> use the inexpensive silicon diode as an RF detector.
>1N4148 as RF detector diode.
>---------
>detected level vs frequency for the detector
>shown below:
>
> -----|--1nF---|-1N4148*-|-----|-----|------+out
>RF in | | | | | to Fluke 8020B
>BNC 56R 1N4148 1000pF 10nF 1M
> -----|--------|---------|-----|-----|-----gnd
>
> Detected mV DC @frequency
>Level 5MHz 15MHz 25MHz 35MHz
>30mV 2.1 1.8 - -
>100mV 10.1 9.0 8.0 6.7
>200mV 72 64 57 48.5
>250mV 143 130 118 100mV
>300mV 234 214 195 170

>400mV 438 409 380 340
>500mV 640 605 571 520
>700mV 1157 1110 1055 976
>1V 1964(920) 1900(750)
>1.58V 2960(1380) 2370(1140)
>
>Measured with Wavetek Model 3001A signal generator
>and Siemens 3W518 Pegelsender
>1m RG58/U coax cable
>() refers to a circuit where second 1N4148 is
>replaced by a 100k resistor.
>
>....Jan-Martin
>
>*) Peter Dodd: The Antenna Experimenter's Guide, RSGB, second edition
>1996. ISBN 1 872309 36 4, page 15-28 + appendix page 137-148
>
>----
>Jan-Martin Noeding - LA8AK at online dot no
>N-4623 KristiansandS
>
>Tel.+47-380-87178

## 5133. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <348F9505.5BB6@trader.com>
Source record: 88426

> What are the advantages of using solder that is 2% silver, compared
> to solder that is only tin and lead?

None, IMHO. The stuff is crappy, but you can't find lead solder
any more. If anyone knows a source for rosin core 60/40, I'd
like to buy some.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

## 5134. TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: Toolman <nospampoustie@concentric.net>
Message-ID: <66o243$g61@examiner.concentric.net>
Source record: 88427
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

I have a Realistic HTX-100 10 m mobile that has a "lag time" between TX and RX. Everytime the mic. is released, a half second pause ensues before anything heard. Otherwise operation is fine. Anybody have any ideas? Thanks.

Tim

# 5135. amplif. with 2C39 or 4cx250

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: PDingemans <129432pd@student.eur.nl>
Message-ID: <348E91C8.6BE47697@student.eur.nl>
Source record: 88428

G'day,

I'm planning on building an amplifier for the 2 metre-band, using a 2c39 (preferably) or 4cx250 (less preferably, because of screen & grid voltages needed). The problem is, that I have lots of schematics for the 4cx250, but they all use Lecher-lines or strip-lines. What I want to try first is using ordinary coils & caps. Is that still possible at this freq.?

Other problem: I would prefer to first try to make an amp using a 2c39, since I have never before worked with valves. Problem is, that I can't seem to find any schematics for the 2m-band using the 2c39... Is that simply because they don't exist, or haven't I looked hard enough?

My question to you is: does anyone know of schematics for the 2c39, and if so, could he point me out on where to find them (or perhaps e/s-mail them; costs will of course be refunded).

Thanks in advance,

73, Peter Dingemans.

# 5136. Svetlana 4CX1600B in linear amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: UserName@prairie.lakes.com
Message-ID: <348f21d1.32793903@news.lakes.com>
Source record: 88429

Anyone used a 4CX1600B in a home brew HF linear??

Frank, KG0FC/G8CJ

# 5137. Re: need advice on BFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: oak@texas.net
Message-ID: <66kv79$srb$1@news3.texas.net>
Source record: 88513

In article <348c1900.1336105@news.erols.com>, wmeara@erols.com says...
>
>On 8 Dec 1997 06:54:28 GMT, oak@texas.net (Oak) wrote:
>
>>Seasons Greetings everybody,
>>
>>After success with a few QRP xmtrs and DC rcvrs, I want to build a
>>receiver.

snip

>>73's
>>
>>K7RMJ
>>Frank
>
>Frank: You might want to consider Doug DeMaw's "Barebones Superhet"
>From the July 1982 QST. It uses a 3.579 Mhz (colorburst crystal) IF.
>The crystals are very cheap - just a few bucks for a bag of 50. For
>the BFO you can use one of the same rocks with a small cap to shift it
>700 hz or so. I've been very pleased with this set up here. Built
>a three pole filter and I think the selectivity is around 400 hz.
>For SSB I built a little one crystal, one resistor filter that I can
>switch in. Sounds good two.
>
>Good luck with the superhet. I found performance to be FAR superior
>to the DC receivers. And not much more difficult.
>
>73 Bill N2CQR

Bill: Thanks for responding. I almost chose the circuit you mention,
However, a few years ago I built a receiver from the QRP Classics called
A Four Stage 75-Meter SSB Superhet with some success. I used the
reccommended 9MHz single-crystal scheme with a 9.0015 MHz BFO crystal.
I have to agree, the performance was better than the DC receivers, but
it was still lacking for my needs. (I'm a hard-core CW man) The
circuit you mention is lacking in Selectivity and it lacks a good AGC
system. The circuit I chose may also be lacking in selectivity and it's
AGC is questionable in my mind, but I like the IF stage (two MC1350's
instead of one), and the S-Meter circuit. With two amplifiers in the
IF strip, a good AGC is acheivable. Good AGC being without "thumps" and
"pops". Anyway, I thank you for the interest and your response.

Regards, Happy Holidays, and 73's

Frank... K7RMJ
>>
>

# 5138. Re: need advice on BFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: oak@texas.net
Message-ID: <66kvj2$srb$2@news3.texas.net>
Source record: 88514

In article <348ba51c.0@newshost.pcug.org.au>, parkerp@pcug.org.au
says...
>
>Frank - ideally you would use two 455 kHz xtals, one for LSB and one
for
>USB. Their frequencies would be close to the extreme ends of the 3kh-s
>wide filter passband - see what the handbooks say about SSB
transmitters
>- the same principles apply.
>
>Alternativly you could experiment with 455kHz ceramic resonators - it
may
>be possible to shift it to cover both USB and LSB positions. A
>free-running BFO should be reasonably stable also - you could
experiment
>with VFO circuits using 455kHz IF transformers as the inductor.
>
>73,
>
>--
>_____________________________________________________
>Peter Parker
>
>E-mail: parkerp@pcug.org.au
>Amateur Radio: VK1PK
>
>Home Page: http://www.pcug.org.au/~parkerp/
>The home of Novice Notes Online, the Australian QRP Home
>Page and the STWG Web Site.
>_____________________________________________________
>
>
Peter - Thanks for the response. Your post has given me the solution.
As usual for me it was a BFO (Blinding Flash of the Obvious)...pun
intended. Two crystals, one for each sideband, and a variable circuit
on both of them. Your comment about ceramic resonators is very
interesting. Did I read somewhere that they were a bit noisey if used
in an oscillator??

Regards and thanks again.

Happy Holidays,

Frank...K7RMJU

Remember this... No matter where you go.... there you are.

# 5139. Re: Need xref on SD1127 (substitution parts)??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <348e6b96.6965928@news.lin.foa.se>
Source record: 88515

Motorola RF Device Data says:
SD-1127 direct replacement is: MRF 237 or TP2314

On Fri, 05 Dec 1997 12:03:48 -0600, kb5ylg <kb5ylg@airmail.net> wrote:

>Need cross reference substitution parts for and SD-1127 transistor...
>

## 5140. Wanted Vac Variable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: Paul Hellenberg <paulh@truline.com>
Message-ID: <66m676$fm0$1@news3.alpha.net>
Source record: 88516

WTB Vac Variable 50 to 100 pF at 10 to 15 kV.

w9ja@contesting.com

# 5141. Re: Weaver type SSB transceiver - dynamic range?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@jps.net>
Message-ID: <348E9BDF.4281@jps.net>
Source record: 88517
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

J M Noeding wrote:
>
> Hi
> I am planning to build and test S53MV Matjaz SSB direct conversion
> transceiver. Dynamic range is said to be a problem with this type
> receiver. S53MV circuit uses LM324 type op.amp in LF-stages. This is
> quite noisy, wouldn't TL084 have lower noise, so one may receive a
> weaker signal and need not have so much RF gain?
> Any ideas for how to improve the dynamic range?
> S53MV and other mentions that this design is more ideally suited for
> 23/13/6/3cm transceiver where usually it is only a few weak signals
> at the time
> This transceiver project is described in 1997 Scriptum des Vortr�ges,
> Weinheim, Germany and DUBUS info nr 3/97 (october) and 4/97 (??) with
> PCB lay-out, DJ9BV explains the theoretical background.
> 73
>
> ----
> Jan-Martin Noeding - LA8AK at online dot no
> N-4623 KristiansandS
>
> Tel.+47-380-87178
I have read with interest this article.I tried to procure the balance of
the article from Dubus who informed me it is a four part article which
only will be available in the magazine.Part two is scheduled to be
shipped 12-15-97.
I am so unskilled in digital circuitry to only suggest that the
utilization of DSP would appear to offer a order of magnitude
improvement in a practical implementation of the Weaver method.I guess
I'll have to wait for the more experienced to publish a design that I
can duplicate. 73 Ken W6GHV

# 5142. Re: Weaver type SSB transceiver - dynamic range?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@jps.net>
Message-ID: <348E9D6C.2D26@jps.net>
Source record: 88518
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

J M Noeding wrote:
>
> Hi
> I am planning to build and test S53MV Matjaz SSB direct conversion
> transceiver. Dynamic range is said to be a problem with this type
> receiver. S53MV circuit uses LM324 type op.amp in LF-stages. This is
> quite noisy, wouldn't TL084 have lower noise, so one may receive a
> weaker signal and need not have so much RF gain?
> Any ideas for how to improve the dynamic range?
> S53MV and other mentions that this design is more ideally suited for
> 23/13/6/3cm transceiver where usually it is only a few weak signals
> at the time
> This transceiver project is described in 1997 Scriptum des Vortr�ges,
> Weinheim, Germany and DUBUS info nr 3/97 (october) and 4/97 (??) with
> PCB lay-out, DJ9BV explains the theoretical background.
> 73
>
> ----
> Jan-Martin Noeding - LA8AK at online dot no
> N-4623 KristiansandS
>
> Tel.+47-380-87178
I read with interest the two articles mentioned.According to Dubus
part 2 of this 4 part article is scheduled for shipment 12-15-97.
Being a novice when it comes to digital circuitry I can't speak
authoritavely.But I would suggest that the Weaver method is a logical
candidate for DSP circuitry.I 'll just have to wait for the more
knowledgeable to publish a design that I can reproduce. 73 Ken W6GHV

# 5143. Re: Weaver type SSB transceiver - dynamic range?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-10 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971210130615.28644A-100000@Stratus.CAM.ORG>
Source record: 88519
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Wed, 10 Dec 1997, K.R.Burtchaell wrote:
[stuff deleted]
> I am so unskilled in digital circuitry to only suggest that the
> utilization of DSP would appear to offer a order of magnitude
> improvement in a practical implementation of the Weaver method.I guess
> I'll have to wait for the more experienced to publish a design that I
> can duplicate. 73 Ken W6GHV
>
>
If you are going to connect a DSP, then there is no advantage of using
the Weaver, or "Third Method".

The whole point of the idea is to provide the needed 90 degree shift
at the audio freguencies. Both the phasing method and the Third Method
start similarly, in that there are two product detectors (we are talking
about receiving here), and they are fed from a bfo, via a 90 degree
shift network. The phasing method takes the audio outputs from the
detectors and combines them via a 90 degree audio phase shift network.

The Third Method takes the detector outputs, and feeds them into
a second set of mixers, these operating at audio frequencies. The
"bfo" to these again comes through a 90 degree network. The output of
these mixers has a 90 degree shift, and is more or less the same
as with the phasing system, after the audio phase shift network. (Yes,
this is a simplified explanation, both in circuit info (there
have to be filters) and theory.

The advantage of the Third Method is that instead of having to
get a wide band 90 degree phase shift network, with all those
precise capacitors and resistors, you need a single frequency
90 shift network, at the frequency of the "bfo" that feeds
the second set of mixers.

But if you are going to try to connect a DSP, which will do
the audio phase shifting, there is no need, and I can't think of a
reason, for the second set of mixers and the associated circuitry,
because the only purpose they serve is to do the audio phase shifting.

I'll try and dig up some articles on The Third method, and post
a bibliography later.

Michael VE2BVW

# 5144. 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: LA8AK@ax25.packet
Message-ID: <348f3dbf.724021@news.online.no>
Source record: 88430
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi
Tom Twist(LB8X) and I are planning to build the G3LDI 3-M antenna impedance bridge *) and use AD-converter and modify software, we hope to find a simple and inexpensive circuit for later publication.
I need 5 equal diode RF detectors. We will prefer to use some commonly available diodes.
AA118, AA119 or 1N270 germanium diodes will work satisfactorily beyond 1000MHz, but they are difficult to find. The only available germanium diode in some quantity is 1N34A (and OA85), they have proven not particularly good over the frequency range. So I have made a test circuit using 1N4148 made on a small piece of single sided pcb

laminate, using short wire ends for good VHF practice.

The result is shown below. I am sort of dissappointed, it seems that inspite of having low capacity, the 1N4148 (1N914) have not particularly good detected level vs frequency data.
We will use some software program to calculate between the 5 different detected voltages, we may have to use some frequency calibration, too.
Keeping the actual RF voltages higher than 100mV it seems possible to use the inexpensive silicon diode as an RF detector.
1N4148 as RF detector diode.
---
detected level vs frequency for the detector shown below:

```
-----|--1nF---|-1N4148*-|-----|-----|------+out
RF in | | | | | to Fluke 8020B
BNC 56R 1N4148 1000pF 10nF 1M
-----|--------|---------|-----|-----|-----gnd
```

Detected mV DC @frequency
Level 5MHz 15MHz 25MHz 35MHz
30mV 2.1 1.8 - -
100mV 10.1 9.0 8.0 6.7
200mV 72 64 57 48.5
250mV 143 130 118 100mV
300mV 234 214 195 170
400mV 438 409 380 340
500mV 640 605 571 520
700mV 1157 1110 1055 976
1V 1964(920) 1900(750)
1.58V 2960(1380) 2370(1140)

Measured with Wavetek Model 3001A signal generator
and Siemens 3W518 Pegelsender
1m RG58/U coax cable
() refers to a circuit where second 1N4148 is
replaced by a 100k resistor.

....Jan-Martin

*) Peter Dodd: The Antenna Experimenter's Guide, RSGB, second edition
1996. ISBN 1 872309 36 4, page 15-28 + appendix page 137-148

---
Jan-Martin Noeding - LA8AK at online dot no
N-4623 KristiansandS

Tel.+47-380-87178

## 5145. Learn about Amateur Television (ATV)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: wb6izg@qsl.net
Message-ID: <348f473c.4458053@news.adnc.com>
Source record: 88431
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I invite you to visit my web site to learn about ATV. If you have always been curious about real television that hams use to communicate with each other then this site is for you. View a video of a television net, see pictures and data of the ATV repeater in southern CA., view videos of a balloon launch and rocket launch having ATV, and visit links to most ATV related sites around the world.

Site is www.qsl.net/wb6izg

See you there,

Bruce Forsberg
WB6IZG

ATV Home Page: http://www.qsl.net/wb6izg
Email: wb6izg@qsl.net

# 5146. Re: need advice on BFOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: oak@texas.net
Message-ID: <66nog4$nqf$1@news3.texas.net>
Source record: 88432

In article <66g5j4$t2j$1@news3.texas.net>, oak@texas.net says...
>
>Seasons Greetings everybody,
>
>After success with a few QRP xmtrs and DC rcvrs, I want to build a
>receiver.

snip

>73's
>
>K7RMJ
>Frank
>

Seasons Greetings all...

I received a number of email requests for more information about the receiver project mentioned above. So, here is a summary of where I am so far. Keep in mind a lot of this is heavily influenced by W1FB's research and publications. The receiver requirements were to be as follows:
1. It MUST BE STABLE!!!
(I am tired of retuning every 10 minutes)

2. It must have good selectivity and IMD performance.

3. It must have sufficient gain to allow good agc.

4. It must be at least as sensitive as my old TS-930S.

5. It must have an S-Meter (for guesstimating purposes).

6. It must be simple enough for an experienced ham to build (tic)

For stability reasons, the VFO frequency is kept as low as is practical. We are talking analog VFO here, not a frequency synthesizer. A tuning bandwidth of 400 to 500 KHz would cover the cw portion of most bands. 455KHz is very popular as an IF frequency and will allow down-conversion from the VFO to the IF. On page 54 of W1FB's QRP Notebook, I found the same VFO circuit of DeMaw's that I had built more than once with very good results in previous home brew receivers and a transmitter. (And best of all there is a PC board available from FAR Circuits...the side of my PC now has an interesting splash of orange freckles on one side)

So, it looks like 160 meters is a good choice of frequency for stability reasons. Converters can be added for more bands later.

This would make the receiver a "Tuned IF" receiver.

Selectivity, IMD and overall gain make the IF stage gain requirements go up, thus requiring more stages of amplification (just so the AGC can knock the gain back down again). This requirement sent me back to the books again. W1FB again came through for me with his pair of MC1350's in series with a Collins mechanical filter in front of them See the Advanced Superhet Mainframe circuit on page 165 of W1FB's QRP NOTEBOOK. (And, there is another PC board available from Far Circuits...the matching spots on my desktop will be happy to hear this)

The AGC section of this receiver is a simple audio AGC system which also drives the s-meter. Even though it isn't mentioned in the accompanying article, I suspect this AGC system will have the thumps and pops that are typical of an audio agc system. However, I might just give it a try as designed just to get it working before I tinker it to death, and I know where there is a receiver design with a much better agc system, so I can change it later. I have an older copy of Solid State Design for the Radio Amateur (second printing 1986) which has a very good design for a 160 meter, high performance receiver. The agc system gets it's input from the output of the last IF amplifier rather than after the output of the product detector. I want to try this circuit in my receiver eventually. (see page 137 fig.39).

This is about where I was when I posted the help with the BFO. From the answers I received, the BFO will be a two-crystal affair, one USB and the other LSB, and a circuit to bend them a few KHz. I found a likely circuit in W1FB's Design Notebook, figure 5-15. A little tinkering and I think I can get those crystals to pull off freq a bit. (And, there is another PC board available from FAR Circuits... that will make the Mrs. happy... we don't talk about the floor tile I replaced)

So now it's back to the Dan's parts catalog and the FAR Circuits catalog and a battle with my checkbook.

Hmmmm.... I wonder what I am forgetting??? Comments? Constructive criticism is ALWAYS welcomed.

Regards, 73's and Happy Holidays to all...

de K7RMJ... Frank dit..dit

# 5147. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <66nrmh$bj4$2@news1.teleport.com>
Source record: 88433

In article <mediumwave-ya02408000R1012971742000001@news.zippo.com>, mediumwave@hotmail.com (Crash Knorr) wrote:
>What are the advantages of using solder that is 2% silver, compared
>to solder that is only tin and lead?

It's used for soldering surface-mount components which have gold or palladium-silver terminations, and for soldering on silver-metallized hybrid circuits. If conventional Sn-Pb solder is used in these applications, the component metallization will be rapidly leached off the component or substrate. A little spool of this kind of solder used to be wound on one of the rear legs of Tektronix 'scopes. You needed to use it for soldering to the metallized ceramic terminal strips used in those old models, otherwise the metallization would disappear after a couple of rounds of soldering.

It's not necessary to use this solder for solder-terminated surface mount components intended for mounting on circuit boards.

Roy Lewallen, W7EL

# 5148. homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Harry Lythall <no.one@no.where>
Message-ID: <348F87A9.1FE3@no.where>
Source record: 88434

Homebrew

Hi all,

It has been a few weeks since I posted anything to the group, but in case you do not know, I have put a few circuits on my homepage. The latest was the G8TGL Terminal Unit which was originally designed to power an old teleprinter. It worked well on the HF bands although it needed a good filter (or a strong RTTY signal).

There have been loads of comments about the transmitters, but surprisingly, the BUG FM transmitter is still the most popular of the circuits!! Isn't it funny how amateurs like to play!!

I am still working on my all valve General Coverage receiver but the last two bands are a bit slow. I have been abroad a couple of times and don't seem to have much time.

Anyway, the URL (the new abbreviated URL) is:

http://come.to/sm0vpo

It is easier to pronounce on HF SSB.

Hope you have some fun with my circuits. Best regards and Merry Christmas. Regards Harry, SM0VPO (ex G4VVJ / G8TGL)

# 5149. Re: homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <348F904A.5D1D@txeas.net>
Source record: 88435

Harry Lythall wrote:

> Anyway, the URL (the new abbreviated URL) is:
>
> http://come.to/sm0vpo

In case you don't already know, this is one of the coolest
ham pages on the web!

Jim N6OTQ

And NO, Harry didn't pay me to say that!

## 5150. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <348F91F2.3FD3@txeas.net>
Source record: 88436

In addition to all that, silver solder also provides
a much more rigid mechanical joint. This is useful in
some applications.

The significantly higher melting point of silver solder is a non-issue
for electronic use, because all your active and passive devices
will degrade or die well before the melting point of Tin-Lead
solder is reached.

N6OTQ

# 5151. Re: TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: "Sean M. Gilligan" <smg3@lehigh.edu>
Message-ID: <348F9B48.D98F5DB4@lehigh.edu>
Source record: 88437
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

I don't have any experience with that radio, but that problem
is very characteristic of a lot of Radio Shack radios. I know
their 2m/440 handheld ham radios have the same problem,
dead audio for a good 1/2 sec after you release the PTT.
Chances are, there's nothing you can do about it. It
doesn't sound defective to me, it just sounds like a RS rig.

Toolman wrote:

> I have a Realistic HTX-100 10 m mobile that has a "lag time" between
> TX and
> RX. Everytime the mic. is released, a half second pause ensues before
> anything heard. Otherwise operation is fine. Anybody have any ideas?
> Thanks.
>
> Tim

--

---

Sean M. Gilligan * smg3@lehigh.edu
UNI 4055292 * AOL IM smg295

Lehigh University, Box C252, 39 University Drive
Bethlehem, PA 18015-3041 * (610.758.1188)

"Nobody knows what it's like to be the bad man,
To be the sad man,
behind blue eyes." -The Who

---

# 5152. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <K0pez3A2Q6j0EwTz@jmwa.demon.co.uk>
Source record: 88438
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <348f3dbf.724021@news.online.no>, J M Noeding
<LA8AK@ax25.packet> writes
>Hi
>Tom Twist(LB8X) and I are planning to build the G3LDI 3-M antenna
>impedance bridge *) and use AD-converter and modify software, we hope
>to find a simple and inexpensive circuit for later publication.
> I need 5 equal diode RF detectors. We will prefer to use some
>commonly available diodes.
> AA118, AA119 or 1N270 germanium diodes will work satisfactorily
> beyond 1000MHz, but they are difficult to find. The only available
> germanium diode in some quantity is 1N34A (and OA85), they have
>proven not particularly good over the frequency range.
Farnell offer several germanium diodes, including several varieties of
OA90, AAZ15 and AAZ17, also Schottky bridges and general-purpose PIN
diodes from HP. The bridges are said to go to 2 GHz.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. It is useless to threaten a strong man - he will
ignore you. It is dangerous to threaten a weak man - he will kill you if he can.

# 5153. Re: TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Christopher McGregor <mcwood@ncn.net>
Message-ID: <01bd062f$695a5840$213220cf@csm>
Source record: 88439
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

A "Roger Duh!" perhaps?

Toolman <nospampoustie@concentric.net> wrote in article
<66o243$g61@examiner.concentric.net>...
> I have a Realistic HTX-100 10 m mobile that has a "lag time" between TX
and
> RX. Everytime the mic. is released, a half second pause ensues before
> anything heard. Otherwise operation is fine. Anybody have any ideas?
Thanks.
>
> Tim
>
>
>

# 5154. Need data for msc2327-3

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Zlatko Miocevic <sbeop@alf.tel.hr>
Message-ID: <66onrq$329@argos.tel.hr>
Source record: 88440

Helo friends, I have transistor msc2327-3.Manufacturer is MICROWAVE SEMICONDUCTOR CORP.- N.J.-USA.Only data I have is freq. but I need voltage, current,gain.....e.t.c. Thanks in advance Zlatko
9A2SB

# 5155. Re: TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: William Lee <willee@interconnect.net>
Message-ID: <01bd0648$a6639d00$5dcbf2ce@william>
Source record: 88441
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

Toolman <nospampoustie@concentric.net> wrote in article
<66o243$g61@examiner.concentric.net>...
> I have a Realistic HTX-100 10 m mobile that has a "lag time" between TX
and
> RX. Everytime the mic. is released, a half second pause ensues before
> anything heard. Otherwise operation is fine. Anybody have any ideas?
Thanks.
>
> Tim
>
>
>
This sounds like the radio has the AGC or QSK adjustments set too slow.
This is exactly what my Ten Tec does when I select the slow AGC or QSK
settings. If you cannot find an adjustment you will need to contact Rat
Shack and have them adjust it for you.

William Lee N5WRX

# 5156. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Jim Pennino <specsol@primenet.com>
Message-ID: <66ot5p$doe@nntp02.primenet.com>
Source record: 88442

Crash Knorr <mediumwave@hotmail.com> wrote:
: What are the advantages of using solder that is 2% silver, compared
: to solder that is only tin and lead?

: --
: They call me "Crash" because that's the only way I can get into parties.

It's like the advantages of a tack hammer compared to a sledge hammer;
depends on what you're doing.

Silver solder is higher temperature, mechanically stronger, and doesn't
leach lead.

In electronic assembly, about the only place silver solder is appropriate
is in soldering to metalized ceramics; the metalization is typically
silver based (though other metals are used) and lead solders tend to
leach the metalization off the ceramic.

The old Tektronics oscilloscopes with the components mounted on ceramic
carriers instead of circuit boards came from the factory with a small
spool of silver solder inside for makeing repairs. It helped keep people
from wiping out the carriers when they replaced a component.

When used on circuit boards, the high temperature of silver solder tends
to cause the pads to lift; not an appropriate use.

It's good for mechanical assembly. I had a radiator in a car once that
wouldn't stay together until I silver soldered all the joints. Kinda
pricy, but cheaper than a new radiator.

--
---
Jim Pennino
jimp@specsol.com
---

# 5157. AX.25 Software Source needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <66p391$1ri$1@ncar.ucar.edu>
Source record: 88443

Looking for *software* to implement AX.25 from a pc. Can anyone
suggest a source to purchase the software to do this?

Thanks!
Chip Owens
NCAR
Boulder, Colorado

--
Chip Owens NW0O, (owens@stout.atd.ucar.edu)

# 5158. Re: TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Professor <bgriffey@megsinet.net>
Message-ID: <66p8ei$pel$1@news.megsinet.net>
Source record: 88444
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

Toolman,
Is the squelch engaged when this occurs?

--
Professor

_____
Sean M. Gilligan wrote in message <348F9B48.D98F5DB4@lehigh.edu>...
:I don't have any experience with that radio, but that problem
:is very characteristic of a lot of Radio Shack radios. I know
:their 2m/440 handheld ham radios have the same problem,
:dead audio for a good 1/2 sec after you release the PTT.
:Chances are, there's nothing you can do about it. It
:doesn't sound defective to me, it just sounds like a RS rig.
:
:
:Toolman wrote:
:
:> I have a Realistic HTX-100 10 m mobile that has a "lag time" between
:> TX and
:> RX. Everytime the mic. is released, a half second pause ensues before
:> anything heard. Otherwise operation is fine. Anybody have any ideas?
:> Thanks.
:>
:> Tim
:
:
:
:--
:_____
:
:Sean M. Gilligan * smg3@lehigh.edu
:UNI 4055292 * AOL IM smg295
:
:Lehigh University, Box C252, 39 University Drive
:Bethlehem, PA 18015-3041 * (610.758.1188)
:
:"Nobody knows what it's like to be the bad man,
:To be the sad man,
:behind blue eyes." -The Who
:_____
:
:

## 5159. Re: Meadowlake?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: CWC Mac 2 <xxx@xetron.com>
Message-ID: <34901467.762F@xetron.com>
Source record: 88445

Digi-Key carries TEK2000 (or equiv. not sure).
Art N2ERI

# 5160. Article Reprint

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Pete deVolpi <amsoft@epix.net>
Message-ID: <Forum.881862417.32697.amsoft@m>
Source record: 88446
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.dx,rec.radio.amateur.digital.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna

Article Reprint from August 97 Monitoring Times Page 72
"The World of Ham Radio"
A Gem of a CD
Ike Kerschner, N3IK

Have you ever stumbled onto something truly valuable? Remember the surprise, the thrill? You can experience that same feeling when you examine a copy of the CD-ROM software by AMSOFT called "The World of Ham Radio"! This is one of the best bargains I have laid my hands on in a long time.

This CD has been around for a few years, and I have seen it for sale at several hamfests. Several years ago I looked at it and felt the CD provided a decent call book with some nice software.

The latest copy, however, knocked me over! I held a copy of it for several weeks before giving it the once over, but after I started I couldn't stop. Programs that I had on separate disks were available to me in one location with an excellent menu, and moreover, they would run directly from the CD. For many years I have collected shareware at the price of 2 to 6 bucks a disk, finding many I liked but a lot more that were just ho-bum. If I were to add up the cash laid out to come up with a handful of decent programs I am sure it would be several hundred dollars.

"The World of Harm Radio" is a collection of excellent software, in fact, almost all of the programs I have chosen over the years as being the best are on this CD, plus a lot more, to boot. All of this and a call book, too! Looking up a call is a snap in AMSOFT's "World of Ham Radio." But, let me give you a brief tour of what else is on this CD.

When you type CDVIEW, a listing of many different subjects is presented to you. Choose "Antennas," for example, and you will find 26 different antenna programs that will provide full information on a host of antennas, from simple long wires to yagi and complex loop antennas.

"Basic programs" are a wide range of simple programs written in BASIC which will run directly from the CD. Examples of the Basic listings vary from antennas to z calculations.

Twenty-six different programs deal with Morse code - from learning programs to programs that will allow you to send Morse from your computer keyboard as well as copy code via the computer and shack receiver.

A variety of engineering programs are included, among which are a a simple-to-use CAD program for drawing schematics, a program to lay out PC boards, and tools for designing specific circuits.

Eight different logging programs give you anything you want for contest logging, general logging, and certificate hunting.

One program I particularly like is a training manual for the oscilloscope. As you go through the Oscope manual the computer shows demonstrations of what will appear on the screen of your oscilloscope under different testing situations. Last Christmas a good friend wanted more info on using an oscilloscope and we spent several weekends going over the use of the instrument in my shack. If we had this program, I am sure my friend would have learned a lot more a lot faster.

Equipment modifications also are included on the "World of Ham Radio" CD. I examined all of the mods available on the CD and am anxious to try several, especially one for a scanner I have. Not every piece of equipment is covered, but there is a lot!

Eight propagation programs allow user to determine the best time and frequency to work various parts of the world.

Included are 36 packet programs from very simple to very elaborate terminal programs, information on using packet, and circuits for various packet projects. If you ever wanted to try RTTY, 10 programs on this CD will let you get your feet wet in this interesting mode with minimum outlay.

A very interesting listing for satellite comm- unications provides info on operating and tracking programs, again from simple to fairly complex. There are several programs for SSTV and WEFAX that I am just now beginning to explore.

As always, there is a "Miscellaneous" listing containing 89 programs which I have only begun to explore. There is also a question and answer section that deals with many subjects, Scanner buffs and SWLs will find a lot of good information on this CD: frequency lists, data bases, modifications, and more.

In short, "The World of Ham Radio" gives you hundreds,
if not thousands of dollars worth of information on ham radio,
and all at a price of $29! If you have a CD drive on your
computer, grab a copy ASAP. If you don't have a drive,
consider putting one on your machine just so you can
use this super CD.

Ike Kerschner, N3IK

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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# 5161. Re: Preamp for about 1500MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <y8DopNAHi5j0EwID@lfheller.demon.co.uk>
Source record: 88447

In article <348F1685.28FE06F9@indigo.ie>, Terry Gaff
<shbcommm@indigo.ie> writes
>Any kind individual out there know where I can get a circuit diagram for
>a preamp for about 1500MHz (1.5GHz) preferably low noice and maybe 20db
>or so?
>
>Thanks a lot
>
>Terry Gaff
>

I think that you will have problems getting 20 dB in a single stage. The
RSGB Microwave Handbook Vol. 3 has a high-performance, low-noise 1.3 GHz
GaAs pre-amp. which you could probably adapt for 1.5 GHz.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

# 5162. need tube info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: David Hatch <hatch_david@u2.bbrown.com>
Message-ID: <349037E4.4971@u2.bbrown.com>
Source record: 88448

Greetings,
I recently acquired a pair of tube audio amplifiers. No particular markings, except for the power xfmr, so I found AC power in easy enough(!). The output xfmr was also a no-brainer. They at least somewhat work. There is a gain pot on the input, and I can inc/dec to get varying levels of hum. But when I hook up my sig. gen to the input, there is *much* more hum than signal. They're fairly simple; 2 stages of 12AX7's and a 6AQ5A, with a 6X4 for HV rectification. The output xfmr is a Triad S-53X Universal. 6 output lugs, but not labeled for any particular impedance. There is also a can about 1 1/2" dia x 3" tall, labeled James C-1800 6 volt 60 cps. On one amp it is very noisy. The other is quiet. No idea what it is. What I would like is if anyone could direct me a bit as to what to look for signal-wise. I don't have much tube background, so maybe a book or two to look up? If someone wants to go more in-depth, I could probably come up with a schematic in .bmp by next Monday.

Thx, 73's
David

# 5163. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <66pdg4$cih$1@news1.teleport.com>
Source record: 88449

In article <348F91F2.3FD3@txeas.net>, jstrohm@.texas.net wrote:
>In addition to all that, silver solder also provides
>a much more rigid mechanical joint. This is useful in
>some applications.

You're confusing this solder (with 2% silver content) with "silver solder", which is a hard solder having a much higher silver content and, I believe, made from metals other than tin and lead. Eutectic tin-lead solder (Sn/Pb 63/37) melts at 183 C; 2%-silver solder (Sn/Pb/Ag 62/37/2) solidifies at 179 C and liquifies at 189 C. (The solder is in a "plastic" state in between; the eutectic 63/37 alloy doesn't exhibit this state.) So the melting temperature isn't changed much by the 2% silver content. Neither are the mechanical properties, except that you have to be more careful not to move the component as the solder cools due to the existence of the plastic state.

>The significantly higher melting point of silver solder is a non-issue
>for electronic use, because all your active and passive devices
>will degrade or die well before the melting point of Tin-Lead
>solder is reached.
>
>N6OTQ

Modern active and passive devices will withstand the melting temperature of tin-lead solder; the temperature of many components reaches this temperature during soldering, and some surface-mount processes actually immerse the components in a bath of liquid solder.

Roy Lewallen

# 5164. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <66pdu1$cih$2@news1.teleport.com>
Source record: 88450
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

>Hi
>Tom Twist(LB8X) and I are planning to build the G3LDI 3-M antenna
>impedance bridge *) and use AD-converter and modify software, we hope
>to find a simple and inexpensive circuit for later publication.
> I need 5 equal diode RF detectors. We will prefer to use some
>commonly available diodes.
> AA118, AA119 or 1N270 germanium diodes will work satisfactorily
> beyond 1000MHz, but they are difficult to find. The only available
> germanium diode in some quantity is 1N34A (and OA85), they have
>proven not particularly good over the frequency range. So I have made
>a test circuit using 1N4148 made on a small piece of single sided pcb
>
> laminate, using short wire ends for good VHF practice.
>. . .

You might take a look at "A Simple and Accurate QRP Directional Wattmeter", QST, February 1990, p. 19, and "The Tandem Match -- An Accurate Directional Wattmeter", QST, January 1987, p. 18. They describe a novel method of detecting low-level RF. The former article uses 1N34A diodes. The prototype unit functioned well up to 450 MHz, but I later found some diodes which wouldn't operate well above about 2 meters. The second article uses hot-carrier diodes which are more consistent at higher frequencies. The technique could be adapted to silicon junction diodes like the 1N4148.

Roy Lewallen, W7EL

# 5165. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: GRay <ggpray@gte.net>
Message-ID: <66ph70$ftd$2@gte2.gte.net>
Source record: 88451

Hmmm,only used to seeing you on alt.radio.pirate-The silver solders are used primarily as high-strength connection,some on the high-end audio groups will argue the sonic merits.....

GRay
--
To reply via E-mail,please remove the extra letter g from the address line of my e-mail..

There is only one thing that makes a mistake faster than a computer.....
A combination of handguns and Tequila.....Egads!

# 5166. Re: AX.25 Software Source needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <349041BB.4A63@trader.com>
Source record: 88452

> Looking for *software* to implement AX.25 from a pc. Can anyone
> suggest a source to purchase the software to do this?

Poor Man's Packet, including source, is on the net. It assumes
modems are connected to the parallel printer port, but with
source you could change that.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5167. hamtronics R144 FM Receiver or helical resonator amplifier.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: aziz@turnet.net.tr
Message-ID: <881872957.1920729099@dejanews.com>
Source record: 88453

hi there :

I need circuit of hamtronics R144 FM Receiver or helical resonator amplifier .

I need info , how to built helical resonators (3 pole) ?.
I have 2m receiver and I want to make adapt helical resonator .
73,s de TA2AD Sua

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5168. Need info: Advanced Computer Controls

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <66pl9e$iic$1@news1.teleport.com>
Source record: 88454
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I recently received the following request by email. I don't know the answer, but hope someone else can help. Please email responses directly to celebes@cdo.butuan.webquest.com.

Thanks!

Roy Lewallen, W7EL

Dear Sir:

The Agusan Radio Club Incorporated of Butuan City, Philippines has bought a Repeater Controller made by Advanced Computer Controls Inc. of the United States. We tried to contact the manufacturer because we had some problems with it but unfortunately, the no. in their manual now belongs to another company ansd we do not know how to contact this company.

We read your email address in the CQ Magazine and would like to ask you a favour if you cna help us locate this company and give us their complete address with their respective phone numbers. Any assistance would be highly appreciated by all our club members.

Thank you for your kind attention and may we look forward to hearing your good news.

Rory Ong Yiu - DU9LC
Agusan Radio Club Inc.
Kilometer 3, Ba-an
Butuan City 8600
Philippines

## 5169. Homebuilt transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19971211221900.RAA11163@ladder01.news.aol.com>
Source record: 88455

for sale , Homebuilt single 813 tube pair 811A modulators 3 tube audio sp.amp works AM and CW 250 watts output .has ext. ps, and seperate VFO Exciter with 2E26 output to drive 813 . built by a design engineer , beautiful work. all including spare tubes .$250.00 Plus ship. Harold, 850 476 8107

## 5170. Underwater radio app...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: void@world.std.com
Message-ID: <EL1rss.8pq@world.std.com>
Source record: 88456

Hi Guys,

Am a digital guy - this RF stuff is baffling!

I need a design reference source where I could
pick up the details I need to build a really small
transmitter receiver pair that will transmit five or six feet
underwater, for purposes of serial communication.

Anybody know where I can start looking?

-Will

# 5171. Re: Preamp for about 1500MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <66ps5h$mdb$1@news1.teleport.com>
Source record: 88457

In article <y8DopNAHi5j0EwlD@lfheller.demon.co.uk>, Leon Heller
<leon@lfheller.demon.co.uk> wrote:
>In article <348F1685.28FE06F9@indigo.ie>, Terry Gaff
><shbcommm@indigo.ie> writes
>>Any kind individual out there know where I can get a circuit diagram for
>>a preamp for about 1500MHz (1.5GHz) preferably low noice and maybe 20db
>>or so?
>>
>>Thanks a lot
>>
>>Terry Gaff
>>
>
>I think that you will have problems getting 20 dB in a single stage. The
>RSGB Microwave Handbook Vol. 3 has a high-performance, low-noise 1.3 GHz
>GaAs pre-amp. which you could probably adapt for 1.5 GHz.
>
>Leon

The Mini-Circuits MAR-6 is specified as having 11.0 dB gain at 2 GHz, 16.0 dB at 1.0 GHz., and a 3.0 dB noise figure (all typical). The MAR-8 is specified at 22.5 dB gain at 1 GHz, 3.3 dB noise figure, and a lot greater dynamic range. Prices are a few dollars, and both require only three or four external components. (But you'll have to add input filtering to keep them from overloading and creating spurs from out-of-band signals.) You can contact the Mini-Circuits distribution center at 800-654-7949, or see your favorite supplier.

Roy Lewallen, W7EL

# 5172. Re: AX.25 Software Source needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <SgKg+bA9HFk0Ew4k@lfheller.demon.co.uk>
Source record: 88458

In article <66p391$1ri$1@ncar.ucar.edu>, Chip Owens
<owens@stout.atd.ucar.edu> writes
>Looking for *software* to implement AX.25 from a pc. Can anyone
>suggest a source to purchase the software to do this?

Look for the KA9Q software, it's free. The latest version source code
needs the current DJGPP DOS port of gcc for compilation.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

## 5173. Re: TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Toolman <nospampoustie@concentric.net>
Message-ID: <66q43r$fp2@examiner.concentric.net>
Source record: 88459
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

No squelch, I'm in the habit of leaving it all the way open. (sidebander habit, I guess) I think the problem is in the tx/rx switching, but I'm not 'up' on that circuit. I note that there's no relay in these modern rigs---!? so must be switched by trx or diode?

Tim

Professor wrote in message <66p8ei$pel$1@news.megsinet.net>...
>Toolman,
>Is the squelch engaged when this occurs?
>
>--
>Professor
>_____
>Sean M. Gilligan wrote in message <348F9B48.D98F5DB4@lehigh.edu>...
>:I don't have any experience with that radio, but that problem
>:is very characteristic of a lot of Radio Shack radios. I know
>:their 2m/440 handheld ham radios have the same problem,
>:dead audio for a good 1/2 sec after you release the PTT.
>:Chances are, there's nothing you can do about it. It
>:doesn't sound defective to me, it just sounds like a RS rig.
>:
>:
>:Toolman wrote:
>:
>:> I have a Realistic HTX-100 10 m mobile that has a "lag time" between
>:> TX and
>:> RX. Everytime the mic. is released, a half second pause ensues before
>:> anything heard. Otherwise operation is fine. Anybody have any ideas?
>:> Thanks.
>:>
>:> Tim
>:
>:
>:
>:--
>:_____
>:
>:Sean M. Gilligan * smg3@lehigh.edu
>:UNI 4055292 * AOL IM smg295
>:
>:Lehigh University, Box C252, 39 University Drive
>:Bethlehem, PA 18015-3041 * (610.758.1188)
>:

>:"Nobody knows what it's like to be the bad man,
>:To be the sad man,
>:behind blue eyes." -The Who
>:_____
>:
>:
>
>

# 5174. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: macy@global.california.com
Message-ID: <Pine.BSI.3.95.971211174020.6978A-100000@global.california.com>
Source record: 88460
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Thu, 11 Dec 1997, Roy Lewallen wrote:

> >Hi
> >Tom Twist(LB8X) and I are planning to build the G3LDI 3-M antenna
> >impedance bridge *) and use AD-converter and modify software, we hope
> >to find a simple and inexpensive circuit for later publication.
> > I need 5 equal diode RF detectors. We will prefer to use some
> >commonly available diodes.
> > AA118, AA119 or 1N270 germanium diodes will work satisfactorily
> > beyond 1000MHz, but they are difficult to find. The only available
> > germanium diode in some quantity is 1N34A (and OA85), they have
> >proven not particularly good over the frequency range. So I have made
> >a test circuit using 1N4148 made on a small piece of single sided pcb
> >
> > laminate, using short wire ends for good VHF practice.
> >. . .
>
> You might take a look at "A Simple and Accurate QRP Directional Wattmeter",
> QST, February 1990, p. 19, and "The Tandem Match -- An Accurate Directional
> Wattmeter", QST, January 1987, p. 18. They describe a novel method of
> detecting low-level RF. The former article uses 1N34A diodes. The prototype
> unit functioned well up to 450 MHz, but I later found some diodes which
> wouldn't operate well above about 2 meters. The second article uses
> hot-carrier diodes which are more consistent at higher frequencies. The
> technique could be adapted to silicon junction diodes like the 1N4148.
>
> Roy Lewallen, W7EL
>
>
>

At HP we used to slightly bias the diodes ON so that the "knee" was
closer.

- Robert -

## 5175. Golden Eagle Mark4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-11 00:00:00 UTC
From: Lynn HOLLIER <scooter@thegrid.net>
Message-ID: <66qfn9$n33$1@zinger.callamer.com>
Source record: 88461

I need HELP!!!!!!
I have a golden eagle mark 4 that the forty channel chip has gone out on; I am trying to find a chip for the radio. The chip make is Motorola, and there are several numbers listed on the chip and I am not sure which number I need to get the chip.
Here are all the numbers: 7701 1302 0658 7703 and last 40ch.
If any one can help me and can point me in the direction of a company that carries this chip PLEASE e-mail me at:
scooter@thegrid.net

# 5176. Re: Preamp for about 1500MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Jim Valdes <jvaldes@whoi.edu>
Message-ID: <34914A07.75B2A183@whoi.edu>
Source record: 88371

Leon Heller wrote:
> 
> In article <348F1685.28FE06F9@indigo.ie>, Terry Gaff
> <shbcommm@indigo.ie> writes
> >Any kind individual out there know where I can get a circuit diagram
> for
> >a preamp for about 1500MHz (1.5GHz) preferably low noice and maybe
> 20db
> >or so?
> >
> >Thanks a lot
> >
> >Terry Gaff
> >
> 
> I think that you will have problems getting 20 dB in a single stage.
> The
> RSGB Microwave Handbook Vol. 3 has a high-performance, low-noise 1.3
> GHz
> GaAs pre-amp. which you could probably adapt for 1.5 GHz.
> 
> Leon
> --
> Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
> Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
> See http://www.lfheller.demon.co.uk/rcm.htm for details of a
> low-cost reconfigurable computing module using the XC6216 FPGA

Sounds like your looking for a GPS preamplifier. Check out TriQuint Semiconductor, theu make a GPS preamplifier evauation kit ~~ $ 35, ~ 17 dB gain and a 1.4 dB NF at 1500 Mhz. www.triquint.com

# 5177. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34913fc1.76891880@news.atl.bellsouth.net>
Source record: 88372

On 11 Dec 1997 07:26:01 -0700, Jim Pennino <specsol@primenet.com> wrote:

>Crash Knorr <mediumwave@hotmail.com> wrote:
>: What are the advantages of using solder that is 2% silver, compared
>: to solder that is only tin and lead?

>It's like the advantages of a tack hammer compared to a sledge hammer;
>depends on what you're doing.
>
>Silver solder is higher temperature, mechanically stronger, and doesn't
>leach lead.
>
>In electronic assembly, about the only place silver solder is appropriate
>is in soldering to metalized ceramics; the metalization is typically
>silver based (though other metals are used) and lead solders tend to
>leach the metalization off the ceramic.
>
>The old Tektronics oscilloscopes with the components mounted on ceramic
>carriers instead of circuit boards came from the factory with a small
>spool of silver solder inside for makeing repairs. It helped keep people
>from wiping out the carriers when they replaced a component.
>
>When used on circuit boards, the high temperature of silver solder tends
>to cause the pads to lift; not an appropriate use.
>
>It's good for mechanical assembly. I had a radiator in a car once that
>wouldn't stay together until I silver soldered all the joints. Kinda
>pricy, but cheaper than a new radiator.

Jim, you are confusing "hard" solder with 2% silver solder. 2% silver
solder is not high temperature (solidus point is within 2 degrees of
eutectic lead/tin), and it is not high strength (yield point is also within
2% of lead/tin). It does prevent leaching of nickel, silver, or gold from
components, and that's why it is used.

"Hard" silver solders, used by jewelers, gunsmiths, etc, have a silver
content of 50% or more. They are more correctly considered brazing alloys
rather than solders (solidus point is 1400-1700 F depending on the particular
alloy composition). They are best applied using a torch, and they have
a high strength (70,000 PSI), but they find no use in electronic assembly.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5178. Re: amplif. with 2C39 or 4cx250

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <TuMEXLAtWUk0EwIw@pacsat.demon.co.uk>
Source record: 88373

In article <348E91C8.6BE47697@student.eur.nl>, PDingemans
<129432pd@student.eur.nl> writes
>G'day,
>
>I'm planning on building an amplifier for the 2 metre-band, using a 2c39
>(preferably) or 4cx250 (less preferably, because of screen & grid
>voltages needed). The problem is, that I have lots of schematics for the
>4cx250, but they all use Lecher-lines or strip-lines. What I want to try
>first is using ordinary coils & caps. Is that still possible at this
>freq.?
>
>Other problem: I would prefer to first try to make an amp using a 2c39,
>since I have never before worked with valves. Problem is, that I can't
>seem to find any schematics for the 2m-band using the 2c39... Is that
>simply because they don't exist, or haven't I looked hard enough?
>
>My question to you is: does anyone know of schematics for the 2c39, and
>if so, could he point me out on where to find them (or perhaps e/s-mail
>them; costs will of course be refunded).
>
>Thanks in advance,
>
>73, Peter Dingemans.
>

Yep can help!

Try the German published UHF Manuals vol 3/4 - they have 2 designs using
2 and 3 2C39's plsu psu details / bias supplies etc

73 Simon
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 5179. Need HRO repair - Austin, TX area

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Gerald Clough <clough.NOSPAM@texas.net>
Message-ID: <34915479.5EF9@texas.net>
Source record: 88374
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur

I need someone experienced in working on older receivers to repair and allign my old HRO 50-T1. It needs a power transformer (I have one that I think will work), and I would like it tuned up and working well, recapped if needed, etc. It's well beyond my capabilities to do a good job on it. Prefer someone reliable anywhere around the Austin area. Reasonable pay is no problem. WB5JEO Lockhart
--
Gerald Clough clough@texas.net
"Nothing has any value unless you know you can give it up."

# 5180. Wanted HP5452 and 5454

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <349153e1.28159052@news.lin.foa.se>
Source record: 88375

HI
Looking for an IF unit HP 8552A or B (preferred) and a RF unit HP
8554. They are needed to get my HP 141T spectrum analyzer going! I am
willing to pay a fair price.....

Both working or non-working units!

73
Lasse SM5GLC
nospam.larsm@lin.foa.se
Remove nospam to reply
Fax:+46 13 31 80 09

## 5181. FS: RF Power Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Craig Siegenthaler <kiwa@wolfenet.com>
Message-ID: <66rohu$92c$2@sparky.wolfe.net>
Source record: 88376

For Sale: RF Power Tubes

The following tubes were acquired from a local radio repair
shop that went out of business.

Prices do not include shipping.

Contact:

Craig Siegenthaler
612 South 14th. Ave.
Yakima, WA 98902

Telephone: 509-453-5492

NOS Tubes

SK606 Ceramic Chimney by Eimac for 4CX125/250 etc. $25
4X150A $20
829B/3E29 $7
832A $3
836 $10
837 $3
3C24 $15
4-65A $30
5894 $20
15E $4
4D32 $25
ELC1K $10

Used and in excellent condition

803 $3
814 $10
815 $4
826 $8
828 $15
829B $3
832A $2
4F27 $5

# 5182. CQ QRP Ops: Why Isn't There More 30 Meter Activity?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: cliffkot@interaccess.com
Message-ID: <cliffkot.235.00625206@interaccess.com>
Source record: 88377

Hi Guys,

During the past couple of months I've been reading everything I can about QRP design with the idea of building a small single bander for camping. The big question is always -- what band?

A survey of the construction literature seems to indicate that the most popular bands are 40 or 20 meters and my listening confirms this finding. It seems to me however that 30 meters would be a more suitable QRP band.

On the average I would think that propagation conditions would allow a longer daily period of operation on 30 meters than either 40 or 20. Also, power on this band is limited so the competition would be only 10 to 15 db louder causing less QRM, so the simple NE602 mixers you all seem to be using would do an adequet job without overload.

The big question is why isn't there more 30 meter activity?

Cliff
WA9YXG

## 5183. Re: Underwater radio app...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: void@world.std.com
Message-ID: <EL34uy.Lx4@world.std.com>
Source record: 88378

ultrasonics are OK for communications, but problematic
for data - too much reflection. Plus it only needs to go
about four feet (through flesh and bone). There are SCUBA
computers that do this (using RF).
A small (1x1") unit transmits tank pressure to a wrist
mounted computer using digital signals. They're even
digitally "keyed" so two divers won't cross signals if they
are within th four or five foot transmission zone.

Frequency and antenna configuration on these things have
me mystified.

-Will

Woody White ("eMail"@my.www.page.Mailto) wrote:
: I would use kilohertz to several megahertz ultrasonics. Modulate the
: Usonic signal. Much of the UT gear is uded for non-destructive testing,
: but I have see (somewhere) a system used for voice communication by
: scuba divers. ask the dolphins..<g>
: Woody

: void@world.std.com wrote:
: >
: > Hi Guys,
: >
: > Am a digital guy - this RF stuff is baffling!
: >
: > I need a design reference source where I could
: > pick up the details I need to build a really small
: > transmitter receiver pair that will transmit five or six feet
: > underwater, for purposes of serial communication.
: >
: > Anybody know where I can start looking?
: >
: > -Will

: --
: de Woody, WB4QXE

: Work: Electron Microscopist/Microanalysist
: Balance: Ham radio "homebrewing", computers , shade tree mechanic "the
: Gravel Garage".

: On the www page: Scanning Electron images and Ham Radio Homebrewing
: stuff.
: http://www.geocities.com/capecanaveral/3722

: .

## 5184. Re: or 8552A or B and 8554 plug-ins

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Rae family <rae4@popd.ix.netcom.com>
Message-ID: <34916DB2.469C@popd.ix.netcom.com>
Source record: 88379

might get more responses!

# 5185. Re: TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: John Mullan <jmullan@sr.hp.com>
Message-ID: <34917457.6168@sr.hp.com>
Source record: 88380
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

Sean M. Gilligan wrote:
> 
> I don't have any experience with that radio, but that problem
> is very characteristic of a lot of Radio Shack radios. I know
> their 2m/440 handheld ham radios have the same problem,
> dead audio for a good 1/2 sec after you release the PTT.
> Chances are, there's nothing you can do about it. It
> doesn't sound defective to me, it just sounds like a RS rig.
> 
> Toolman wrote:
> 
> > I have a Realistic HTX-100 10 m mobile that has a "lag time" between
> > TX and
> > RX. Everytime the mic. is released, a half second pause ensues before
> > anything heard. Otherwise operation is fine. Anybody have any ideas?
> > Thanks.
> > 
> > Tim
> 
> --
> _____________________________________________
> 
> Sean M. Gilligan * smg3@lehigh.edu
> UNI 4055292 * AOL IM smg295
> 
> Lehigh University, Box C252, 39 University Drive
> Bethlehem, PA 18015-3041 * (610.758.1188)
> 
> "Nobody knows what it's like to be the bad man,
> To be the sad man,
> behind blue eyes." -The Who
> _____________________________________________

This is another case of Radio Shack doing something right, and catching hell for it. On the VHF/UHF handhelds, the radio is dropping the CTCSS tone before the RF drops out. Thats why you don't hear the squelch tail on the end of a transmission from a RS HT.

KD2LQ/6

# 5186. FS: RADIOS/EQUIP.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: JP <restar@idir.net>
Message-ID: <01bd0727$38d5da20$a5c1acd1@restar.idir.net>
Source record: 88381
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

HAM RADIOS and EQUIPMENT
FOR SALE
FT 757GXII= $900 (LOW $700)
1.5 to 30 Mhz., output 100 watts PEP
TM-401B = $300
UHF FM, 430 to 440 Mhz., output 5/25 watts
TR-9130 = $300
2m all mode, 144 to 148 Mhz., output 5/25 watts
TR-9500 = $300 (SOLD)
UHF all mode, 430 to 439.999 Mhz., output 1/10 watts
Multi-Mode Data Controller = $180
MFJ-1278, packet, RTTY, ASCII, CW, Fax, SSTV, AMTOR.
Antenna Tuner = $200 (SOLD)
MFJ-986, 1.8 to 30 Mhz., handles up to 3KW
Radio Direction Finder = $175
(Dick Smith) with 4' square antenna array (mobile).
Will consider reasonable offers plus shipping cost if neccessary.
All with owners manuels.
Ask for Joe, WI0X. - 816-483-2037
email = restar@idir.net

# 5187. NEED 216 MHz CW Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Bo Henderson <bo@physitron.com>
Message-ID: <34919299.B2A2EA88@physitron.com>
Source record: 88382

Does anyone have any ideas?? Kit? Used 220 gear?? Other??

Any help greatly appreciated.... Thanks Bo
--

**********
OTHER PERTINENT INFORMATION YOU MAY NEED TO KNOW !

Mr. T.G. "Bo" Henderson Bo Knows Physics......
VP Adv. Tech. App's. Bo Also Knows HAM Radio...
Physitron, Inc. In the Beautiful Tennessee Valley.
3304A Westmill Dr. Rocket City USA
Huntsville AL 35805 Where the Sky is NOT the Limit !
205-534-4844 VOICE 205-534-4846 FAX
E-mail: bo@physitron.com
Physitron Page http://www.physitron.com
Diamond Page http://www.physitron.com/diamond.html

*******SPAMMERS BEWARE******
LEGAL NOTICE: "By US Code Title 47, Sec. 227 (a) (2) (B), a
computer/modem/printer meets the definition of a telephone fax
machine. By Sec. 227 (b) (1) (C), it is unlawful to send any
unsolicited advertisement to such equipment.
By Sec. 227 (b) (3) (C), a violation of the aforementioned
Section is punishable by action to recover actual monetary
loss, or $500, whichever is greater, for each violation.

# 5188. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <34919C5E.31C0@lakeweb.com>
Source record: 88383
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi,

You may want to try this with a schottky diode:

```
------1nF---| -diode-|-----|------+out
RF in | | | to Fluke 8020B
BNC 51R 1000pF 1M
------------|--------|-----|-------gnd
```

If you don't want to do surface mount,
try the 5082-3080 by hp.

The surface mounts can be had for 50
cents each in small quantity.

Best, Dan.

# 5189. Re: Preamp for about 1500MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Terry Gaff <shbcommm@indigo.ie>
Message-ID: <3491A48C.FC449391@indigo.ie>
Source record: 88384

Terry Gaff wrote:

> Any kind individual out there know where I can get a circuit diagram
> for
> a preamp for about 1500MHz (1.5GHz) preferably low noice and maybe
> 20db
> or so?
>
> Thanks a lot
>
> Terry Gaff

Thanks a lot to those who answered my question.

Regards to all.

Terry Gaff

# 5190. NOS tubes 4 sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971212215000.QAA05164@ladder01.news.aol.com>
Source record: 88385

For Sale:
I have a large inventory of quality NOS tubes and a wide variety of radio related publications. Also available are radios, test equipment and misc. radio parts. My schematic service is the best price around at just $3 delivered for schematics and tuning info. Quality, tested used tubes are also available. If I don't have it, I'll try to help you find it! Hundreds of happy customers have used my service. Ask Rog42@aol.com for an e-mail copy of my latest offerings - list #1115-T

## 5191. fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: fmradio@hotmail.com
Message-ID: <881965299.1875968001@dejanews.com>
Source record: 88386
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

I need a drawing on a FM transmitter for a school project. I would appreciate all kind of help. If you got a good drawing, just send it to me or if you know someplace I can get one please tell me. I would be even happier if it were for free, since I cant spend money on the excercise. :-)

Thanks in advance.
Eric Persson, fmradio@hotmail.com

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5192. Ham-Homebrew Digest V97 #715 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4914ffc.061@pii.com>
Source record: 88387

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5193. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <66sfk2$rsj@bgtnsc02.worldnet.att.net>
Source record: 88388
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

Search FM transmitter there are a dozen sites on the net. Radio shack
sells a good stable one for about $30.00

fmradio@hotmail.com wrote in article <881965299.1875968001@dejanews.com>...
> I need a drawing on a FM transmitter for a school project. I would
> appreciate all kind of help. If you got a good drawing, just send it to
> me or if you know someplace I can get one please tell me. I would be even
> happier if it were for free, since I cant spend money on the excercise.
> :-)
>
> Thanks in advance.
> Eric Persson, fmradio@hotmail.com
>
> ----------------------==== Posted via Deja News ====-----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet
>

## 5194. Homebuilt transmitter -- single 813 etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19971212230400.SAA11336@ladder02.news.aol.com>
Source record: 88389

my ad showed up and then disappeared ,I cant find it , what happend? Harold
w4pqw hs @aol.com

# 5195. Need Mars for Kenwood TM-261A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Rafael Hernandez <wp4leq@prtc.net>
Message-ID: <66shlh$co44@news.prtc.net>
Source record: 88390

I need this modification, does anybody have it.

Thanks and 73's.

# 5196. Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <O4ak#b0B9GA.76@ntdwwaaw.compuserve.com>
Source record: 88391

Hi fellow Hamcomm people.

Just wondering if anyone has any interest in setting up some AMTOR contacts. OK, ok, so AMTOR is old hat, but if you have Hamcomm (which is a great deal, by the way), that is your only choice other than straight RTTY.

If there is enough interest, I'd wouldn't mind putting some space on my web site to help people set up AMTOR QSO's. Maybe a call, a time you will be on, and a Freq. something like that.

Email me if you are interested and I will set something up.

73,

Al WD5GNR
http://www.al-williams.com/wd5gnr
alw@al-williams.com

# 5197. Need detailed mods for IC-w31a

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: "Preferred Customer"
Message-ID: <66svfk$cco5@hades.ldd.net>
Source record: 88392

I would appreciate any mods you may have for my Icom IC-w31a dual band hand held radio. Thanks, jeff5@ldd.net

## 5198. subscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: sp1wsx@polbox.COM
Message-ID: <199712130809.JAA30158@mx1.polbox.com>
Source record: 88393

SP1WSX
Tomasz Rzepecki
Uznam Isl. ( EU-129 )
Poland

# 5199. D.I.Y HF 3 band 3 el beam (10 15 20)?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: jeff <jeffinc@ibm.net>
Message-ID: <34906C96.4E03@ibm.net>
Source record: 88462

Hi!!

looking for homebrew D.I.Y full plans for:
HF 3 band 3 el beam (10 15 20)

thxs!!!!!!!!

## 5200. Underwater radio apparatus

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19971212025801.VAA12296@ladder02.news.aol.com>
Source record: 88463

I would not use rf for underwater data, i would use audio ,use a transducer to transmit and rec. for atemporary setup get two small horn spkrs wrap them tightly with plastic connect them like an intercom system , go from there good luck Harold w4pqw

# 5201. Want 5VCT XFMR & fil choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <66qsmf$8ag_001@slip-25.nlbbs.com>
Source record: 88464

I'm looking for a 5 VCT filiment transformer at 45 amps, and a 45 amp filiment choke. also need 2 Johnson 275 sockets. TNX de Dick NY1E ny1e@nlis.net

# 5202. Re: Underwater radio app...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <66qh3g$beg@mtinsc03.worldnet.att.net>
Source record: 88465

I would use kilohertz to several megahertz ultrasonics. Modulate the
Usonic signal. Much of the UT gear is uded for non-destructive testing,
but I have see (somewhere) a system used for voice communication by
scuba divers. ask the dolphins..<g>
Woody

void@world.std.com wrote:
>
> Hi Guys,
>
> Am a digital guy - this RF stuff is baffling!
>
> I need a design reference source where I could
> pick up the details I need to build a really small
> transmitter receiver pair that will transmit five or six feet
> underwater, for purposes of serial communication.
>
> Anybody know where I can start looking?
>
> -Will

--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the
Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing
stuff.
http://www.geocities.com/capecanaveral/3722
.

# 5203. Re: Underwater radio apparatus

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: void@world.std.com
Message-ID: <EL2At7.EGH@world.std.com>
Source record: 88466

W4pqw HS (w4pqwhs@aol.com) wrote:
: I would not use rf for underwater data, i would use audio ,use a transducer to
: transmit and rec. for atemporary setup get two small horn spkrs wrap them
: tightly with plastic connect them like an intercom system , go from there good
: luck Harold w4pqw

There are problems with audio: reflection and absorbtion cause
signal distortion. More importantly, there will be several
devices in the water at once, and one of the advantages
of radio is that there is a very definite travel distance.

This isn't new: there are computers for SCUBA diving that
transmit tank pressure to the wrist-mounted computer via
radio. Each unit has a binary serial number that
identifies it as being unique, rather than frequency
separation.

-Will

# 5204. Re: Fast Charger NiCd Battery charger scheme needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Ken Harris <kjh@shoreline-studios.com>
Message-ID: <01bd06db$64d8dba0$010000c0@nt2>
Source record: 88467

Ramsey electronics (http://www.ramseyelectronics.com/products.htm)
sells a kit (using the BQ2003 chip :
http://www.benchmarq.com/prod/bq2003.html) for $50.
I bought one. Haven't finished building it yet... looks good though.

Also, there is a schematic in the ARRL handbook (using the MAX232 chip).

Alfonso <alfonsog@redestb.es> wrote in article
<66n93j$dl3$1@talia.mad.ibernet.es>...
> Hi, I want make a fast Charger batterys for my wt, but i don't have
> the scheme.
>
> You can help me?
>
> Thanks in advanced. 73's EB3FYJ Alfonso
> e-mail: alfonsog@redestb.es
> 73 de EB3FYJ
> Regards :-)
>
>

# 5205. WTB: Kenwood SM-230

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: sammac@interaccess.com
Message-ID: <66rdl3$aj1$2@nntp3.interaccess.com>
Source record: 88468

WTB: Mint Kenwood SM-230 Spectrum Analyzer. Sam W2DNN, 486 Glenwood Trail, Elgin, IL 60120 (847)695-0218

# 5206. Re: TX/RX delay??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-12 00:00:00 UTC
From: Professor <bgriffey@megsinet.net>
Message-ID: <66re58$gpi$1@news.megsinet.net>
Source record: 88469
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

Yes, you are correct there are no relays anymore for that purpose. All switching is done via a transistor. Someone on the NG mentioned the ALC on the front end being abnormally slow for some reason. I agree that would cause this symptom. Maybe some investigation in this area would be in order...

--
Professor

_____
Toolman wrote in message <66q43r$fp2@examiner.concentric.net>...
:No squelch, I'm in the habit of leaving it all the way open. (sidebander
:habit, I guess) I think the problem is in the tx/rx switching, but I'm not
:'up' on that circuit. I note that there's no relay in these modern
rigs---!?
:so must be switched by trx or diode?
:
:Tim
:
:
:
:Professor wrote in message <66p8ei$pel$1@news.megsinet.net>...
:>Toolman,
:>Is the squelch engaged when this occurs?
:>
:>--
:>Professor
:>_____
:>Sean M. Gilligan wrote in message <348F9B48.D98F5DB4@lehigh.edu>...
:>:I don't have any experience with that radio, but that problem
:>:is very characteristic of a lot of Radio Shack radios. I know
:>:their 2m/440 handheld ham radios have the same problem,
:>:dead audio for a good 1/2 sec after you release the PTT.
:>:Chances are, there's nothing you can do about it. It
:>:doesn't sound defective to me, it just sounds like a RS rig.
:>:
:>:
:>:Toolman wrote:
:>:
:>:> I have a Realistic HTX-100 10 m mobile that has a "lag time" between
:>:> TX and
:>:> RX. Everytime the mic. is released, a half second pause ensues before
:>:> anything heard. Otherwise operation is fine. Anybody have any ideas?
:>:> Thanks.

:>:>
:>:> Tim
:>:
:>:
:>:
:>:--
:>:_____
:>:
:>:Sean M. Gilligan * smg3@lehigh.edu
:>:UNI 4055292 * AOL IM smg295
:>:
:>:Lehigh University, Box C252, 39 University Drive
:>:Bethlehem, PA 18015-3041 * (610.758.1188)
:>:
:>:"Nobody knows what it's like to be the bad man,
:>:To be the sad man,
:>:behind blue eyes." -The Who
:>:_____
:>:
:>:
:>
:>
:
:

# 5207. Re: need circuit for mic preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <66vq8c$m4c$1@gte2.gte.net>
Source record: 88321

MR DXER wrote:
>
> looking to build a mic pre amp
> anyone know a easy circuit to build

Look in the ARRL Handbook. You will find suitable single transistor
circuits for both low and high Z mics.

Grant/NQ5T

nq5t@gte.net
http://home1.gte.net/nq5t

# 5208. ICOM R71A power supply fix

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: pierfelice <pierfelice@NoToSpam.MCI2000.com>
Message-ID: <01bd0764$ed2e4b00$LocalHost@default>
Source record: 88394
Cross-posted to:
rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave

My R71A had power supply trouble as many have had or will. The design of
the supply results in poor regulation and AC ripple on the supply output.
My solution was replacing the active components with one ECG1954 low
dropout 12 Volt 1Amp 3 terminal regulator. The ECG1954 requires but 13
Volts at it's input to function unlike other 3 terminal regulators that
require about 16 Volts (such as the 7812). The ECG1954 is a TO220 case as
was the original pass transistor Q1. Cost of the ECG1954 was $5.
Basic steps I performed:
1) Remove the regulator unit from the radio.
2) Remove the PC board / transformer from the regulator unit frame.
3) Remove everything on the PC board except
C11,L1,F4,D1,C3,C4,C5,C6,C7,C9,T1
4) Install the ECG1954 where Q1 used to reside. Note that the mica
insulator is no longer necessary on the heat sink and can be removed for
improved heat transfer.
5) You will have to jumper the input and output pins of the ECG1954
appropriately. Add a jumper from the cold end of the fuse to the ECG1954
input. Jumper from the ground side of C7 to the ECG1954 ground pin and
jumper the ECG1954 output to the radio's DC input. I removed J2/P2 from my
radio.
6) I also glued a rubber grommet on top of T1 to contact the bottom cover
and reduce vibration induced in the cover from T1's field.
7) Put the radio back together.
Note that this fix may not work with other than "bare bones" R71's. Mine
does not have the crystal heater, FM, remote or any other option. The radio
uses almost 1 amp as is and radios with more options may require a second
regulator.
How does it work? Great! Even though the radio was designed to run at 13.6
Volts, mine runs fine at 12. No hum and stable down to 105 Volts line. I
also installed an International Radio (WWW.QTH.COM/INRAD) Fox-Tango CW
filter at the time of this modification and I am very happy with the
filter's performance.
Bob, KB8TL
--
pierfelice@NOTOSPAM.MCI2000.COM
(Discard "NOTOSPAM" to reply)

## 5209. crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: msebrakr@telepath.COM
Message-ID: <3.0.1.16.19971212204421.3fef3986@telepath.com>
Source record: 88395

I have an old Galexy V ham radio. It's IF filters is at 9 MHZ with a bandwidth of 2.4 KHZ. The filter is a black box with an input, an output, and a ground. I want to if I can make another filter, like a crystal ladder filter, with a tighter bandwidth, say 500 Hz, and then add a switch so I can switch between it and the other filter. If you could provide me with a filter schamatic and/or suggested I would greatly appriceate it. TNX.

73,
Arnold KD5CKH

# 5210. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Meldor Singfrand <schmeckt@goldfind.net>
Message-ID: <01bd0775$a01a7b20$3e9192ce@default>
Source record: 88396
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

There are so many grammatical errors in this message, I am not really sure
what it is you are looking for. May I suggest a project in English first,
so that you may express yourself more adequately in other undertakings.

fmradio@hotmail.com wrote in article <881965299.1875968001@dejanews.com>...
> I need a drawing on a FM transmitter for a school project. I would
> appreciate all kind of help. If you got a good drawing, just send it to
> me or if you know someplace I can get one please tell me. I would be even
> happier if it were for free, since I cant spend money on the excercise.
> :-)
>
> Thanks in advance.
> Eric Persson, fmradio@hotmail.com
>
> ---------------------==== Posted via Deja News ====-----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet
>

# 5211. Re: Power supply: improving rating?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: jdc@cci.com
Message-ID: <66t0da$r1m@bmerhc5e.bnr.ca>
Source record: 88397

In article <FBAA8D88DF4D68DE@library-proxy.airnews.net>,
kb5ylg <kb5ylg%NOSPAM%@airmail.net> wrote:
>How can I beef up a power supply to deliver more current...?
>
>With common parts?
>
>I think I can put on a 3055 transistor for a 7805 circuit to deliver
>several amps rather than less than 1 amp, correct? And several 3055 in
>parallel to increase that, true?
>
>DJ

That's right. Things to remember:

Emitter resistors to balance the load between transistors. Something
around .1 ohm.

Use too many transistors instead of too few. 2N3055's are cheap.
With power supplies it never pays to "live on the edge."

There is a voltage drop across the transistors, so output voltage with
a 7805 will be around 4.2-4.3 volts. Use a LM-317 adjustable regulator
to get a 5 volt final output.

Don't forget to bypass the output of the IC regulator and the final
output or it will oscillate. Use tantalum capacitors if possible.

Check your local public library for an ARRL Handbook. The power
supply and power supply project sections. You will find an example of
power transistors in parallel.

Power supplies are great projects. I built a 12 volt supply that's
good for about 50 amps. Great educational experience, especially when
it started oscillating and generating RF noise... (Bypass caps fixed
that one.)

73..Jim N2VNO
--
James D. Cronin, Sr. Software Engineer
Directory and Operator Services, Northern Telecom
jdc@cci.com
jdcronin@nt.com

## 5212. CB Modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: asimonin@murdrum.nmsu.edu
Message-ID: <66t0s5$aen@bubba.NMSU.Edu>
Source record: 88398

I have an old Radio Shack "Navaho" CB base station. This unit came with
40 channels and SSB. Has anyone information on converting this old CB for
10 meter operation. A fellow ham and VE told me that this was quite
popular several years a go!

Thanks

asimonin@acca.nmsu.edu
KD5AEY
---Las Cruces, NM---
Engineering, converting science into technology

# 5213. Ham-Homebrew Digest V97 #716 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s491b444.034@pii.com>
Source record: 88399

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5214. WTD XREF MRF 428

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: WB9IOG <WB9IOG@REVEALED.NET>
Message-ID: <34924A5E.6AF3@REVEALED.NET>
Source record: 88400

Tnxs in advance.
Any one know of a substitue for the
Motorola MRF 428??
Mike

# 5215. Searching equivilent parts pse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: steve@nospamthanks.tenchy.demon.co.uk
Message-ID: <3492406a.1401466@news.demon.co.uk>
Source record: 88401

Hi,

I know these parts I search are not radio related, but being known as a 'ham' I get all the family repair jobs chucked at me..

Anyway, I've been given this touch on/touch off 240V light. There's only two parts that could be dud, both of which are naturally not in RS, Farnell etc.

A C026, a triac I believe and a 8 pin DIL IC: LS7232

I can probably work out the pin out for the triac and hence an equivilent, but anyone know the IC ???

thanks.

73's

ETL Systems: http://www.etlsystems.demon.co.uk/

## 5216. Want: D3W Rotatable dipole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Raymond Hansmeier <rhansme@pacifier.com>
Message-ID: <34924426.724E4B07@pacifier.com>
Source record: 88402

Want a D3W rotatable dipole for the warc bands..N7NL

## 5217. Crimp tool for coax plugs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: nc-bolchpe@netcologne.de
Message-ID: <34925299.500433@news.netcologne.de>
Source record: 88403

Hi,

I have been told that a special crimp tool for each type of cable is
needed but the tool can be used with all types of plugs (e.g. BNC,
SMA, SMC) as long the type of cable is the same. Is this true?

Peter

# 5218. Re: How Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: nc-bolchpe@netcologne.de
Message-ID: <3492544f.938971@news.netcologne.de>
Source record: 88404

Mike <bad@email.adr> wrote:

[...]

>
>Hi Peter,
>
>I recall, from somewhere, that a ham documented a 26 GHz spectrum
>analyzer design. Have you heard anything about this, or know where to
>find the articles?

Hi Mike,

sorry, I haven't seen such a circuit although nearly all the authors mentioned that their spectrum analyzer circuit can be extended to at least several GHz. But none of them said how this can be done exactly......

Best regards

Peter

# 5219. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Andy <lakeaa@boat.bt.com>
Message-ID: <66trhi$7gs$1@pheidippides.axion.bt.co.uk>
Source record: 88405
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

Hey Eric, good luck, search the net, you'll find there are loads of
sites with easy-to-build circuits, with diagrams!

Don't worry about typing or grammar mistakes.
I feel it's better to help and encourage rather than criticise and offer
no assistance.

Andy.

Hey, Meldor, did you note this was a school-kid?

Meldor Singfrand wrote:
>
> There are so many grammatical errors in this message, I am not really sure
> what it is you are looking for. May I suggest a project in English first,
> so that you may express yourself more adequately in other undertakings.
>
> fmradio@hotmail.com wrote in article <881965299.1875968001@dejanews.com>...
> > I need a drawing on a FM transmitter for a school project. I would
> > appreciate all kind of help. If you got a good drawing, just send it to
> > me or if you know someplace I can get one please tell me. I would be even
> > happier if it were for free, since I cant spend money on the excercise.
> > :-)
> >
> > Thanks in advance.
> > Eric Persson, fmradio@hotmail.com
> >
> > ----------------------==== Posted via Deja News ====-----------------------
> > http://www.dejanews.com/ Search, Read, Post to Usenet
> >

## 5220. Re: crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971213124001.HAA15025@ladder01.news.aol.com>
Source record: 88406

> I want to if I can make another filter, like a crystal
>ladder filter, with a tighter bandwidth, say 500 Hz, and then add a switch

Buy Haywards book "Introduction to RF Design" from the ARRL and read it. His design software will design the filter (and many others) for you.

W4ZCB

# 5221. Re: Crimp tool for coax plugs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971213124301.HAA13371@ladder02.news.aol.com>
Source record: 88407

>
>I have been told that a special crimp tool for each type of cable is
>needed but the tool can be used with all types of plugs (e.g. BNC,
>SMA, SMC) as long the type of cable is the same. Is this true?
>
>
>Peter

Not mine. The tool is the same, but there are a pair of dies which are interchangeable on the tool. Each die is made for a specific connector.

W4ZCB

# 5222. Ham-Homebrew Digest V97 #717 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4921da9.045@pii.com>
Source record: 88408

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5223. Re: Homebuilt transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: edhowell@aol.com
Message-ID: <19971213135600.IAA17311@ladder02.news.aol.com>
Source record: 88409

Harold, if you can, why dont you keep that rig? When you're as old as I am you will be glad you did. Sure wish I had kept my first tube rig, 6 ft+ cabinet etc. The brute would almost heat the house. I know storage is a problem for most of us, but if you can do it, you..and your kids will be glad. 73
W4SOD

## 5224. CQ or 73 still $15 yr but going up soon

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: edhowell@aol.com
Message-ID: <19971213141501.JAA20428@ladder01.news.aol.com>
Source record: 88410

Everything, except pay scales, seems to go up..and magazines are no exception. New list coming out shortly but currently Popular Communications is still $11/yr; and CQ or 73 can be had for $15. Over 600 other popular titles discounted 10 to 60%. 1 yr new or renewals only and USA addresses only. Save money by e-mailing me list of titles your family is interested in and I will return quote within hours!
Thanks a lot and Merry Christmas! 73 W4SOD

# 5225. Re: Power supply: improving rating?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Nick <nick@no.spam.for.me.ta>
Message-ID: <66u6qk$j2r$1@heliodor.xara.net>
Source record: 88411

If you're 'beefing up' an existing PSU you'd of course need a new
transformer to deliver those amps - so you've effectively built a new PSU.
Better really to do just that!

I think also, a few caps to dampen parasitic oscillations, especially if
there's going to be RF about? A 50-amp PSU oscillating could be fun!!

If a fixed +5v is what you're after, there are plenty of cheap switched-mode
PSU's about nowadays at rallies etc. Unless of course you want a linear
supply for being (electrically) quiet. I can't imagine why though, because
+5v @ lotsa amps suggests loads of noise-making digital chips!

73, Nick g7ufg

James D. Cronin wrote in message <66t0da$r1m@bmerhc5e.bnr.ca>...
>In article <FBAA8D88DF4D68DE@library-proxy.airnews.net>,
>kb5ylg <kb5ylg%NOSPAM%@airmail.net> wrote:
>>How can I beef up a power supply to deliver more current...?
>>
>>With common parts?
>>
>>I think I can put on a 3055 transistor for a 7805 circuit to deliver
>>several amps rather than less than 1 amp, correct? And several 3055 in
>>parallel to increase that, true?
>>
>>DJ
>
>That's right. Things to remember:
>
>Emitter resistors to balance the load between transistors. Something
>around .1 ohm.
>
>Use too many transistors instead of too few. 2N3055's are cheap.
>With power supplies it never pays to "live on the edge."
>
>There is a voltage drop across the transistors, so output voltage with
>a 7805 will be around 4.2-4.3 volts. Use a LM-317 adjustable regulator
>to get a 5 volt final output.
>
>Don't forget to bypass the output of the IC regulator and the final
>output or it will oscillate. Use tantalum capacitors if possible.
>
>Check your local public library for an ARRL Handbook. The power
>supply and power supply project sections. You will find an example of
>power transistors in parallel.

>
>Power supplies are great projects. I built a 12 volt supply that's
>good for about 50 amps. Great educational experience, especially when
>it started oscillating and generating RF noise... (Bypass caps fixed
>that one.)
>
>73..Jim N2VNO
>--
>James D. Cronin, Sr. Software Engineer
>Directory and Operator Services, Northern Telecom
>jdc@cci.com
>jdcronin@nt.com

## 5226. ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Bert Douglas <G_Herbert_Douglas@msn.com>
Message-ID: <66uccq$giv$0@198.79.30.94>
Source record: 88412

I am thinking about buying the Radio Designer product.
Is anyone else using it?

# 5227. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971213185600.NAA14985@ladder02.news.aol.com>
Source record: 88413

>
>I am thinking about buying the Radio Designer product.
>Is anyone else using it?

Not sure what you are planning on doing with it, there are several packages out there that have different strengths and weak points.

You might write to Bob Stanton, RF Engineering, Rd1 Box 587 Norwich, NY 13815

He wrote one called NOVA, quite like PSpice but with real time tweaking of component capabilities while you watch the Bode response. I find it just about all I need. It was originally $75, but about a year ago, he made it Public Domain and encouraged giving it away since he had started on a (Yech) windows version.

Of course, the student version of PSpice is also available for free, between these two, I find I don't really need anything else.

W4ZCB

# 5228. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: deejay@mm.com
Message-ID: <3492eda3.0@rain.mm.com>
Source record: 88414
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

Andy ("lakeaa"@boat.bt.com(Andy)) wrote:
:
: Hey, Meldor, did you note this was a school-kid?

And one who either has never studied or who goes to a school that is not good at teaching basic grammar and spelling. It's hard to tell these days, though, if someone so poorly taught as that is in high school or a freshman in college. ;)

--
Be happy while you're living... | deejay@mm.com
...because you're a long time dead. | 73617.105@compuserve.com
-- Scottish proverb | http://www.mm.com/user/deejay/
---
Hungry? Visit The Straits Cafe Virtual Restaurant
http://www.straitscafe.com

# 5229. Quad Construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Jerome Warburton <jerome.warburton@armyemail.com>
Message-ID: <3492F45B.FB68A6F7@armyemail.com>
Source record: 88415

I'm Planning a Quad for 6 meters and 2 meters on one 12 foot boom. Does anyone have experience with quads built on metal booms? All the ones I've built in the past were on pvc or wood. I'm looking to save some weight and gain some strength. Would aluminum boom with pvc spreaders and copper wire loops be a working option?

KB0OTW
Jerome
JW Communications

Free Web Pages for Life!
Long Distance Phone Service 9.9 Cents a minute!
Satellite TV Nothing to buy!

# 5230. need circuit for mic preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: MR DXER <sbdesign@worldnet.att.net>
Message-ID: <66v0n6$276@bgtnsc02.worldnet.att.net>
Source record: 88416

looking to build a mic pre amp
for desk mic

anyone know a easy circuit to build

thank in advance
brian
--
CQ CQ CQ DX CQ DX

## 5231. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <OWfKvPBC9GA.159@nih2naab.prod2.compuserve.com>
Source record: 88417
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

One of my favorite projects page (and one that has at least one FM xmitter)
is http://hem2.passagen.se/sm0vpo/.

I have a few projects on my home page, but no FM transmitters.

73,

Al Williams WD5GNR
http://www.al-williams.com/wd5gnr

# 5232. Re: How Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: willard561@aol.com
Message-ID: <19971213235501.SAA14524@ladder02.news.aol.com>
Source record: 88418

>>I recall, from somewhere, that a ham documented a 26 GHz spectrum
>>analyzer design. Have you heard anything about this, or know where to
>>find the articles?

I think that this may have been in a73 magazine in the "above&beyond" section
Bill Higdon

# 5233. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-13 00:00:00 UTC
From: cmoore@sedona.intel.com
Message-ID: <34933036.62D8@sedona.intel.com>
Source record: 88419

Al Williams wrote:
> Just wondering if anyone has any interest in setting up some AMTOR contacts.
> OK, ok, so AMTOR is old hat, but if you have Hamcomm (which is a great deal,
> by the way), that is your only choice other than straight RTTY.

Hi Al, IMO PACTOR is more popular and works better.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 5234. Re: CQ QRP Ops: Why Isn't There More 30 Meter Activity?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <349859c1.18235737@eskinews.eskimo.com>
Source record: 88322

cliffkot@interaccess.com (Cliff Kotchka) wrote:

>Hi Guys,
>
>During the past couple of months I've been reading everything I can about QRP
>design with the idea of building a small single bander for camping. The big
>question is always -- what band?
>
>A survey of the construction literature seems to indicate that the most
>popular bands are 40 or 20 meters and my listening confirms this finding. It
>seems to me however that 30 meters would be a more suitable QRP band.
>
>On the average I would think that propagation conditions would allow a longer
>daily period of operation on 30 meters than either 40 or 20. Also, power on
>this band is limited so the competition would be only 10 to 15 db louder
>causing less QRM, so the simple NE602 mixers you all seem to be using would
>do an adequet job without overload.
>
>The big question is why isn't there more 30 meter activity?
>
>Cliff
>WA9YXG
>

---

30 is an interesting band in terms of propagation, but it closes sooner than 40 in the evening and has higher absorption than 20 during the day. It is at it's best just before 20 opens or just after 20 closes, but the time period there is short. Once 20 is open, it's better. Once 40 is open, it's better too.

I always thought 30 would be an ideal band for mobile operation. The antenna would be more efficient than an equal-length 40 meter one, and propagation would be somewhat longer during daytime hours (though not as good as 20). If they ever allow SSB there I think it would become very popular.

73, Bill W7TI

## 5235. BC 890 xlt modifcation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Over Lord <b_lasalle@hotmail.com>
Message-ID: <01bd083a$08171de0$0100a8c0@work5>
Source record: 88323
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave

Does anyone know of the modification for the Uniden BC 890? I am getting one in the next couple weeks...

# 5236. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971214034701.WAA10807@ladder01.news.aol.com>
Source record: 88324

>
>It's well worth the $150.00 price tag, I find the rf circuit analysis very
>realistic. Radio Designer 1.5 is a smaller version of Super Compact's
>$5000.00 simulation software.
>
>DC

LOTs smaller. They took out all the non-linear analysis.

W4ZCB

# 5237. F.S. TUBES PACKAGE DEAL!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <66vkl2$as0$3@newsfeed.smartt.com>
Source record: 88325

Hi! I do have for sale as a package the following:

(5) 31LQ6 , (5) 17DQ6 , (5) 15DQ8 , (12) 22JF6,
(10) 12DQ6B , (5) 16A8 All brand new in their boxes.

Asking: $225.00 can. (shipping included)

If interested contact me at : PH/FAX: (250)868-1182

THANKS, REGARDS.

Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5238. Re: Ham

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: k5kne@aol.com
Message-ID: <19971214040601.XAA10946@ladder02.news.aol.com>
Source record: 88326

You may check at your Radio Shack for a book on how to become a ham. Technician No-Code Plus is one for $12 that should give you a good idea of what is involved.

Depending on what type of radio you want, there are usually some bargains at ham swapfests (like a ham garage sale). Two meter radios for local contacts are generally about $400 new and used ones come down to about $100. High Frequency radio transceivers start at about $800 new, but you can get a good used one for as cheap as $300. Antennas, like radios, have a wide range of cost. You can expect about $50 for a mobile antenna and about $75 for a base station antenna. HF antennas vary from simple wire antennas that may cost you only $25 to beams that cost much more. Two meter antennas don't have to be put up very high if you live in a city with repeaters. In general new hams spend around $500 before they feel like they have anything to operate with. Hams that have been into the hobby for several years may have thousands of dollars worth of equipment. We all start out rather modesty, so don't be discouraged.

If you plan to get into ham radio, get you a book and read a little and also try to meet some local ham operators. There may be a ham club nearby also. It is a good hobby. Good Luck.

# 5239. Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Bert Douglas <G_Herbert_Douglas@msn.com>
Message-ID: <66vmmq$q3k$0@198.79.30.86>
Source record: 88327

Would someone please explain the Smith Chart to me?

I went thru three years of EE and tons of Calculus so
I should be able to understand it, but right now I
have no clue.

Thanks,
Bert Douglas.

# 5240. F.S.AUDIO TUBES!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <66vmsb$bok$1@newsfeed.smartt.com>
Source record: 88328

Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5241. WANTED: Wilson WR-1000 Rotor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <01bd084e$58385500$604506d1@default>
Source record: 88329
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Anyone have one of these? They were made at least 10 - 15 years ago.
Need one to replace dead one on tower.
Thanks!!
73,
Chuck...K1KW

# 5242. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34936ee0.9408364@news.atl.bellsouth.net>
Source record: 88330

On 13 Dec 1997 16:16:26 GMT, "Bert Douglas" <G_Herbert_Douglas@msn.com> wrote:
>I am thinking about buying the Radio Designer product.
>Is anyone else using it?

I've got it. It is Ok for simulating passive networks and Class A linear circuits. It doesn't understand biasing, and has no concept of any nonlinear circuit like a mixer or an oscillator or a Class C amp. For that you want Spice or NOVA or one of the other modeling programs which understand biasing and non-linear behavior. It is also just a circuit simulator. It isn't really a design aid. By that I mean it won't calculate component values for a filter or anything like that. There are a number of programs which will, some of them free.

What Radio Designer does, it does quite well. But it doesn't do a lot. Get MicroSim's free demo CD for DesignLab and you may find that it does everything you need (the demo is limited to 30 components, but otherwise is their full product including schematic capture, board layout, auto-router, Spice simulator with simulated scope probes, and it does digital as well as analog, including programable gate arrays). If DesignLab can't do it, you probably don't need it. If the demo version's 30 component limit is too constraining, spring the $13,000 for the real thing.

I find that 30 components is enough for most circuit modules, so I use their demo almost exclusively. I'd pay at least as much as I paid for Radio Designer to up the limit to 100 components, but there's no way I'm forking over $13,000. (They offer a student deal for $1,300, but that's still a little bit too steep for me.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5243. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: jnpotter@prodigy.net
Message-ID: <34936fb5.80016174@news.prodigy.net>
Source record: 88331

"Bert Douglas" <G_Herbert_Douglas@msn.com> wrote:

>Would someone please explain the Smith Chart to me?
>
>I went thru three years of EE and tons of Calculus so
>I should be able to understand it, but right now I
>have no clue.
>
The Smith Chart is just a complex transform of the impedance plane.

Consider an impedance Z=R+jX, where R>=0 and X can have any real value, i.e. any electrical impedance. Normalize the impedance to the impedance of a transmission line Ro. Let z=Z/Ro, the normalized impedance.

Now consider the function f(z)=(z-1)/(z+1). Any impedance as defined above will plot on or inside a unit circle. Consider the case Z=Ro. Then z=1 and f(z)=0+j0. This is the origin of the complex plane (Real part = 0, imaginary part= 0.) An open circuit Z=<infinity>, then f(z)=+1,j0. This is the right hand limit of the impedance normalized Smith Chart. Consider Z=0. Then f(z)=-1, the left hand side. Now take Z=jRo. Then z=j and f(z)=(j-1)/(j+1).If you multiply this by (j-1)/(j-1) the denominator becomes -2 and the numerator works out to be -2j, so the ratio is j, or more properly 0+j, which is the top of the Smith Chart. Similarly if Z=-jRo, f(z)=-j. For all pure imaginary z, f(z) is on the unit circle. If there is any resistive(real) component, f(z) will be inside the circle. You can thus plot any impedance on the Smith Chart.

The beauty of the Smith Chart is that a section of transmission line of impedance Ro added between the generator and the impedance Z transforms the impedance in such a way that the new load impedance,measured at the generator can be determined by rotating the original z about the origin through an angle equal to twice the electrical length of the transmission line section.

I have also used the Smith chart to plot the gain response of an op amp. The utility of this is that any op amp with a single pole plots on the same curve, indpendently of the frequency of the pole. There are always 2nd, 3rd and higher poles in real op amps. The distortion of the curve from the higherpoles can plainly be sen in this plot, where it is subtle, like a change in slope, on a normal phase and amplitude gain plot.

Note that the Smith Chart only represents the right half complex impedance plane. It takes another circle to represent the negative

half plane. This of course doesn't apply to normal transmission line problems.

The traditional use of the Smith Chart is as a graphical means to obtain the length of transmission lines and lumped impedance necessary for impedance matching.

Don't know if that helps, but it has nothing to do with calculus, just complex algebra.

Jim Potter.

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

# 5244. FS: Tek 6-channel storage scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: vantonova@aol.com
Message-ID: <882071753.585170951@dejanews.com>
Source record: 88332
Cross-posted to:
sci.electronics.equipment,rec.radio.cb,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.ham-radio

I have a 5000 series Tektronix scope for sale. It has 6 channels, 2 beams (with independant focus and intensity for each beam), storage and a dual delayed timebase. It's in good condition. I'm asking $400 or offer. Highest reasonable offer takes it.

Alex.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 5245. S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: minilinx <minilinx@netaccess.co.nz>
Message-ID: <6703fg$60v$1@titania.telstra.net.nz>
Source record: 88333
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Hi,
Could someone please email me formulae for converting
S-Parameters into Input and Output Impedance.

Regards
Dave Huisman

# 5246. Ham-Homebrew Digest V97 #718 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4932dbe.006@pii.com>
Source record: 88334

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5247. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: "Brian P. Wilson" <bwilson@$seanet.com>
Message-ID: <670bf2$mqr@q.seanet.com>
Source record: 88335
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

I believe you are referring to LaPlace Transformations where s-domain is
frequency as opposed to time. There are many manipulations that can be
performed and you can also take inverse LaPlace Transforms to put things
back into time domain. unfortunately there is no easy answer, since it
really depends upon the equation.

This is a fairly involved subject which is usually covered in Circuit
Analysis Textbooks.

--
Important: Remove the "$" in the Reply-to address,
needed spam protection
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Brian P. Wilson
bwilson@seanet.com
bpwilson@u.washington.edu

minilinx wrote in message <6703fg$60v$1@titania.telstra.net.nz>...
>Hi,
>Could someone please email me formulae for converting
>S-Parameters into Input and Output Impedance.
>
>Regards
>Dave Huisman
>
>

# 5248. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: nc-bolchpe@netcologne.de
Message-ID: <3493ca58.6033239@news.netcologne.de>
Source record: 88336
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

LA8AK@ax25.packet (J M Noeding) wrote:

> I need 5 equal diode RF detectors. We will prefer to use some
>commonly available diodes.

Hi Jan-Martin,

I have experimented with a broadband RF power meter and found that schottky diodes are sensitive and work well beyond 1 GHz. E.g. the types BAT 64-07, BAT 62-03 W, BAT 63 and BAT 17. If the levels to be detected aren't too low, the HP 2800 Series might be choice.

All the diodes mentioned are available(also in small quantities) from RS Components (http://www.rs-components.com).

Peter

# 5249. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: jnpotter@prodigy.net
Message-ID: <3493d0cb.104873616@news.prodigy.net>
Source record: 88337

"minilinx" <minilinx@netaccess.co.nz> wrote:

>Hi,
>Could someone please email me formulae for converting
>S-Parameters into Input and Output Impedance.

The detailed formulation can be found in the Radio Engineering Handbook and probably many others as well. I don't have that handy, but I can tell you enough to figure it out for yourself.

The s parameters relate the reflected (outgoing) waves at all ports to the incident waves at all ports. Generall a is used for incident wave and b for reflected. For a twoport network you get:

```
| b1 | | s11 s12 | | a1 |
| | = | | | |
| b2 | | s21 s22 | | a2 |
```

There are some rules relating the parameters, depending on whether or not the network is passive, reciprocal, etc.

Now you can relate the voltage and current (V, I)at a terminall to the wave amplitudes a and b in the following way:

a = (V/SQRT(R0) + I*SQRT(R0))/SQRT(2)

b = (V/SQRT(R0) - I*SQRT(R0))/SQRT(2)

R0 is the characteristicimpedance of the transmission line.

The impedance at the terminal (looking in) is V/I.

For a two-port network, of course, you get a 2 by 2 impedance matrrix.

The algebra is tedious, but that's what is required to get the answer yoiu seek. Unless you look it up in a book.:-) :-)

Note that the current calculated is the current into the terminal which is what you want for an impedance matrix. For chain matrices, the current on the output port(s) is defined as coming out of the terminal.

73 de Jim K9GXC

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

# 5250. WTB: Allied 2567 CB Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: David <Freimark@mail.com>
Message-ID: <670nbp$pnt@newsops.execpc.com>
Source record: 88338
Cross-posted to:
sci.electronics.equipment,rec.radio.cb,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.ham-radio

I'm looking for an Allied Citizen's band radio model number 2567.
It is a 23 channel crystal-controlled radio. A large dial, loud
relay, and big S-meter are it's features.

Please send a price to the email below. I'm serious about this,
so you are not wasting your time.

--
Dave freimark@mail.com www.friemark.com

## 5251. regen RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: "P. Singh" <singhpk@AT.exit109.AT.com>
Message-ID: <3493E820.34C0@AT.exit109.AT.com>
Source record: 88339

hello ,

Please take a look at: http://www.nsknet.or.jp/~ja9mat/0v1_sche.htm

It seems that this guy is a genius at designing and
implementing regen and dc recievers. He seems to have
certainly beat me.

73

# 5252. Ham-Homebrew Digest V97 #719 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4936d81.011@pii.com>
Source record: 88340

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5253. Need info on IC chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Phil Heaton <ke4krt@mindspring.com>
Message-ID: <3493F0D6.129F692@mindspring.com>
Source record: 88341

Posting this for a friend
Please reply to him, not me.
---

Help!

IC chips needed for my only oven time base bench counter, Western Electric Model KS 20884: MC1662L & MC1678L. Does anyone know of a source for these? Does anyone know what they are, have pin outs or data on these? I know that the MC1662L is faulty for sure.

I don't have any info. on these IC chips. They do operate at TTL levels. Also, I don't have a manual for the counter. What a predicament!

Is it junk, or is it not. That is the million dollar question.

Thanks, Byron

mailto:wa4geg@juno.com
---

# 5254. Re: need circuit for mic preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <3493F3C0.1106@txeas.net>
Source record: 88342

Grant Youngman wrote:

> Look in the ARRL Handbook. You will find suitable single transistor
> circuits for both low and high Z mics.

Well, which edition? There are 75 of them now.

Admittedly, solid-state info really didn't start showing up until
1960, and you probably wouldn't want to go back more than 20 years
because you can't buy the parts.

But my 1997 handbook shows only IC-based mic amps and speech
processors (page 17.45). Of course, these would likely
be a LOT better than a one-transistor design.

Please, when you ref the handbook, give us a clue about what year,
and if possible, what page. The Index and the Table of Contents
have never been a strong suit in the handbook. And since back before
they invented fire, the handbook has always had wonderful pieces
of totally essential information tucked in the wrong place, without
an index reference. Such as the WONDERFUL tip that you can use
1/2" copper pipe for a station ground (page 9.8, figure 9.6,
1997 edition). This isn't well-indexed and appears (AFAIK) only
once, in the Safety chapter but not in the Station Setup chapter.

So give us a hint....

Jim N6OTQ
pleasantly surprised at how much the handbook has been improved
in the last few years

# 5255. Re: Need info on IC chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: joe <jedent@jedavisent.com>
Message-ID: <3493F78F.13E7@jedavisent.com>
Source record: 88343

Phil Heaton wrote:
> 
> Posting this for a friend
> Please reply to him, not me.
> --------------------------
> 
> Help!
> 
> IC chips needed for my only oven time base bench counter, Western
> Electric Model KS 20884: MC1662L & MC1678L. Does anyone know of a
> source for these? Does anyone know what they are, have pin outs or data
> on these? I know that the MC1662L is faulty for sure.
> 
> I don't have any info. on these IC chips. They do operate at TTL levels.
> Also, I don't have a manual for the counter. What a predicament!
> 
> Is it junk, or is it not. That is the million dollar question.
> 
> Thanks, Byron
> 
> mailto:wa4geg@juno.com
> --------------------------
have you tried Motorolas pages?
http://mot-sps.com/cgi-bin/my-mot/moto.cgi

# 5256. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <34940a84.1947201@news.azstarnet.com>
Source record: 88344

On Sun, 14 Dec 1997 06:03:40 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>On 13 Dec 1997 16:16:26 GMT, "Bert Douglas" <G_Herbert_Douglas@msn.com> wrote:
>>I am thinking about buying the Radio Designer product.
>>Is anyone else using it?
>
>I've got it. It is Ok for simulating passive networks and Class A linear
>circuits. It doesn't understand biasing, and has no concept of any
>nonlinear circuit like a mixer or an oscillator or a Class C amp. For
>that you want Spice or NOVA or one of the other modeling programs
>which understand biasing and non-linear behavior. It is also just a
>circuit simulator. It isn't really a design aid. By that I mean it won't
>calculate component values for a filter or anything like that. There
> are a number of programs which will, some of them free.

[snip]

Actually, using the circuit optimizer, it will calculate component
values for a filter, matching network, etc.

You must decide on the topology and put realizable limits on the
beginning component values, but then after defining the desired
outcome, you can just say sic'em and let the optimizer do the work.

73, N7WS

# 5257. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3493D8EB.1BA0@ix.netcom.com>
Source record: 88345

Bert Douglas wrote:
>
> Would someone please explain the Smith Chart to me?
>
> I went thru three years of EE and tons of Calculus so
> I should be able to understand it, but right now I
> have no clue.
>
> Thanks,
> Bert Douglas.
--- Howdy Bert -- see URL's:
http://sss-mag.com/smith.html

and URL
http://www.tnt.uni-hannover.de/soft/math/matlab/m_files/18.smith/

has:

smidraw SMIDRAW Draw Smith chart
gamma2z GAMMA2Z Convert reflection coefficient to impedance.
smiim SMIIM Plot imittance into the Smith chart.
smiinv SMIINV Invert impedance in the Smith chart
smircirc SMIRCIRC Draw impedance circle in the Smith chart.
smirotg SMIROTG Rotate impedance in the Smith chart towards
generator.
smirotl SMIROTL Rotate impedance in the Smith chart towards load.
smistand SMISTAND Draw standard Smith chart.
smiundo SMIUNDO Undoes the last operation in the Smith Chart.
smixcirc SMIXCIRC Draw admittance circle in the Smith chart.
z2gamma Z2GAMMA Convert impedance to reflection coefficient.
Contents Smith Chart Toolbox

73
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
70 PAGES AND OVER 2000 LINKS TO DX AND HAM RADIO!
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 5258. Re: Need info on IC chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971214123354.6879B-100000@Stratus.CAM.ORG>
Source record: 88346

I don't have the pinouts, but in a 1973 Motorola reference volume, these
are listed.

MC1662 quad 2-input nor gate
MC1678 bi-quinary counter (350MHz typical masimum operating frequency)

And they are ECL, in Motorola's MECL family.

MIchael VE2BVW

On Sun, 14 Dec 1997, Phil Heaton wrote:

> Posting this for a friend
> Please reply to him, not me.
> ---------------------------
>
> Help!
>
> IC chips needed for my only oven time base bench counter, Western
> Electric Model KS 20884: MC1662L & MC1678L. Does anyone know of a
> source for these? Does anyone know what they are, have pin outs or data
> on these? I know that the MC1662L is faulty for sure.
>
> I don't have any info. on these IC chips. They do operate at TTL levels.
> Also, I don't have a manual for the counter. What a predicament!
>
> Is it junk, or is it not. That is the million dollar question.
>
> Thanks, Byron
>
> mailto:wa4geg@juno.com
> ---------------------------
>
>

## 5259. Re: Underwater radio app...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Edward A Slimak <afn01212@afn.org>
Message-ID: <34941D59.7FDE@afn.org>
Source record: 88347

void@world.std.com wrote:
>
> ultrasonics are OK for communications, but problematic
> for data - too much reflection. Plus it only needs to go
> about four feet (through flesh and bone). There are SCUBA
> computers that do this (using RF).
> A small (1x1") unit transmits tank pressure to a wrist
> mounted computer using digital signals. They're even
> digitally "keyed" so two divers won't cross signals if they
> are within th four or five foot transmission zone.
>
> Frequency and antenna configuration on these things have
> me mystified.
>
> -Will
>
> Woody White ("eMail"@my.www.page.Mailto) wrote:
> : I would use kilohertz to several megahertz ultrasonics. Modulate the
> : Usonic signal. Much of the UT gear is uded for non-destructive testing,
> : but I have see (somewhere) a system used for voice communication by
> : scuba divers. ask the dolphins..<g>
> : Woody
>
> : void@world.std.com wrote:
> : >
> : > Hi Guys,
> : >
> : > Am a digital guy - this RF stuff is baffling!
> : >
> : > I need a design reference source where I could
> : > pick up the details I need to build a really small
> : > transmitter receiver pair that will transmit five or six feet
> : > underwater, for purposes of serial communication.
> : >
> : > Anybody know where I can start looking?
> : >
> : > -Will
>
> : --
> : de Woody, WB4QXE
>
> : Work: Electron Microscopist/Microanalysist
> : Balance: Ham radio "homebrewing", computers , shade tree mechanic "the
> : Gravel Garage".

>
> : On the www page: Scanning Electron images and Ham Radio Homebrewing
> : stuff.
> : http://www.geocities.com/capecanaveral/3722
> : .
Maybe you could find ideas at WWET AM home page <www.afn.org/~afn57296/>
:)

# 5260. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Doug <do@not.spam>
Message-ID: <01bd08d4$b91211a0$9324f326@camalus.paragon-networks.com>
Source record: 88348
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

minilinx <minilinx@netaccess.co.nz> wrote in article
<6703fg$60v$1@titania.telstra.net.nz>...
> Hi,
> Could someone please email me formulae for converting
> S-Parameters into Input and Output Impedance.

Scattering parameter? Nope.

Check out

http://www.macom-phi.com/prod/app/AN005/AN005.html

# 5261. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Madjid BOUKRI <mboukri@cam.org>
Message-ID: <34945D12.CA7944A3@cam.org>
Source record: 88349

Bert Douglas wrote:
>
> Would someone please explain the Smith Chart to me?
>
> I went thru three years of EE and tons of Calculus so
> I should be able to understand it, but right now I
> have no clue.

Jim Potter already gave you the fundamentals on this.
I will just add this:

Suppose you wanted to represent ALL POSSIBLE impedances
R+jX

R >= 0 to infinite
and X from - infinite to +infinite

You will have a problem and couldn't fit that on a piece
of paper. The Smith Chart is just another representation
of the right half side of the rectangular plane in a
circle using the Z transform explained by Jim Potter.

Now you can put 0+j0 but also 10000 -j10000 and also
10000 + j2000. On top of that you have a set of
"magical" properties like rotations, reflections etc
that will represent addition of R, X, admittances
transmission lines etc...

The ARRL antenna handbook has a section at the end
explaining the Smith Chart and how to use it. It is
a great tool for matching impedances, coax Xforms
and a lot of other things....

--
Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Windows Antenna Simulation Software

# 5262. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Madjid BOUKRI <mboukri@cam.org>
Message-ID: <34946074.6179651F@cam.org>
Source record: 88350

Bert Douglas wrote:
>
> Would someone please explain the Smith Chart to me?
>
> I went thru three years of EE and tons of Calculus so
> I should be able to understand it, but right now I
> have no clue.

Forgot to put that nice URL for tutorial and playing with
Smith Chart, S-Params etc from HP

http://www.tmo.hp.com/tmo/appnotes/interactive/an-95-1/classes/imatch.html

---
Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Windows Antenna Simulation Software

# 5263. F.S. AUDIO TUBES!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <671nkb$7j2$4@newsfeed.smartt.com>
Source record: 88351

Hi! I have the following for sale:

- 2 (6550-USA) for $30.00 U.S.each. (reg.$50.00)
- 2 (6550 ST-USA) for $65.00 U.S.each. (reg.$95.00)
- 2 (6L6GC-USA)used for few hours only(like new)
for $15.00 U.S each
- 12 (6CA7-EL34-MULLARD) brand new in white boxes
for $18.00 U.S. each (reg. $29.00)
- 3 (7591A-USA) for $50.00 U.S.each (reg.$68.00)
- 3 (7591A-USA)used but like new for $25.00 U.S.each
All tubes are new except the ones mentionned.
If interested contact me. (250)868-1182
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

## 5264. SSB with DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@jps.net>
Message-ID: <34945E45.307B@jps.net>
Source record: 88352

Looking for hardware solutions utilizing DSP to generate and detect SSB transmissions. 73 Ken W6GHV

# 5265. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <#b8JFFPC9GA.159@ntdwwaaw.compuserve.com>
Source record: 88353

There is no doubt that Pactor is more popular. There is also little doubt that Pactor is "better". The issue is that HAMCOM doesn't do PACTOR. Some of us still like to build what we can.

Lord knows I don't want to start a flame war about how awful AMTOR is. It is better than RTTY and for HAMCOM users thats your 2 choices.

73,

Al Williams WD5GNR
http://www.al-williams.com/wd5gnr

cmoore@sedona.intel.com wrote in message <34933036.62D8@sedona.intel.com>...
>Al Williams wrote:
>> Just wondering if anyone has any interest in setting up some AMTOR contacts.
>> OK, ok, so AMTOR is old hat, but if you have Hamcomm (which is a great deal,
>> by the way), that is your only choice other than straight RTTY.
>
>Hi Al, IMO PACTOR is more popular and works better.
>--
>73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 5266. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <#29LIPPC9GA.267@ntdwwaaw.compuserve.com>
Source record: 88354

There is a good treatment of the Smith Chart in RF Circuit Design by Bowick (Sams). The best thing is the whole book (which covers PA design) is only 176 pages, so you can reasonably read it.

73,

WD5GNR
http://www.al-williams.com/wd5gnr

AC6V wrote in message <3493D8EB.1BA0@ix.netcom.com>...
>Bert Douglas wrote:
>>
>> Would someone please explain the Smith Chart to me?
>>

# 5267. Re: How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <O5tLJOPC9GA.246@ntdwwaaw.compuserve.com>
Source record: 88355
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

The really low parts count classic hi pass filter is just a capacitor in series with the input and a resistor shunt to ground.

```
In -----C----- Out
^
R
|
Gnd
```

The idea is to make a voltage divider that is frequency dependant. Say XC is the reactive capacitance of the capacitor at some frequency and R is the resistance of the resistor. Then (given infinite source and load resistance):

Vout=Vin R/(XC+R), so as XC goes down towards zero, this gets closer and closer to R/(0+R)=1. Right? as XC goes up, the fraction R/(XC+R) gets very small.

For any capacitor, XC is going to go down as frequency increases. Why?
XC=1/(2piFC)
So all other things being equal XC is inversely proportional to the frequency.

Now, your scope has some impedance (probably very large) that has to be factored in. And the source does too.

Say you want a 50 ohm R and you want the signal to be 10% at 50khz. A little back of the envelope says that C should equal .007 uF.

At 50khz, the XC is 450 ohms, and 50/(450+50) is .1. Now .007uF caps aren't very common, but .01s are. Let's see:
XC@50kHz=318 ohms
so at 50kHZ your divider fraction is .14, which is probably OK.

At 30khz the fraction is even less (about .09; less than 10%). at 600khz (your lowest freq. of interest the fraction is about 65%. Of course, you have to factor this filter attenuation into your measurements.

Not sure if that will help you make your measurements, but hopefully it helps you with simple filter design. By the way, want a low pass filter? swap the R and the C. That reverses the voltage divider. Same principle. Voltage dividers are the most important building block in electronics, in my opinion. Explains the wheatstone bridge, transistor and tube biasing, RC filters, and plenty more.

If you want to learn more about stuff like this, drop by web site and see the review on the Art of Electronics. Absolutely the best book of its kind bar NONE.

73,

Al WD5GNR
http://www.al-williams.com/wd5gnr

DaveC wrote in message ...
>In article
><voicebox-0912970944580001@dnai-207-181-210-84.dialup.dnai.com>,
>voicebox@dnai.com (DaveC) wrote:
>
>On my o'scope, I want to display ripple voltage present on a 30KHz signal.
>I want to filter out the 30K signal and show only the ripple voltage. This
>ripple frequency is somewhere between 20 and 40 times the 30K signal. The
>voltage of the 30K signal is less than 1 volt p-p. The ripple voltage is
>much smaller than this.
>
>If I remember my basic electronics correctly, I can get a not-at-all-sharp
>filter with a few components (cap and coil? cap and res?).
>
>Component values and any other help would be greatly appreciated. Direct
>e-mail replies doubly so.
>
>Enjoy,
>Dave
>--
>Dave Carpenter
>Sound Logic

# 5268. NE602 and DC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Paul Breed <Paul@rasdoc.com>
Message-ID: <349482B1.6AD963C2@rasdoc.com>
Source record: 88356

I am working on a I/Q direct conversion reciever for the ~300Khz

Coast Guard DGPS broadcasts.
Since I am doing an I/Q direct conversion reciever, and I was
cotemplating using a pair of NE602's for the mixers....
I need to know how the NE602 does converting to DC.
Does the DC setpoint drift?
At about what rate? .1Hz 1Hz? 10 Hz?
What is the common mode value of the outputs?

None of this appears to be covered in the Datasheet.

Paul

# 5269. Dan's 10 Turn 100k Pot and Parts Quality

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: astone@erols.com
Message-ID: <3494C8C3.7279@erols.com>
Source record: 88357

Hi -- Has anyone tried one of these pots with their projects? How's the quality? They sell for $3.50 or so which seems fairly low even for a surplus 10 turn pot. Any comments on the general quality of Dan's parts especially on his real low price capacitor and tape and reel strip component deals? Thanks for your help. Please respond direct.

73,

Ron (KA3J)

# 5270. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: don <bjmcpher@usit.net>
Message-ID: <6729q3$deh$1@news.usit.net>
Source record: 88358
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

minilinx wrote in article <6703fg$60v$1@titania.telstra.net.nz>...

>Hi,
>Could someone please email me formulae for converting
>S-Parameters into Input and Output Impedance.
>
>Regards
>Dave Huisman
>
Hi dave. here are equations to convert from scattering parameters (s
parameters) to impedance parameters. I assume you mean a 2 port network.

Zi=((1+S11)(1-S22)+S12 S21)/((1-S11)(1-S22)-S12 S21)
Zr=2 S12\((1-S11)(1-S22)-S12 S21)
Zf=2 S21/((1-S11)(1-S22)-S12 S21)
Zo=((1-S11)(1+S22)+S12 S21)/((1-S11)(1-S22)-S12 S21)

In these transformations, S in a scattering coefficient, Z is an impedance
coefficient, and all numerics should be regarded as subscripts.
Hope this helps

Don

# 5271. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3494BAE2.46C0@trader.com>
Source record: 88359
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

minilinx wrote:
> Could someone please email me formulae for converting
> S-Parameters into Input and Output Impedance.

Oh! So _that's_ what S Parameters are! I'd like to know
this formula too!
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5272. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3494B4FB.2569@trader.com>
Source record: 88360

mud wrote:
> The typical 4148 has about 4ns of reverse recovery time.

So what's the EE term for this characteristic?

> That's an appreciable fraction of a cycle at VHF, and will lead to
> quite low rectification efficiency.

I'm going to assume the frequency-to-effeciency curve is NOT linear.
Is there an EE symbol for rectification efficiency?

> The typical schottky ...will be pretty flat up to a Ghz or a little more

Can I assume you are talking about the above mentioned curve, and that
by "flat" you mean linear?

> ...sorting them for Vf.
> you can easily find 5 that match within a single millivolt.

Vf==the forward voltage at which current starts flowing? Something else?
I thought this value was _normally_ just a few millivolts, even for cheapos.

> mud mud mud...mudding...mudder...

Well, ya'. But I'm hoping _that_ can be rectified. :-)
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5273. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3494B5F1.24E7@trader.com>
Source record: 88361

> >I am thinking about buying the Radio Designer product.

> It's well worth the $150.00 price tag, I find the rf circuit analysis very
> realistic. Radio Designer 1.5 is a smaller version of Super Compact's
> $5000.00 simulation software.

This is an ARRL product?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5274. Re: need circuit for mic preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-14 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3494B999.4C97@trader.com>
Source record: 88362

Jim Strohm wrote:
> Please, when you ref the handbook, give us a clue about what year,
> and if possible, what page. The Index and the Table of Contents
> have never been a strong suit in the handbook. And since back before
> they invented fire, the handbook has always had wonderful pieces
> of totally essential information tucked in the wrong place, without
> an index reference.

Is there an on-line errata sheet for the Handbooks? There should be.
Then add the on-line better index. Would the ARRL site host it?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5275. -FS- 903Mhz DownEast-Microwave Loop Yagis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Ron Sibbitt <n8lmt@usa.net>
Message-ID: <672m9g$7kp$1@nu-informer.alliance.net>
Source record: 88271
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

i have a pair of down east microwave 903mhz 'loopers'
for sale....only been used in a few hilltop vhf contest set-ups
back 1988-1990...in storage (indoors) since.
want to sell them as pickup only, i am located in
Croswell, Michigan....about 20miles from Port Huron, MI

also included is down east microwave 903mhz power
divider...the loopers are the model 3333LY 12' boom
18.5dBi gain each 33 elements each. the lot originally
cost about $250.....all yours now for $ 75.

e-mail me n8lmt@usa.net

Ron Sibbitt N8LMT
5885 Galbraith Line
Croswell, MI 48422

# 5276. Re: WTD XREF MRF 428

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <3494f0fd.3769899@news.lin.foa.se>
Source record: 88272

Similar (not direct) Replacement
H100-50
S100-50

All according to Motorola RF Device Data

On Sat, 13 Dec 1997 00:42:06 -0800, WB9IOG <WB9IOG@REVEALED.NET>
wrote:

>Tnxs in advance.
>Any one know of a substitue for the
>Motorola MRF 428??
>Mike

# 5277. Re: or 8552A or B and 8554 plug-ins

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <3494ef10.3276310@news.lin.foa.se>
Source record: 88273

Ooops!!!
Yes you are correct, really got those numbers screwed up!
I am still looking........

/Lasse SM5GLC

On Fri, 12 Dec 1997 09:00:34 -0800, Rae family
<rae4@popd.ix.netcom.com> wrote:

>might get more responses!

# 5278. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <3494f2c9.4229379@news.lin.foa.se>
Source record: 88274

I am using =Superstar= from Eagleware, it used to have the same tideous circuit description input as Radio Desiner but have now moved into schematic input. Both Radio Designer and Superstar are linear analyzers i.e. much faster at analyzing circuits than any spice based product. The price-tag for Superstar is $995 as a starter (you would really want some extra add-on programs) , which is *very fair* but expensive for hobby use only!

Using Superstar at work with all the add-on programs for designing microwave filters, active filters PCBs etc makes you very very spoiled!! I really WISH that they could release a "light version" for experimenting HAMs

I find the tuning option very enlightning, especially tweking filters and changing Q-values. Using realisitc Q-values gives invaluable insight to how lossy the filter will be.

Using high performance simulation and design software are fun to say the least, and it is a pity they are so expensive it is almost impossible for the experimenting ham to use this stuff. If only the software companies would understand that letting hams using it in their hobby would surely boost the proffesional usage too i.e. increasing their revenues.

As things are now, I recommend go for RF-designer and have fun but as always: If one start with a shitty desing the result is usually poor.....

/Lasse SM5GLC

On 13 Dec 1997 16:16:26 GMT, "Bert Douglas"
<G_Herbert_Douglas@msn.com> wrote:

>I am thinking about buying the Radio Designer product.
>Is anyone else using it?

# 5279. 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Alan <gilly@camtech.net.au>
Message-ID: <01bd0916$b84063c0$LocalHost@my>
Source record: 88275
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Hi to all on the Newsgroup.

Has anyone had experience in constructing a 2M to 10m Transverter.

Might seem the wrong way around, but a surplus 2M FM rig would be a nice
way to drive a Transverter to 10M and work a bit of 10fm mobile.

Any thoughts, experiences would be appreciated.

73 De Alan

gilly@camtech.net.au

Amateur Radio Callsign VK5BWG PF87SQ

Amateur Radio Packet Address :-
VK5BWG @ VK5SU.#MDN.#SA.AUS.OC
++++++++++++++++++++++++++++++++++++++++++++++++++++++++

# 5280. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: jhallen@world.std.com
Message-ID: <EL89H5.LtJ@world.std.com>
Source record: 88276
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Speaking of S parameters, has anyone tried building their own network analyzer for low frequencies? It shouldn't be too hard: feed a VFO into the device under test through a programmable attenuator, receive it back with an agc amp. The agc voltage/attenuator setting is magnitude. Feed both the original VFO and the received signal through limiters and to a xor-gate or flip-flop phase detector and low pass filter to measure phase. Maybe have A/D converters and control everything with a PC.

--
/* jhallen@world.std.com (192.74.137.5) */ /* Joseph H. Allen */
int a[1817];main(z,p,q,r){for(p=80;q+p-80;p-=2*a[p])for(z=9;z--;)q=3&(r=time(0)
+r*57)/7,q=q?q-1?q-2?1-p%79?-1:0:p%79-77?1:0:p<1659?79:0:p>158?-79:0,q?!a[p+q*2
]?a[p+=a[p+=q]=q]=q:0:0;for(;q++-1817;)printf(q%79?"%c":"%c\n"," #"[!a[q-1]]);}

## 5281. crystal filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: msebrakr@telepath.COM
Message-ID: <3.0.1.16.19971214205139.33d720aa@telepath.com>
Source record: 88277

Did you say to look in the book "introduction radio frequency design" or "solid state design for the radio amateur" about crystal filters?. Sorry for making you repeat youself but that message got deleted.

73,
Arnold KD5CKH

P.S. Anybody else out there with suggestions for a 9 MHZ I.F. low BW filter for CW?

# 5282. Re: 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Don Ward <don@kay-dee.demon.co.uk>
Message-ID: <zald7GAeyRl0EwW0@kay-dee.demon.co.uk>
Source record: 88278
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

In article <01bd0916$b84063c0$LocalHost@my>, Alan <gilly@camtech.net.au>
writes
>Hi to all on the Newsgroup.
>
>Has anyone had experience in constructing a 2M to 10m Transverter.
>
>Might seem the wrong way around, but a surplus 2M FM rig would be a nice
>way to drive a Transverter to 10M and work a bit of 10fm mobile.
>
>Any thoughts, experiences would be appreciated.
>
There was such a device published in the GQRP mag SPRAT. I can find out
more if you wish.
--
Don Ward G0MDO

# 5283. Ham-Homebrew Digest V97 #720 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s494c33a.040@pii.com>
Source record: 88279

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5284. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Bill Sloman <sloman@sci.kun.nl>
Message-ID: <3495C038.ED4DD8FA@sci.kun.nl>
Source record: 88280
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Brian P. Wilson wrote:

> I believe you are referring to LaPlace Transformations where s-domain is
> frequency as opposed to time. There are many manipulations that can be
> performed and you can also take inverse LaPlace Transforms to put things
> back into time domain. unfortunately there is no easy answer, since it
> really depends upon the equation.
>
> This is a fairly involved subject which is usually covered in Circuit
> Analysis Textbooks.

I don't think this is either helpful or correct. The "s" in
S-parametersstands for "scattering" and has nothing to do with the s-domain.

The Philips RF wideband transistor data-book SC-14 describes
S-parameters as return losses or reflection coefficients of a
two-port network.

Neither of my microwave texts is very helpful on how you
would transform the s-parameter matrix to the impedance
matrix, so I can't answer the original question, but there
ought to be a microwave text that makes this simple.

Bill Sloman, Nijmegen

> >minilinx wrote in message <6703fg$60v$1@titania.telstra.net.nz>...
> >Hi,
> >Could someone please email me formulae for converting
> >S-Parameters into Input and Output Impedance.
> >
> >Regards
> >Dave Huisman
> >
> >

# 5285. Re: Dan's 10 Turn 100k Pot and Parts Quality

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <uDOgG4VC9GA.142@ntdwwaaw.compuserve.com>
Source record: 88281

Every time I have done business with Dan's I have been more than satisfied. Great deals. Have bought some stuff on reel strips with no worries. Don't know what passes for "real low price" but I've bought plenty of caps there too. No experience with the 10T pots, but FWIW, I really like doing business with Dan's.

Now if he would let you order online.... oh well, can't have everything.

Regards,

Al Williams WD5GNR
http://www.al-williams.com/wd5gnr
(BTW, I have a list of part suppliers at this URL).
astone@erols.com wrote in message <3494C8C3.7279@erols.com>...
>Hi -- Has anyone tried one of these pots with their projects? How's the
>quality? They sell for $3.50 or so which seems fairly low even for a
>surplus 10 turn pot. Any comments on the general quality of Dan's parts
>especially on his real low price capacitor and tape and reel strip
>component deals? Thanks for your help. Please respond direct.
>
>73,
>
>Ron (KA3J)

# 5286. Re: How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Bill Sloman <sloman@sci.kun.nl>
Message-ID: <3495D0C6.1DA04794@sci.kun.nl>
Source record: 88282
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

DaveC wrote:

> In article
> <voicebox-0912970944580001@dnai-207-181-210-84.dialup.dnai.com>,
> voicebox@dnai.com (DaveC) wrote:
>
> On my o'scope, I want to display ripple voltage present on a 30KHz signal.
> I want to filter out the 30K signal and show only the ripple voltage. This
> ripple frequency is somewhere between 20 and 40 times the 30K signal. The
> voltage of the 30K signal is less than 1 volt p-p. The ripple voltage is
> much smaller than this.
>
> If I remember my basic electronics correctly, I can get a not-at-all-sharp
> filter with a few components (cap and coil? cap and res?).
>
> Component values and any other help would be greatly appreciated. Direct
> e-mail replies doubly so.

If you knew enough electronics to appreciate a useful response, you wouldn't have posted such a trivial question. Find a library and look up the answer in an
electronics text - we like "The Art of Electronics" by Horowitz and Hill - ISBN 0-521-37095-7 but it was written as an undergraduate text for use at Harvard, so you may want to look out for something by Don Lancaster.

Bill Sloman, Nijmegen

# 5287. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <34955860.1352722@news.lin.foa.se>
Source record: 88283
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

I guess checking these pages will help alot!
Well done by the crew at HP!!!

http://www.tmo.hp.com/tmo/appnotes/interactive/

/Lasse SM5GLC
On Mon, 15 Dec 1997 15:41:44 -0800, Bill Sloman <sloman@sci.kun.nl>
wrote:

>
>
>Brian P. Wilson wrote:
>
>> I believe you are referring to LaPlace Transformations where s-domain is
>> frequency as opposed to time. There are many manipulations that can be
>> performed and you can also take inverse LaPlace Transforms to put things
>> back into time domain. unfortunately there is no easy answer, since it
>> really depends upon the equation.
>>
>> This is a fairly involved subject which is usually covered in Circuit
>> Analysis Textbooks.
>
> I don't think this is either helpful or correct. The "s" in
>S-parametersstands for "scattering" and has nothing to do with the s-domain.
>
>The Philips RF wideband transistor data-book SC-14 describes
>S-parameters as return losses or reflection coefficients of a
>two-port network.
>
>Neither of my microwave texts is very helpful on how you
>would transform the s-parameter matrix to the impedance
>matrix, so I can't answer the original question, but there
>ought to be a microwave text that makes this simple.
>
> Bill Sloman, Nijmegen
>
>> >minilinx wrote in message <6703fg$60v$1@titania.telstra.net.nz>...
>> >Hi,
>> >Could someone please email me formulae for converting
>> >S-Parameters into Input and Output Impedance.
>> >
>> >Regards
>> >Dave Huisman
>> >

>> >
>
>
>

# 5288. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: don <bjmcpher@usit.net>
Message-ID: <673qev$qjd$1@news.usit.net>
Source record: 88284

Bert Douglas wrote in article <66vmmq$q3k$0@198.79.30.86>...

>Would someone please explain the Smith Chart to me?
>
>I went thru three years of EE and tons of Calculus so
>I should be able to understand it, but right now I
>have no clue.
>
>Thanks,
>Bert Douglas.

Bert, it takes some time to learn the smith chart and you really need to read all you can and then get someone to sit down with you and go through some excercises. It really isnt as bad as it looks, but its one of those things you have to actually do, kind of like soldering. If you can get a copy of the following book from a library, you will find it very well written and straightforward, yet not compromised by simplifications. Contrary to the title, it is mostly for smith chart. I dont reccomend it for antenna or field theory.

Lines, Waves, and Antennas
by
Robert Grover Brown
Robert A. Sharp
William Lewis Hughes
and Robert E. Post

Ronald Press co. N.Y
1st edition 1961
2nd edition 1973

good luck
don

# 5289. Re: 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <349584b2.0@newshost.pcug.org.au>
Source record: 88285
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

"Alan " <gilly@camtech.net.au> wrote:

>
>Has anyone had experience in constructing a 2M to 10m Transverter.
>
>Might seem the wrong way around, but a surplus 2M FM rig would be a nice
>way to drive a Transverter to 10M and work a bit of 10fm mobile.
>

Alan - it should work OK. I have built a transverter that converts
144-148 MHz to 3.5-7.5 MHz, thus allowing both 80 & 40m from a 2m
multimode rig.

Start with the local oscillator - you will need an xtal oscillator on
144-26 MHz if you want to cover the CB band as well. This could be done
with 2 transistors - an overtone xtal oscillator and doubler/tripler.
Then build RX mixer part, then TX section. It is desirable you have
access to the PTT line of the 2m rig (the FT290R has a socket on the side
for this) to switch the transverter.

73,

--


_____________________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home
Page and the STWG Web Site.


_____________________________________________________________

# 5290. Re: SSB with DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Laura Halliday <ve7ldh@direct.ca>
Message-ID: <34958976.451302B6@direct.ca>
Source record: 88286

K.R.Burtchaell wrote:

> Looking for hardware solutions utilizing DSP to generate and
> detect SSB transmissions. 73 Ken W6GHV

The hardware is trivial - just about any of the DSP chip evaluation boards will do the job. You might want to try transmitting first, as the input signals are more controlled, so dynamic range isn't as tough a problem as it is on receive.

You still need software to make it go. Look in your favourite DSP reference under "Hilbert Transform".

...laura

# 5291. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <Wfpp5bAuHRl0Ewy6@jmwa.demon.co.uk>
Source record: 88287
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

In article <34948cd0.0@news.massey.ac.nz>, Malcolm Loudon
<PsyTech@massey.ac.nz> writes
>In article <6703fg$60v$1@titania.telstra.net.nz>, minilinx@netaccess.co.nz
>says...
>>
>>Hi,
>>Could someone please email me formulae for converting
>>S-Parameters into Input and Output Impedance.
>>
>>Regards
>>Dave Huisman
>>
>>
>Its rather complicated, not difficult but alot of algebra - abit much for
>email. The equations are in C Bowick's "RF Design" and the ARRL "VHF/UHF
>Experimenters Manual". I wrote a C programme to implement them a while
>back, it reads in a file of the four S params in polar form and spits
>out a file giving I/O imps, ref coeffs, max gain, stability factor etc. I
>could email you a copy if you like. It is necessary to calculate intermediate
>quantities, most of which require complex number arguments which is very
>clumsy to do by hand (even with a good calculator).
>
>Malcolm
>
Something else to include in AoE3. Should be easy, since it ISN'T
WRITTEN YET, eh, Win?
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. It is useless to threaten a strong man - he will
ignore you. It is dangerous to threaten a weak man - he will kill you if he can.

# 5292. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <cfJr5fAuMRl0EwSP@jmwa.demon.co.uk>
Source record: 88288
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

In article <6729q3$deh$1@news.usit.net>, don <bjmcpher@usit.net> writes
>
>
>minilinx wrote in article <6703fg$60v$1@titania.telstra.net.nz>...
>
>>Hi,
>>Could someone please email me formulae for converting
>>S-Parameters into Input and Output Impedance.
>>
>>Regards
>>Dave Huisman
>>
>Hi dave. here are equations to convert from scattering parameters (s
>parameters) to impedance parameters. I assume you mean a 2 port network.
>
>
>Zi=((1+S11)(1-S22)+S12 S21)/((1-S11)(1-S22)-S12 S21)
>Zr=2 S12\((1-S11)(1-S22)-S12 S21)
>Zf=2 S21/((1-S11)(1-S22)-S12 S21)
>Zo=((1-S11)(1+S22)+S12 S21)/((1-S11)(1-S22)-S12 S21)
>
>In these transformations, S in a scattering coefficient, Z is an impedance
>coefficient, and all numerics should be regarded as subscripts.
>Hope this helps
>
>Don
>
>
>
Yes, that's the sort of expression that I vaguely remembered - not so
dreadfully complicated in that form. You only have to evaluate the
denominator once, of course, and in some cases one or more S is
negligible or, for a passive network, S12 = S21, of course (IIRC).

Just to clarify, I suppose Zr is the reverse transfer impedance and Zf
is the forward transfer impedance?
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. It is useless to threaten a strong man - he will
ignore you. It is dangerous to threaten a weak man - he will kill you if he can.

# 5293. Re: How Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Harke.Smits@net.HCC.nl
Message-ID: <6744k0$99e$1@news.Eindhoven.NL.net>
Source record: 88289

nc-bolchpe@netcologne.de (Peter Bolch) wrote:
Hello Peter,

I remember some guy put a microwave diode in a waveguide one side
connected to a SMA bulk head, feeding it with 2 GHz or so and getting
the IF out of the same connecter. HP and Tek doing the same thing.
Maybe I can find it if you are interested .

Harke Smits (PA0HRK)
harke.smits@net.hcc.nl

>Mike <bad@email.adr> wrote:

>[...]

>>
>>Hi Peter,
>>
>>I recall, from somewhere, that a ham documented a 26 GHz spectrum
>>analyzer design. Have you heard anything about this, or know where to
>>find the articles?

>Hi Mike,

>sorry, I haven't seen such a circuit although nearly all the authors
>mentioned that their spectrum analyzer circuit can be extended to at
>least several GHz. But none of them said how this can be done
>exactly......

>Best regards

>Peter

# 5294. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Stephen Schiller <schiller@adobe.com>
Message-ID: <34958BFF.4448@adobe.com>
Source record: 88290
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

minilinx wrote:
>
> Hi,
> No, I am wanting to perform impedance matching between RF stages.
> The transistor data is only given as S-parameters (s11,s12,s21,s22).
> S11 relates to reflected wave at input while s22 refers to reflected
> wave at output (as response to incident wave from a signal generator).
> There should be a formula which will allow the input reflection co-efficient
> to be converted to input impedance.
>
> Regards
> Dave Huisman

Briefly, the input impedance, assuming the output is
termianted, is 50*(1 + s11)/(1 - s11). That's also assuming
the parameters were measured in a 50 ohm environment
(which is almost always the case). Likewise, the
output impeadance, assuing the intput is terminated
is 50*(1 + s22)/(1 - s22). But the intput and output
are never perfectly terminated and that means that
the actual impedance a the output will affect the
input impedance and vice versa. That's where the
s12 and s21 termns come in. (See Jim Potter's
post for more on that.) That's all the free
advice I am good for at the moment. If you really
want to design a high frequency you need to read a
good book on high frequency amplifiers. The one by
Carson is is OK.

- S

# 5295. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: hill@rowland.org
Message-ID: <6746kr$kli@fridge.shore.net>
Source record: 88291
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

John Woodgate at jmw@jmwa.demon.co.uk says...
>
>>> Could someone please email me formulae for converting
>>> S-Parameters into Input and Output Impedance.
>>>
>>> Regards
>>> Dave Huisman
>>
>> It's rather complicated, not difficult but alot of algebra -
>> a bit much for email. The equations are in C Bowick's "RF
>> Design" and the ARRL "VHF/UHF Experimenters Manual". ...
>> Malcolm
>
> Something else to include in AoE3. Should be easy, since it
> ISN'T WRITTEN YET, eh, Win?

No it's not, but if we have to include scatter parameters, and
all the RF amd microwave theory leading up to that, well, hmmm,
think I'll go play with some opamps someplace!!

--
Winfield Hill hill@rowland.org
Rowland Institute for Science
Cambridge, MA 02142

# 5296. info needed about simpsonCB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Dennis PE1NQH <pe1nqh@zeelandnet.nl>
Message-ID: <34959C06.63B9@zeelandnet.nl>
Source record: 88292

hallo there
has anyone ever heard about a SIMPSON CB tranceiver?
I have had an modification manual for it , but it dos'nt seem to work
on other cb gear.
the manual is a written one , whitout the drawing of the PCboard.
I do have quiet a lot of allignment manuals for cb but none of them
fitts the simpson model regarding the text used for the different
core's, trafo's and C's.
can you help me ?
please do .
73 dennis pe1nqh@zeelandnet.nl

# 5297. Re: How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: pante@pi.net
Message-ID: <6746nf$ent@halley.pi.net>
Source record: 88293
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

```
>
>
>DaveC wrote:
>
>> In article
>> <voicebox-0912970944580001@dnai-207-181-210-84.dialup.dnai.com>,
>> voicebox@dnai.com (DaveC) wrote:
>>
>> On my o'scope, I want to display ripple voltage present on a 30KHz signal.
>> I want to filter out the 30K signal and show only the ripple voltage. This
>> ripple frequency is somewhere between 20 and 40 times the 30K signal. The
>> voltage of the 30K signal is less than 1 volt p-p. The ripple voltage is
>> much smaller than this.
>>
>> If I remember my basic electronics correctly, I can get a not-at-all-sharp
>> filter with a few components (cap and coil? cap and res?).
>>
>> Component values and any other help would be greatly appreciated. Direct
>> e-mail replies doubly so.
The roll of for an RC filter will be 6dB / ocatve.
The 3 dB point would be f = 1 / R x C.
If you look at a 60 Hz ripple on 30 KHz, then start rolling of at 100Hz,
200 -6, 400 -12, 800 -18 etc.
Should do the job.
Any errors are copyright J.M.
```

## 5298. Digital Coded Squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: tracker557@aol.com
Message-ID: <19971215213900.QAA15665@ladder02.news.aol.com>
Source record: 88294

What is the populatity of digital coded squelch and what are predictions for future popularity in both amature and commercial markets.

I'm just curious about this topic.

Tracker

# 5299. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971215222901.RAA22870@ladder01.news.aol.com>
Source record: 88295

>Hi,
>Thanks all for feedback on Scattering Parameter - Impedance Conversion.
>From the replies received, it seems a drawn out affair to use S-parameters
>to find transistor input and output impedance.

Not at all. You make up a spreadsheet and enter the equations and it does the
math for you.

W4ZCB

# 5300. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: jeffg@ptp.hp.com
Message-ID: <674cfn$m2d@hpscit.sc.hp.com>
Source record: 88296
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Lasse Mo&#65533;ll (larsm@lin.foa.se) wrote:
> I guess checking these pages will help alot!
> Well done by the crew at HP!!!
>
> http://www.tmo.hp.com/tmo/appnotes/interactive/

Thanks!

Jeff
--

==========================================================================
Jeff Gruszynski Any Standard Disclaimers Apply
Test & Measurement Electronic Commerce
Hewlett-Packard Company
==========================================================================
jeffg@ptp.hp.com http://www.tmo.hp.com/
==========================================================================

# 5301. Re: How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: reinhard.zwirner@t-online.de
Message-ID: <674fb3$a0j$1@news02.btx.dtag.de>
Source record: 88297
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

Jan Mourer wrote:
> [snip]
>> The 3 dB point would be f = 1 / R x C.

Hi,
IMHO the equation should be as follows: f = 1 / 2 x pi x R x C

CU, Reinhard

## 5302. Herring Aid Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Chris Whiteside <cfwhiteside@earthlink.net>
Message-ID: <3495E4CD.46C5@earthlink.net>
Source record: 88298

Does any one have a copy of the QST article for the Herring Aid 40 meter DC receiver from the late 70's. I have one partially built but no longer have the article. Will pay copy and mail charges.

73,
Chris K6FP
cfwhiteside@earthlink.net

# 5303. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <eCp$bUcC9GA.272@ntawwabp.compuserve.com>
Source record: 88299
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Gee, that is in this month's QST. Uses a DDS oscillator, I think.

Al WD5GNR
http://www.al-williams.com/wd5gnr

Joseph H Allen wrote in message ...
>Speaking of S parameters, has anyone tried building their own network
>analyzer for low frequencies? It shouldn't be too hard: feed a VFO

# 5304. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: dan <dan@lakeweb.com>
Message-ID: <349601E1.191C@lakeweb.com>
Source record: 88300
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

J M Noeding wrote:
>
> On Sun, 14 Dec 1997 12:16:04 GMT, nc-bolchpe@netcologne.de (Peter
> Bolch) wrote:
>
> >LA8AK@ax25.packet (J M Noeding) wrote:
> >
> >
> >> I need 5 equal diode RF detectors. We will prefer to use some
> >>commonly available diodes.
> >

Hi,

You would also like to get Hewlett Packard's Application
Note 64-1A. I found it very informative. They don't
have it in PDF format yet but will mail it.

Best, Dan.

## 5305. schematic for browning eagle mk IV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Lynn HOLLIER <scooter@thegrid.net>
Message-ID: <6756n2$77p$1@zinger.callamer.com>
Source record: 88301

I am looking for a set of schematics for the browning eagle mark IV.
if anybody has one please e-mail me
at scooter@thegrid.net

# 5306. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: minilinx <minilinx@netaccess.co.nz>
Message-ID: <671aa8$fhs$1@titania.telstra.net.nz>
Source record: 88363
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

Hi,
No, I am wanting to perform impedance matching between RF stages.
The transistor data is only given as S-parameters (s11,s12,s21,s22).
S11 relates to reflected wave at input while s22 refers to reflected
wave at output (as response to incident wave from a signal generator).
There should be a formula which will allow the input reflection co-efficient
to be converted to input impedance.

Regards
Dave Huisman

# 5307. Re: 1N4148 as RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: LA8AK@LA9K.packet
Message-ID: <34947d27.199927@news.online.no>
Source record: 88364
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Sun, 14 Dec 1997 12:16:04 GMT, nc-bolchpe@netcologne.de (Peter Bolch) wrote:

>LA8AK@ax25.packet (J M Noeding) wrote:
>
>
>> I need 5 equal diode RF detectors. We will prefer to use some
>>commonly available diodes.
>
>Hi Jan-Martin,
>
>I have experimented with a broadband RF power meter and found that
>schottky diodes are sensitive and work well beyond 1 GHz. E.g. the
>types BAT 64-07, BAT 62-03 W, BAT 63 and BAT 17. If the levels to be
>detected aren't too low, the HP 2800 Series might be choice.
>
>All the diodes mentioned are available(also in small quantities) from
>RS Components (http://www.rs-components.com).
>
>
Hi agn Peter!
Yes, I will look for data and prices for the diodes you mention, and the 1N5711 and 1N6263. We need diodes for another project, too. My friend Wilhelm Sch&#65533;rings DK4TJ described a circuit using a/d converter with minimum detectable level of -30dBm. We are planning to build something better. My plan is to make a voltmeter with lowest range of 10mV and max range of 10V RMS, so it would be best if we could buy only one type of diodes, they must stand at least 30V peak. So perhaps we may have it demonstrated sometime at Weinheim VHF meeting..... This instrument should be a modern version of the LA7MI type I described in DUBUS Magazine in 1986 years ago (using diode/resistor combinations as gain equalizers)

1) It is important to build 5 equal detectors, so we will not have to calibrate output voltages for each detector and make special measurements to calibrate them.
2) Frequency charachteristique should be as good as possible, I don't want a gain vs frequency correction factor.

I did not have success with the RS homepage, but I have updated catalog at work, I have also CD for RS and several other manufacturers, the only problem is that we are not supposed to have cd drives at work, somebody is afraid that we may install too private

large programs on the PC's !

Another writer mentioned transistor rectifiers with JFET buffers.
I don't rely on JFETs, in my experience gain will vary with
individual buffers, again making it difficult to calibrate each
detector reading against the other. Too often the voltage gain is only
0.6-0.8 for a source follower. Perhaps I am wrong, but I have just
seen too many incorrect applications of JFETs, they tend to be popular
- particularly when one have not studied any performance data.......

I do not wish to go into details of G3LDO's book explaining how the
measurements can be explained, it is based on an algorithm by Tim
Lloyd G3TML. It is a valuable book for the European antenna
experimenter who still believe "homebrewing" has something to do with
experiments, not information about where to buy.....

---
Jan-Martin Noeding - LA8AK at online dot no
N-4623 KristiansandS

Tel.+47-380-87178

# 5308. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: PsyTech@massey.ac.nz
Message-ID: <34948cd0.0@news.massey.ac.nz>
Source record: 88365
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.misc

In article <6703fg$60v$1@titania.telstra.net.nz>, minilinx@netaccess.co.nz says...
>
>Hi,
>Could someone please email me formulae for converting
>S-Parameters into Input and Output Impedance.
>
>Regards
>Dave Huisman
>
>
Its rather complicated, not difficult but alot of algebra - abit much for email. The equations are in C Bowick's "RF Design" and the ARRL "VHF/UHF Experimenters Manual". I wrote a C programme to implement them a while back, it reads in a file of the four S params in polar form and spits out a file giving I/O imps, ref coeffs, max gain, stability factor etc. I could email you a copy if you like. It is necessary to calculate intermediate quantities, most of which require complex number arguments which is very clumsy to do by hand (even with a good calculator).

Malcolm

# 5309. Kenwood TH-G71A 2m/440 MOD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: tracker557@aol.com
Message-ID: <19971215015201.UAA22761@ladder02.news.aol.com>
Source record: 88366

I'm looking for an out of band mod for the Kenwood TH-G71A 2m/440 dual band HT.
If anyone has it or knows where I can find it please let me know via E-Mail.

Tracker557@juno.com

Thanks, Tracker

# 5310. Need Help with COR circuit, And feeding audio into rptr TXer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19971215020700.VAA24407@ladder02.news.aol.com>
Source record: 88367

Hi,

I am attempting to set up a low power portable repeater. I am using 2 Motorola MX series portables. The MX, at hte side accessory connector, has a contact that when no signal is present has approximately 0.5 volts, and when it is recieving a signal, approximately 5.0 volts. I am looking for either a relay (I think that would work fairly well) or FET or some other device that will not switch at the 0.5 volts, but switch at approximately 4.0 volts. All the device needs to switch is the PTT ground of the other radio. I have not checked how many amps it is sinking, but I would assume it isn't much. I would prefer, in the interest of power consumption, that the device not need external power sources.

In addition, if any one could help me out with feeding the audio. The MX has 2 contacts which connect to the Speaker Mic, providing audio to the speaker in the mic. Is this emphasized, or deemphisized, how would I check which one it is, and which one would I need to feed into the mic contact on the transmitting radio.

Any help would be greatly appreciated.

## 5311. Conversion to Wilson WU-1510 to 440 Ham band ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: TLNixon@worldnet.att.net
Message-ID: <6723mu$6ti@mtinsc04.worldnet.att.net>
Source record: 88368

Looking for anyone who has ever convered a commercial Wilson model WU-1510 mobile to the ham band (440-450 mHz).

Also looking for the manual including tune-up and test points for this unit.

This is the slop-front mobile with a programming pad on the front, which appears similar to a touchtone pad.

Wouldn't even considerthe conversion, except one is sitting on my shelf here excess to my current needs.

DE Terry WB0VQP
TLNixon@worldnet.att.net

# 5312. Free Ham Radio mags.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Brian Gibbs <Brian@brimar.demon.co.uk>
Message-ID: <VF8wwPAyUNl0EwTA@brimar.demon.co.uk>
Source record: 88369

Hello to all.

I still have quite a large pile of magazines for which I'm hoping to
find a loving home. They are RadCom, SWM, Oscar News, and Datacom.
More info available by Email if interested. 73....Brian g3mbn


==========
= Brian Gibbs =
= Neston, Corsham, Wiltshire =
= brian@brimar.demon.co.uk =
==========

# 5313. -FS- DAIWA NS-448 900Mhz-1300Mhz Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-15 00:00:00 UTC
From: Ron Sibbitt <n8lmt@usa.net>
Message-ID: <672kna$7gd$1@nu-informer.alliance.net>
Source record: 88370
Cross-posted to: fido7.hardw.microwave,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap,sci.electronics,sci.electronics.equipment,sci.electronics.misc

For Sale:

DAIWA NS-448 SWR & Power Meter

900 Mhz to 1300 Mhz.

Two Ranges: 0-5 watts & 0-20 Watts

Cross-Needle type complete with external

pick-up unit model NS-448U that has type N

female connectors. This external pick-up has

4 feet of cable, that plugs into the 5-pin DIN

connector on back of the meter unit.

Meter has a light and can be hooked to 12vdc,

if you want to have it illuminated.

** It's all like new in the box **, only used a couple

of times back when i was nuts about vhf/uhf contesting

and had a 903 Mhz station.

Originally cost about $175. ........need $100.00

plus $3.00 to ship USA/48

Email - Me n8lmt@usa.net

Ron Sibbitt Croswell, MI

# 5314. Help with Stancor A-3844 xformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Postmaster@00a024cadb60.exu.ericsson.se
Message-ID: <NEWTNews.882293616.25662.Postmaster@a024cadb60.exu.ericsson.se>
Source record: 88221
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I need some help in finding out the specs and connections
for a Stancor A-3844 transformer.

I have been surfing the WEB with no luck.

Thanks

Tim /N5DWV

tim.long@ericsson.com

# 5315. TUBES FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <676702$7c4$1@newsfeed.smartt.com>
Source record: 88222

Hi!, I do have the following tubes for sale:

-(6) 807 power tubes new, for $10.00 U.S. each.
-(10) 6V6GT/a/b new for $7.00 U.S. each.
-(20) 12AU7 bulk (like new) for $4.00 U.S>each.
-(2) 6550 ST-USA used (check like new) for $30.00 U.S.each.
-(1) KT66(7243) new for $50.00 U.S.
-(2) 7360-USA new for$35.00 U.S.each.

For order or info. contact me. (250)868-1182
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5316. TUBES FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <67670e$7c4$3@newsfeed.smartt.com>
Source record: 88223

Hello! I have the following tubes for sale:

- (20) 6SL7GT NOS for $4.50 U.S. each.
- (3) 6AZ8 NOS for $8.00 U.S. each.
- (1) 4422 new for $25.00 U.S.
- (1) 6084/E80F new for $20.00 U.S.
- (1) 7788 NOS for $25.00 U.S.
- (1) 272A-WE NOS for $95.00 U.S.

If interested in any of these tubes,just contact me. THANKS
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5317. TUBES FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <676708$7c4$2@newsfeed.smartt.com>
Source record: 88224

Hi! I have the following for sale:
- (2) 6G5/6U5 new for $25.00 U.S. each.
- (2) 8417 new for $40.00 U.S. each
- (1) 918 new for $15.00 U.S.
- (3) 80 new for $15.00 U.S. each.
- (1) 8233 new for $30.00 U.S.
- (3) 5AR4 new for $45.00 U.S.each

If interested in any of those,please contact me. THANKS
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5318. Re: How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: voicebox@dnai.com
Message-ID: <voicebox-1612970751150001@dnai-207-181-210-215.dialup.dnai.com>
Source record: 88225
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

> In article
> <voicebox-0912970944580001@dnai-207-181-210-84.dialup.dnai.com>,
> voicebox@dnai.com (DaveC) wrote:
>
> On my o'scope, I want to display ripple voltage present on a 30KHz signal.
> I want to filter out the 30K signal and show only the ripple voltage. This
> ripple frequency is somewhere between 20 and 40 times the 30K signal. The
> voltage of the 30K signal is less than 1 volt p-p. The ripple voltage is
> much smaller than this.
>
> If I remember my basic electronics correctly, I can get a not-at-all-sharp
> filter with a few components (cap and coil? cap and res?).
>
> Component values and any other help would be greatly appreciated. Direct
> e-mail replies doubly so.

If you knew enough electronics to appreciate a useful response, you wouldn't have posted such a trivial question. Find a library and look up the answer in an
electronics text - we like "The Art of Electronics" by Horowitz and Hill - ISBN 0-521-37095-7 but it was written as an undergraduate text for use at Harvard, so you may want to look out for something by Don Lancaster.

=====

Bill:
I know enough to appreciate a useful response AND I posted this question. So what? You stick to books, I'll stick to newsgroups. You don't want to help? Fine. But we don't need negative responses. If you don't want to help, then don't.

Public libraries are very time-inefficient. Getting there (it's out of the way, parking's a bitch); browsing the electronic catalog (must be a UNIX system; poorly cataloged titles); wandering the stacks; coming back with woefully inadequate information. Whereas the 'net is populated with MILLIONS of engineers, just overflowing with electronics knowledge they are happy to share (well, a few are not, it seems).

But many people realize that the 'net is a great resource (yes, in some ways similar to a library-- but in many ways more like a neighborhood-- only at your fingertips) and are GENEROUS enough to HELP each other without posting ANAL RETENTIVE responses.

Thanks to the many who provided circuit suggestions to help me reach a solution.

Enjoy,
Dave
--
Dave Carpenter
Sound Logic

# 5319. Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: c.j.williams@tcat.ac.uk
Message-ID: <34967fec.16046770@sirius.data-io.com>
Source record: 88226

Hi all...

anyone got any info or experience in building cavities for low VHF??

Im looking for a simple desig whcih can be fabricated without the need
for turning or milling... ie a few old tin cans and a long bolt etc
:-)

cheers....

Chris Williams - g7nbp

email : webboss@tcat.ac.uk
or : c.williams@tcat.ac.uk
or : g7nbp@hotmail.com

web : www.tcat.ac.uk

## 5320. High Speed radio Network

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: matjoao@ci.ua.pt
Message-ID: <6769uu$e2c$1@news.ua.pt>
Source record: 88227

Hi...

Recently I've seen an ISA card that connects several computers
via radio. That card deliver about 1Mbps. Anyone have some schematics to
do a card for that purpose?

Tks in advance!

# 5321. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3496b515.67334638@news.atl.bellsouth.net>
Source record: 88228
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

On 16 Dec 1997 01:11:04 GMT, n8blk@aol.com (N8BLK) wrote:

>In article <#b8JFFPC9GA.159@ntdwwaaw.compuserve.com>, "Al Williams"
><alw@al-williams.com> writes:
>
>>There is no doubt that Pactor is more popular. There is also little
>>doubt that Pactor is "better". The issue is that HAMCOM doesn't do >PACTOR.
>>Some of us still like to build what we can.
>
>This is one of those situations though, where building a Pactor
>interface is difficult because Pactor & Pactor II are propietary
>techniques, and the implementations are licensed before sale
>to the public. You have a good point about AMTOR being cheaper
>than Pactor, and at least some Pactor implementations allow
>an Amtor station to connect, and then have an Amtor connect.
>
>>Lord knows I don't want to start a flame war about how awful AMTOR is.
>> It is better than RTTY and for HAMCOM users thats your 2 choices.
>
>In the defense of Cecil, he rarely gets upset about people disagreeing
>with him. Pactor, even with the MFJ implementation does have
>better features than AMTOR connects, and also can pass let's say
>a file better than AMTOR. It is a shame that Pactor is propietary, and
>that other modes like Clover & GTor also are, but I guess that's life
>in the new HF digital world!

All of the HF methods, with the possible exception of PACTOR II, have
been sufficiently documented by either the manufacturers or in the
amateur literature that you could homebrew a compatible unit. That's
allowed under Fair Use, and won't get you into licensing difficulties.
Licensing is only required if you're going to manufacture units for resale.

I'm not even sure that the PACTOR I protocol requires licensing. I think,
but could be wrong, that the protocol (not a particular implementation)
was released publicly for amateur use The more advanced PACTOR II,
Clover II, and GTOR protocols do require a license, AFAIK. At least HAL
has publicly *offered* non-exclusive licenses for Clover II to other
manufacturers. I haven't heard of SCS or Kantronics making the same
offer for their protocols.

All that said, I am very much in favor of an *open* protocol for advanced
amateur HF digital. Open standards are very useful in allowing competition
to improve products, and to drive a free market to the best price point.
TAPR and AMSAT collaborated to give us AX25, and warts and all that

standard has done much to make amateur packet widely available and affordable. AMTOR is similarly open, but just isn't good enough. We need to work on a higher performance open HF digital standard that all amateurs, and amateur manufacturers, can adopt and support. I've been beating the drum about this for a while now, but no one has risen to the bait and volunteered any ideas about what this open standard should be, or how we should go about developing it.

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5322. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3496babc.68781919@news.atl.bellsouth.net>
Source record: 88229

On Tue, 16 Dec 1997 08:07:46 +1300, "minilinx" <minilinx@netaccess.co.nz> wrote:
>Hi,
>Thanks all for feedback on Scattering Parameter - Impedance Conversion.
>From the replies received, it seems a drawn out affair to use S-parameters
>to find transistor input and output impedance.
>This was a surprise to me as all literature I have read so far states that
>S-Parameters is a simply way of obtaining transistor characteristics.

S parameters are used because they are much simpler to *measure*
than Z or Y parameters. When characterizing a network, you first have
to have some measured parameters. It is very difficult to measure Z
or Y directly for a circuit that contains active components (because you
have to either short circuit or open circuit one port, and that usually makes
active circuits misbehave). But measuring S parameters is relatively trivial.
It is basically no different than measuring SWR. So that's what you do. Then
use a spreadsheet programmed with the transform equations to give you Z
or Y when you input the S measurements. Simple.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5323. Re: WTB: Allied 2567 CB Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: nq9220700-Ostrowski <dwostrowski@lucent.com>
Message-ID: <3496C4E8.500F9F30@lucent.com>
Source record: 88230
Cross-posted to:
sci.electronics.equipment,rec.radio.cb,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.ham-radio

David wrote:
>
> I'm looking for an Allied Citizen's band radio model number 2567.
> It is a 23 channel crystal-controlled radio. A large dial, loud
> relay, and big S-meter are it's features.
>
> Please send a price to the email below. I'm serious about this,
> so you are not wasting your time.
>
> --
> Dave freimark@mail.com www.friemark.com
---
David,

Re: 2567 radio

What do you need? I have a few of them stored in my pole barn for
parts.... BTW, the Cobra Cam98 is the same radio.

#12

## 5324. Weller WLC100 Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <uSOkSKIC9GA.195@ntdwwaaw.compuserve.com>
Source record: 88231

If you are thinking about buying a WLC100 Soldering Station (the one for about $30-$40), you might want to read my review.

I don't sell them (or any kind of soldering iron, for that matter). I just bought one, have used it for awhile, and wanted to share my thoughts on it.

You can find it under Construction tips at my Ham Web Site:
http://www.al-williams.com/wd5gnr

73,

Al WD5GNR

# 5325. Data for switch mode transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <ULy0iMAPssl0EwD1@falstaf.demon.co.uk>
Source record: 88232
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear All,
I am trying to design some power supplies and need addresses of companies that supply transformers already wound and/or bare cores for me to wind them. Can someone send me lists, addresses or fax numbers or URLs for suitable companies so I can hunt up some data sheets.

REgards

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

# 5326. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <3496D10E.A688CF25@erols.com>
Source record: 88233
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

SCS has licensed Pactor-II to PacComm and, I believe is willing to license to others. The last I heard, HAL was holding on to the Clover rights - although just about anyone will license just about anything if you are willing to pay enough money.

Gary Coffman wrote:

> On 16 Dec 1997 01:11:04 GMT, n8blk@aol.com (N8BLK) wrote:
>
> >In article <#b8JFFPC9GA.159@ntdwwaaw.compuserve.com>, "Al Williams"
> ><alw@al-williams.com> writes:
> >
> >>There is no doubt that Pactor is more popular. There is also little
> >>doubt that Pactor is "better". The issue is that HAMCOM doesn't do >PACTOR.
> >>Some of us still like to build what we can.
> >
> >This is one of those situations though, where building a Pactor
> >interface is difficult because Pactor & Pactor II are propietary
> >techniques, and the implementations are licensed before sale
> >to the public. You have a good point about AMTOR being cheaper
> >than Pactor, and at least some Pactor implementations allow
> >an Amtor station to connect, and then have an Amtor connect.
> >
> >>Lord knows I don't want to start a flame war about how awful AMTOR is.
> >> It is better than RTTY and for HAMCOM users thats your 2 choices.
> >
> >In the defense of Cecil, he rarely gets upset about people disagreeing
> >with him. Pactor, even with the MFJ implementation does have
> >better features than AMTOR connects, and also can pass let's say
> >a file better than AMTOR. It is a shame that Pactor is propietary, and
> >that other modes like Clover & GTor also are, but I guess that's life
> >in the new HF digital world!
>
> All of the HF methods, with the possible exception of PACTOR II, have
> been sufficiently documented by either the manufacturers or in the
> amateur literature that you could homebrew a compatible unit. That's
> allowed under Fair Use, and won't get you into licensing difficulties.
> Licensing is only required if you're going to manufacture units for resale.
>
> I'm not even sure that the PACTOR I protocol requires licensing. I think,
> but could be wrong, that the protocol (not a particular implementation)
> was released publicly for amateur use The more advanced PACTOR II,
> Clover II, and GTOR protocols do require a license, AFAIK. At least HAL
> has publicly *offered* non-exclusive licenses for Clover II to other

> manufacturers. I haven't heard of SCS or Kantronics making the same
> offer for their protocols.
>
> All that said, I am very much in favor of an *open* protocol for advanced
> amateur HF digital. Open standards are very useful in allowing competition
> to improve products, and to drive a free market to the best price point.
> TAPR and AMSAT collaborated to give us AX25, and warts and all that
> standard has done much to make amateur packet widely available and
> affordable. AMTOR is similarly open, but just isn't good enough. We need
> to work on a higher performance open HF digital standard that all amateurs,
> and amateur manufacturers, can adopt and support. I've been beating the
> drum about this for a while now, but no one has risen to the bait and
> volunteered any ideas about what this open standard should be, or
> how we should go about developing it.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

# 5327. Re: Where to get rack panel silk screening

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <3496D1E9.3937DEEF@erols.com>
Source record: 88234

Try "dry transfer" labels. They do a good job and hold up well if you coat
the panel with clear plastic spray after labeling.

John Welton wrote:

> Anyone know where we can send out a rack panel for silk screening (at a
> reasonable price)? We're building an interface board for our repeater
> system and putting it in a Jameco rack/chassis and would like to do
> something better than label makers on the front panel.
>
> Second choice would be decals (white lettering) - anyone have any
> recommendations.
>
> Thanks, John, N4SJW

## 5328. 50MHz Amplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: equinox@nospam.itl.net
Message-ID: <349743E7.21DB4B9@nospam.itl.net>
Source record: 88235

Here's some nice projects, fully documented:
Try:
http://user.itl.net/~equinox/8877.html
http://user.itl.net/~equinox/kw.html
http://user.itl.net/~equinox/4cx.html
:-)

# 5329. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Nick <nick@no.spam.for.me.ta>
Message-ID: <676lmm$ftb$1@heliodor.xara.net>
Source record: 88236

Check this month's Practical Wireless. They have an article about cavity filters using large food tincans & copper waterpipe. Not too practical for 6m, but interesting reading.

Chris Williams wrote in message <34967fec.16046770@sirius.data-io.com>...
>Hi all...
>
>anyone got any info or experience in building cavities for low VHF??
>
>Im looking for a simple desig whcih can be fabricated without the need
>for turning or milling... ie a few old tin cans and a long bolt etc
>:-)
>
>cheers....
>
>Chris Williams - g7nbp
>

# 5330. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <3496E8FE.58893E52@berlin.snafu.de>
Source record: 88237

DavidN3213 wrote:

> This technique is highly conditional, for a host of reasons--a set
> of S parameters is derived only a a given bias point, for one
> instance; for another, S-parameter data doesn't characterize an
> active device's noise performance (and ARRL Radio Designer therefore
> won't be able to tell you anything useful about your device's noise
> performance through this TWO-based approach)--but can be
> quite useful for a first cut at a linear amplifier design.

Radio Designer knows about noise if you enter the data.
Read The Manual, Page 17-8, "Data for TWO"

Gerhard DK4XP

# 5331. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: davidn3213@aol.com
Message-ID: <19971216202001.PAA24935@ladder02.news.aol.com>
Source record: 88238

Gerhard, DK4XP wrote:

>Radio Designer knows about noise if you enter the data.
>Read The Manual, Page 17-8, "Data for TWO"

True; that's one of ARRL Radio Designer's many attractive features. Note that what I said, however, still obtains: S parameters for an active device do not in themselves characterize that device's noise performance.

That said, we should also note that ARRL Radio Designer *does*, by design, simulate noise for *passive* TWO elements even though it does not, also by design, attempt to simulate noise for active TWO elements. (See Note 7 [part of the description of the TWO element] on page 15-51 of the ARRL Radio Designer manual.

It's safe to assume that a TWO characterized by Mr. Huisman's S parameter data would analyze as active; therefore, ARRL Radio Designer would not attempt to simulate its noise performance without the addition of noise data. This is why I said, in a discussion that dealt with characterizing a TWO with only S-parameter data, that ARRL Radio Designer would not simulate his device's noise.

Regards,

David Newkirk, W9VES

# 5332. Re: Need a CTCSS tone circut

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Dave Sien <phonic@futureone.com>
Message-ID: <3496f19a.0@news.futureone.com>
Source record: 88239

A single transistor connected as a phase-shift oscillator will work fine as
a PL encoder...
Gary Coffman wrote in message <3480d0e9.560809915@news.atl.bellsouth.net>...
>On Mon, 01 Dec 1997 15:17:24 GMT, see@signaure.on.bottom (Ryan) wrote:
>>Can someone help me with a CTCSS tone circuit? I know I can
>>get a kit for $25, but I only need one tone, and I'd rather build it
>>myself for a couple $. Can a 555 timer be used for this? Please
>>email me if you can help. Thanks a lot.
>
>The frequency tolerance for CTCSS is very tight. I very much doubt
>that you can get a free running 555 to stay on frequency closely
>enough to work for long. There are purpose built chips for CTCSS,
>which is clearly the best way to go, but you could use a chain of
>divider chips from a stable reference (crystal or ceramic resonator)
>to generate the tone frequency. Clean up the divider output with an
>opamp and RC filter to turn it back into a sinewave. Or you could locate
>one of the old vibrating reed encoders and adapt that to your project.
>That should be virtually free.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

## 5333. 'Schematic Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: "G. M. Privette" <timeblue@bellsouth.net>
Message-ID: <3496F99E.2DA3@bellsouth.net>
Source record: 88240

Need Schematic/Instructions for Kenwood VOX-4 external VOX unit.
Used with TS-680 HF Transceiver.
Xerox via mail, FAX or attach to Email.
Will pay cost.

Thanks,

Jerry, WD4MDK

# 5334. Ham-Homebrew Digest V97 #723 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4968fdf.063@pii.com>
Source record: 88241

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

## 5335. TC962

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <677456$rr8$1@vixen.cso.uiuc.edu>
Source record: 88242

Does anyone have a pinout or specs for a TC962 DC-DC converter IC by
Telcom Semiconductor? Is it just a beefier version of the ICL7662?

Zack W9SZ

--

# 5336. Ham-Homebrew Digest V97 #718 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s496a3b6.024@pii.com>
Source record: 88243

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5337. Re: How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: dnult <dnult@concentric.net>
Message-ID: <349725E3.378C@concentric.net>
Source record: 88244
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

You should be able to observe the ripple without a filter (I guess it
really depends on the makup of your signal). I'm picturing a sware wave
signal with ripple on it. If the signal is too large (pk-pk) to offset
with the vertcal position control in the DC coupling mode, AC coupling
might help. You *should* then be able to bring the signal portion of
interest into view. On the other hand if your signal is 20 volts pk-pk,
this method may not work - in which you will have to persue a filter
approach. Keep in mind though that since the ripple is likely odd
harmonics of 30khz your *simple* filter may turn out to be more
difficult than expected. The filter is very likely to distort phase
(and amplitude) of the ripple as well.

-dnult

DaveC wrote:
>
> > In article
> > <voicebox-0912970944580001@dnai-207-181-210-84.dialup.dnai.com>,
> > voicebox@dnai.com (DaveC) wrote:
> >
> > On my o'scope, I want to display ripple voltage present on a 30KHz signal.
> > I want to filter out the 30K signal and show only the ripple voltage. This
> > ripple frequency is somewhere between 20 and 40 times the 30K signal. The
> > voltage of the 30K signal is less than 1 volt p-p. The ripple voltage is
> > much smaller than this.
> >
> > If I remember my basic electronics correctly, I can get a not-at-all-sharp
> > filter with a few components (cap and coil? cap and res?).
> >
> > Component values and any other help would be greatly appreciated. Direct
> > e-mail replies doubly so.
>
> If you knew enough electronics to appreciate a useful response, you wouldn't
> have posted such a trivial question. Find a library and look up the answer in
> an
> electronics text - we like "The Art of Electronics" by Horowitz and Hill -
> ISBN 0-521-37095-7 but it was written as an undergraduate text for use at
> Harvard, so you may want to look out for something by Don Lancaster.
>
> =====
>
> Bill:
> I know enough to appreciate a useful response AND I posted this question.
> So what? You stick to books, I'll stick to newsgroups. You don't want to

> help? Fine. But we don't need negative responses. If you don't want to
> help, then don't.
>
> Public libraries are very time-inefficient. Getting there (it's out of the
> way, parking's a bitch); browsing the electronic catalog (must be a UNIX
> system; poorly cataloged titles); wandering the stacks; coming back with
> woefully inadequate information. Whereas the 'net is populated with
> MILLIONS of engineers, just overflowing with electronics knowledge they
> are happy to share (well, a few are not, it seems).
>
> But many people realize that the 'net is a great resource (yes, in some
> ways similar to a library-- but in many ways more like a neighborhood--
> only at your fingertips) and are GENEROUS enough to HELP each other
> without posting ANAL RETENTIVE responses.
>
> Thanks to the many who provided circuit suggestions to help me reach a solution.
>
> Enjoy,
> Dave
> --
> Dave Carpenter
> Sound Logic

## 5338. Homebrew text?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: "Charles J. Shaw" <cshaw@epix.net>
Message-ID: <34972A5C.46B081B1@epix.net>
Source record: 88245

I've been looking for a good source of homebrew ham radio projects. Is there a text or other source that contains some interesting projects or has the build-it-yourself aspect of the hobby gone by the wayside.
I do receive QST and I'm not "really" interested in kits.

Thanks.
Charlie Shaw
KB3BTO
cshaw@epix.net

# 5339. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <8ZawDnADcwl0EwGC@ifwtech.demon.co.uk>
Source record: 88246

Nick wrote:
>Check this month's Practical Wireless. They have an article about cavity
>filters using large food tincans & copper waterpipe. Not too practical for
>6m, but interesting reading.
>
>
>Chris Williams wrote in message <34967fec.16046770@sirius.data-io.com>...
>>Hi all...
>>
>>anyone got any info or experience in building cavities for low VHF??
>>
>>Im looking for a simple desig whcih can be fabricated without the need
>>for turning or milling... ie a few old tin cans and a long bolt etc

Also check http://www.dallas.net/~jvpoll/techidx.html for details of
novel cavities and diplexers based on 3in heliax.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 5340. Spectrum Analyser

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Mikael Nordman <mikael.nordman@lmf.ericsson.se>
Message-ID: <34968478.4D84F414@lmf.ericsson.se>
Source record: 88247
Cross-posted to: rec.radio.amateur.homebrew,lmfmin@ericsson.fi

Hi,
Does anybody know if:
-There exist any software that turns a PC soundcard into a AF spectrum
analyser ?
-There exist any RF spectrum analyser cards that use a PC as display and
control panel ?

73 de Mike/OH2AUN

# 5341. New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: minilinx <minilinx@netaccess.co.nz>
Message-ID: <673v4t$836$1@titania.telstra.net.nz>
Source record: 88302

Hi,
Thanks all for feedback on Scattering Parameter - Impedance Conversion.
From the replies received, it seems a drawn out affair to use S-parameters
to find transistor input and output impedance.
This was a surprise to me as all literature I have read so far states that
S-Parameters is a simply way of obtaining transistor characteristics.

I would like to ask another question now, in light of difficulty with
S-Parameters.

How do others determine the input and output impedance of a device for
matching
without using s-parameters ?

I need theses values in terms of R + jX. so that I can match for
1) optimum load for Power Amplifier
2) interstage match between pre-driver and Power Amp.

I would like to write a small utility for Windows 95, so I would just
require the
calculations rather than a URL where I can download a program etc.

Thanks in advance

Regards
Dave Huisman

# 5342. Re: crystal filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: oak@texas.net
Message-ID: <674h41$h5r$1@news3.texas.net>
Source record: 88303

In article <3.0.1.16.19971214205139.33d720aa@telepath.com>,
msebrakr@telepath.COM says...
>
>Did you say to look in the book "introduction radio frequency design"
or
>"solid state design for the radio amateur" about crystal filters?.
Sorry
>for making you repeat youself but that message got deleted.
>
>73,
>Arnold KD5CKH
>
>P.S. Anybody else out there with suggestions for a 9 MHZ I.F. low BW
filter
>for CW?
>
Arnold - Seasons greetings.
You will find the information you seek in an ARRL publication called
QRP CLASSICS. My copy is first edition copyright 1990. Not sure about
newer editions. However, check pages 199 through 204. The name of the
article is "Design and Building Simple Crystal Filters" and I syspect
you will find it a big help.

73's.....Happy Holidays

Frank.....K7RMJ dit..dit

# 5343. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19971216011100.UAA11391@ladder01.news.aol.com>
Source record: 88304

In article <#b8JFFPC9GA.159@ntdwwaaw.compuserve.com>, "Al Williams"
<alw@al-williams.com> writes:

>There is no doubt that Pactor is more popular. There is also little
>doubt that Pactor is "better". The issue is that HAMCOM doesn't do >PACTOR.
>Some of us still like to build what we can.

This is one of those situations though, where building a Pactor
interface is difficult because Pactor & Pactor II are propietary
techniques, and the implementations are licensed before sale
to the public. You have a good point about AMTOR being cheaper
than Pactor, and at least some Pactor implementations allow
an Amtor station to connect, and then have an Amtor connect.

>Lord knows I don't want to start a flame war about how awful AMTOR is.
> It is better than RTTY and for HAMCOM users thats your 2 choices.

In the defense of Cecil, he rarely gets upset about people disagreeing
with him. Pactor, even with the MFJ implementation does have
better features than AMTOR connects, and also can pass let's say
a file better than AMTOR. It is a shame that Pactor is propietary, and
that other modes like Clover & GTor also are, but I guess that's life
in the new HF digital world!

-art clemons-

# 5344. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Dave Huisman <SPAMOFF_d.huisman@niwa.cri.nz>
Message-ID: <674kcr$t2r$1@clam.niwa.cri.nz>
Source record: 88305

W4ZCB,
What formulae do you enter into the spreadsheet that "does all the work for you".
Where do you get the parameters from to enter into your spreadsheet if you don't use the published data from the data book ?
The Philips Wideband Data Book gives data a "S-Parameters".

Your comments have not answered my question. If you don't use S-parameters to determine input/output impedance of devices, how do you determine these values to enable matching networks to be contrsucted ?

Dave Huisman

# 5345. TUBES TO LIQUIDATE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <674jlb$fli$4@newsfeed.smartt.com>
Source record: 88306

Hi! I have the following for sale:
- (4) 4-400A used for few hours only $100.00 U.S. each.
- (2) 6550-USA new for $30.00 U.S.each. (reg $50.00)
- (2) 6550 ST-USA new for $65.00 U.S.each. (reg $89.00)
- (3) 7591-USA new for $45.00 U.S.each.
- (3) 7591-USA used (like new) for $25.00 U.S. each.
- (20) 12AX7(7025) Bulk,used for only a very short while
for $8.00 U.S.each (reg $16.00)
If interested in any of those,contact me. (250)868-1182
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5346. TUBES SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <674jlv$fli$8@newsfeed.smartt.com>
Source record: 88307

The following tubes for sale:

- (8) 5U4GB new for $10.00 U.S. each
- (3) 6CA7-EL34-USA new for$35.00 U.S. each.
- (4) 5881-USA-6L6 new for $19.00 U.S. each.
- (4) 7189-usa new for $15.00 U.S. each.
- (1) 7199-usa new for $19.00 U.S each.
- (2) 6L6GC-USA new for $19.00 U.S. each.

If interested in any of those, please contact me.
(250)868-1182
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5347. TUBES FOR SALE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <674jm6$fli$9@newsfeed.smartt.com>
Source record: 88308

Hi!, I do have the following tubes for sale:

-(6) 807 power tubes new, for $10.00 U.S. each.
-(10) 6V6GT/a/b new for $7.00 U.S. each.
-(20) 12AU7 bulk (like new) for $4.00 U.S>each.
-(2) 6550 ST-USA used (check like new) for $30.00 U.S.each.
-(1) KT66(7243) new for $50.00 U.S.
-(2) 7360-USA new for$35.00 U.S.each.

For order or info. contact me. (250)868-1182
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5348. Ham-Homebrew Digest V97 #721 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s495751a.015@pii.com>
Source record: 88309

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

# 5349. PLATE TRANS FOR SELL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19971216042801.XAA27702@ladder02.news.aol.com>
Source record: 88310

IVE GOT A HEATHKIT SB 220 FACTOR HV TRANSFORMER
TO SELL OR TRADE
JUST PUT A PETER DAHL SETUP TOGETHER SO DONT NEED
RAN 2350 AND 3200 VDC IN SB 220
GREAT SHAPE JUST DONT NEED
100.00 OR TRADES??????
LOOKING FOR SOME FACTOR DRAKE FINALS TUBES
6JB6's OR????????
JOE KF4TOH

# 5350. 813 AMP FOR SELL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19971216043801.XAA00566@ladder01.news.aol.com>
Source record: 88311

IVE GOT A HOMEBREW AMP THAT RUNS 2 813 GG AT 2500 VDC
NICE CASE BLACK WITH CHROME FACE 2 METERS PLATE AND GRID
BIG HEAVY C-1 AND C-2 CAPS FULL OUTPUT " INPUT AT 120VAC"
SINGLE BANDED AT 75 METERS ONLY
BEST OFFER GETS IT
JOE KF4TOH

## 5351. Crimp connectors for RG-8X Cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: John Ackermann <john.ackermann@daytonOH.ncr.com>
Message-ID: <34967D79.3B63@daytonOH.ncr.com>
Source record: 88312
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Anyone know of a source for BNC and UHF crimp-style connectors for RG-8X (mini RG-8) cable? Searching Amphenol's web page and the Digikey catalog didn't turn any up.

John
--
John Ackermann Amateur Radio N8UR (ex-AG9V)
home: jra@febo.com http://www.febo.com
work: john.ackermann@daytonOH.ncr.com

# 5352. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: prjohnso@facstaff.wisc.edu
Message-ID: <675uar$159a$1@news.doit.wisc.edu>
Source record: 88313
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

Or, maybe one for whom English is not his native tongue?? Hmmmm?? Did you ever think of THAT
Mr."My-grammer-is-so-perfect-and-my-spelling-is-divine"? SHEESH! I get so tired of the fact that those of us who live in the U.S. are so damned ethnocentric. O.K., Steve. Your assignment for today is to ask for F.M. radio schematics in perfect Finnish.
Mind your grammer!

Peter R. Johnson

deejay@mm.com (Steve Sundberg) wrote:
>Andy ("lakeaa"@boat.bt.com(Andy)) wrote:
>:
>: Hey, Meldor, did you note this was a school-kid?
>
>And one who either has never studied or who goes to a school that is not
>good at teaching basic grammar and spelling. It's hard to tell these
>days, though, if someone so poorly taught as that is in high school or a
>freshman in college. ;)
>
>--
> Be happy while you're living... | deejay@mm.com
> ...because you're a long time dead. | 73617.105@compuserve.com
> -- Scottish proverb | http://www.mm.com/user/deejay/
> ----------------------------
> Hungry? Visit The Straits Cafe Virtual Restaurant
> http://www.straitscafe.com

# 5353. Re: Weaver type SSB transceiver - dynamic range?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: David Stockton <david_stockton@hp.com>
Message-ID: <34967ED4.7877@hp.com>
Source record: 88314
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Michael Black wrote:
>
> >
> If you are going to connect a DSP, then there is no advantage of using
> the Weaver, or "Third Method".
>

What goes on in a DSP SSB modulator or demodulator is actually very closely allied to the well-known analogue phasing methods. Anyone wanting to use the Hilbert transform as an audio phase shifter, might just as well include the mixers and summer in the DSP section. The great precision achievable gives potentially far better cancellation of the carrier and unwanted sideband.

Cheers
David

# 5354. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: davidn3213@aol.com
Message-ID: <19971216135400.IAA26530@ladder02.news.aol.com>
Source record: 88315

Dave Huisman wrote:

>Hi,
>Thanks all for feedback on Scattering Parameter - Impedance Conversion.
>From the replies received, it seems a drawn out affair to use S-parameters
>to find transistor input and output impedance.
>This was a surprise to me as all literature I have read so far states that
>S-Parameters is a simply way of obtaining transistor characteristics.

An RF design program that's capable of using S parameters to characterize a generic two-port element may also be usable in determining a equivalent R+jX values for a device's input and output. One program I know of that can be so used is ARRL Radio Designer (http://www.arrl.org/ard/), which includes a generic two-port element (called TWO) that can be characterized by S, Y or Z parameters.

What you'd do to get your transistor's input R+ jX, for instance, is set up a simple one-port circuit consisting of a TWO, characterized by your S parameter data, with a 50-ohm resistor connected across its output and its one port connected to the TWO's input. After analyzing the circuit, ask Report Editor to plot RZ11 (the real part of Z11) and IZ11 (the imaginary part of Z11) for the circuit. This gives you your device's input R+jX at (and interpolated between) the frequency points in your S-parameter data.

For output R+jX, you'd set up a circuit consisting of a TWO, again characterized by your S parameter data, but this time with a 50-ohm resistor connected across its *input* and the circuit's one port connected to its output. Plotting RZ11 and IZ11 for *this* circuit would give you your device's output R+jX at (and interpolated between) the frequency points in your S parameter data.

This technique is highly conditional, for a host of reasons--a set of S parameters is derived only a a given bias point, for one instance; for another, S-parameter data doesn't characterize an active device's noise performance (and ARRL Radio Designer therefore won't be able to tell you anything useful about your device's noise performance through this TWO-based approach)--but can be quite useful for a first cut at a linear amplifier design.

Regards,

David Newkirk, W9VES

# 5355. Ham-Homebrew Digest V97 #722 -Reply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s4961572.038@pii.com>
Source record: 88316

Thank you, your message has been recieved.

I will unavailable until tuesday December the 16th.
If your email requires a more immediate response, please contact Doug Juergensen via email at Doug.Juergensen@pii.com or by phone at (503)-623-1000 x1137.

Thank you, RC.

## 5356. Where to get rack panel silk screening

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: John Welton <John_Welton@unc.NoSpam.edu>
Message-ID: <01bd0a2d$d01b5460$d5e70298@JWELTON.UNCH.UNC.EDU>
Source record: 88317

Anyone know where we can send out a rack panel for silk screening (at a reasonable price)? We're building an interface board for our repeater system and putting it in a Jameco rack/chassis and would like to do something better than label makers on the front panel.

Second choice would be decals (white lettering) - anyone have any recommendations.

Thanks, John, N4SJW

# 5357. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <3496C3EA.4A1C@trader.com>
Source record: 88318
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

And some of us are okay with English, but not with ham-speak. :-)

I don't know how many of you recieved the schematic for the tiny FM
transmitter based on two 2222As, but I have a question. I'm trying
to emulate it in Micro Cap V. I made a macro for electrolytic caps
by putting a 1Meg resistor in parallel with a bi-polar cap to represent
the leakage. Is this sufficient to emulate an electrolytic?
Should a 5V +/- 4V sine wave emulate the electret microphone?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5358. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <3496694B.360C@mail.rancho.cc.ca.us>
Source record: 88319
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

Al Williams wrote:

> One of my favorite projects page (and one that has at least one FM xmitter)
> is http://hem2.passagen.se/sm0vpo/.

Well, it's not a transmitter, it's a wireless microphone 'bug'. It's
even more of a toy than Mr. Microphone. Almost all of Lythall's stuff
is for hams, but I do enjoy those ham projects. Wanna learn to brew
beer? It's there, too, or at least it used to be.

> I have a few projects on my home page, but no FM transmitters.
> 73,
> Al Williams WD5GNR
> http://www.al-williams.com/wd5gnr

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rancho.cc.ca.us @
@ 17th St. at Bristol \ Santa Ana, CA 92706 |www.rancho.cc.ca.us @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ May all your days be blue skies and green lights, and spam-free @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@

# 5359. Re: fmradio help needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-16 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <349669EB.520@mail.rancho.cc.ca.us>
Source record: 88320
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,alt.radio.pirate,alt.radio.broadcasting

Andy wrote:
> Hey Eric, good luck, search the net, you'll find there are loads of
> sites with easy-to-build circuits, with diagrams!

> Don't worry about typing or grammar mistakes.

But worry about all the errors and omissions in the schematics and
diagrams in most of the projects on the net.

> I feel it's better to help and encourage rather than criticise and offer
> no assistance.

> Andy.

> Hey, Meldor, did you note this was a school-kid?

> Meldor Singfrand wrote:
[snip]
> > > Thanks in advance.
> > > Eric Persson, fmradio@hotmail.com

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rancho.cc.ca.us @
@ 17th St. at Bristol \ Santa Ana, CA 92706 |www.rancho.cc.ca.us @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ May all your days be blue skies and green lights, and spam-free @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@

# 5360. Re: Junkbox component values??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <34981F06.BF4@txeas.net>
Source record: 88171

Yes and no.

Inductors are commonly marked with a color code that approximates
the resistor color code, but the multiplier is not always defined.

But there's more -- some inductors are color-coded by PART NUMBER,
same as some sub-watt zener diodes. And small tubular capacitors.
And that make life hell.

Your safest bet is to test for value. You can get a cheap but
reasonably repeatable and accurate digital inductance meter for under
US$100. nowadays, and it's a handy device for quick guesses.

FWIW, most components change value with age -- most notably,
capacitors (which should be junked when they're old enough to vote)
and carbon resistors, which all need to be checked before re-use.

But hey, why do we call it the junk box, after all?

## 5361. FS Garmin GPS 20s

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Steve Allen <caipurc@sover.net>
Message-ID: <349814BC.6083@sover.net>
Source record: 88172

Used Garmin GPS 20 receivers(very inexpensive), interconnect cable and pinout included.

Respond to:

Steve at caipurc@sover.net

## 5362. GPS Antenna AMP plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: obb3009@InfoNET.st-johns.nf.ca
Message-ID: <6796t5$3vl$2@coranto.ucs.mun.ca>
Source record: 88173

Anyone built a low noise,amp,5 volts,50 ohms in/out
What IC should I use?

--
Dave -- Atlantic Canada--N4731.0 W05254.0

# 5363. Re: CQ QRP Ops: Why Isn't There More 30 Meter Activity?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: urolab@ix.netcom.com
Message-ID: <6799s0$g2q@sjx-ixn6.ix.netcom.com>
Source record: 88174

In <349859c1.18235737@eskinews.eskimo.com> wrt@eskimo.com (Bill Turner) writes:
>
>cliffkot@interaccess.com (Cliff Kotchka) wrote:
>
>>Hi Guys,
>>
>>During the past couple of months I've been reading everything I can about QRP
>>design with the idea of building a small single bander for camping. The big
>>question is always -- what band?
>>
>>A survey of the construction literature seems to indicate that the most
>>popular bands are 40 or 20 meters and my listening confirms this finding. It
>>seems to me however that 30 meters would be a more suitable QRP band.

>>
>>On the average I would think that propagation conditions would allow a longer
>>daily period of operation on 30 meters than either 40 or 20. Also, power on
>>this band is limited so the competition would be only 10 to 15 db louder
>>causing less QRM, so the simple NE602 mixers you all seem to be using would
>>do an adequet job without overload.
>>
>>The big question is why isn't there more 30 meter activity?
>>
>>Cliff
>>WA9YXG
>>
>_____________________________________________________________
>30 is an interesting band in terms of propagation, but it closes
>sooner than 40 in the evening and has higher absorption than 20 during
>the day. It is at it's best just before 20 opens or just after 20
>closes, but the time period there is short. Once 20 is open, it's
>better. Once 40 is open, it's better too.
>
>I always thought 30 would be an ideal band for mobile operation. The
>antenna would be more efficient than an equal-length 40 meter one, and

>propagation would be somewhat longer during daytime hours (though not
>as good as 20). If they ever allow SSB there I think it would become
>very popular.
>
>73, Bill W7TI
>
>ANOTHER good reason to keep SSB off 30m, now we could only get rid
>of those RTTY,MUX & FAX below 10.120, we'd have it made.

WB4DTC, Dave

## 5364. ant analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Emil <emilgborys@worldnet.att.com>
Message-ID: <679bb4$smd@bgtnsc02.worldnet.att.net>
Source record: 88175

does anyone have a reference article for construction of an antenna analyzer. thanks.

emil, ak9i

# 5365. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <34983CAC.4EC8D432@erols.com>
Source record: 88176

Digikey sells Multicore of the 60/40 and 63/37 variety in multiple sizes.
No mention of shipping limitations.

jdaggett@gate.net wrote:

> On Wed, 10 Dec 1997 23:23:49 -0800, Dennis Erwin Thurlow
> <geosynq@trader.com> wrote:
>
> >> What are the advantages of using solder that is 2% silver, compared
> >> to solder that is only tin and lead?
> > >
> >None, IMHO. The stuff is crappy, but you can't find lead solder
> >any more. If anyone knows a source for rosin core 60/40, I'd
> >like to buy some.
>
> Yopu can find it but no one will ship by FED EX . In fact the only
> way it is shipped now is by ground. FED EX and UPS will not send by
> air. They may charge a harzardoues material surcharge to your order.
>
> regards
> James
>
> >--
> >geosynq@trader.com
> >Elder - Westminster Presbyterian
> >TRA #2693
> >N9VEM

# 5366. 7417 IC Substitute

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: johnz@utxvms.cc.utexas.edu
Message-ID: <johnz-1712971459360001@mac65-west.edb.utexas.edu>
Source record: 88177

I would like to do a project that calls for an IC 7417. I can't find one. There are plenty of IC's that have 7417 in the number but they look to have a different function. Perhaps I am looking in the wrong place. Any ideas?

Thnaks
John AB5YQ

# 5367. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34983553.BA5@trader.com>
Source record: 88178

Bob Mueller wrote:
> > Yopu can find it but no one will ship by FED EX
> Is this for real or is it a misunderstanding?

I think he's right. I just dealt with this ordering chemicals.
No hazmets by air, but no special hazmet fees for USPS ground.

> I have used the solder with only tin (no lead) and 5 % silver and it
> is certainly NOT crappy. The stuff is far stronger than the lead-tin
> kind, and flows nicely.

And where do you get this, Bob?
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5368. Re: GPS Antenna AMP plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <34984995.39C0@txeas.net>
Source record: 88179

Almost any MMIC will give acceptable gain to 2 GHz. For a start,
take a look at the November 1997 QST pre-amp article.

For frequencies above 500 MHz, the PC board material and geometries
are more critical -- there have been a number of articles in QST
and QEX on this particular topic over the last decade. G-10
(the standard light green glass-epoxy) is marginally usable
to 2 GHz if you're lucky. Rogers has some inexpensive substrates
available now that are very good (and they sample if you ask right).
Duroid 5880 or similar is not required -- but it's easy to use,
easy to make work, and easy to have a seizure over the price.

For specifics on good MMICs to use, see the Mini-Circuits Designer's
Handbook. You should be able to talk that company out of a
free copy. MMICs are typically in the $3. each range, so you
can afford to blow a few up while experimenting.

50-ohm stripline design is trivial if you know the characteristics
and thickness of the substrate. And MMIC design apps are trivial,
except that biasing needs to be done right.

N6OTQ

# 5369. helical resonator appl schema

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: aziz@turnet.net.tr
Message-ID: <882396090.1247870986@dejanews.com>
Source record: 88180

hi there :

I need circuit of hamtronics R144 FM Receiver&#65533; or&#65533; helical resonator
amplifier .

I need info&#65533; , how to built helical resonators (3 pole) ?.
I have 2m receiver&#65533; and&#65533; I want to make adapt helical resonator .
73,s de TA2AD&#65533;&#65533;&#65533;&#65533; Sua

--
A . Sua TORTU
aziz@turnet.net.tr
Z O N G U L D A K

--------------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5370. Re: CQ QRP Ops: Why Isn't There More 30 Meter Activity?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: mailfrmpa@aol.com
Message-ID: <19971217223901.RAA05383@ladder02.news.aol.com>
Source record: 88181

>>cliffkot@interaccess.com (Cliff Kotchka) wrote:

>>>The big question is why isn't there more 30 meter activity?

30m is FULL of qrp signals. Its just that no one can hear them.....

K0MB

## 5371. Homebrew 813, 811 mod.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19971217232801.SAA13017@ladder01.news.aol.com>
Source record: 88182

Please remov this ad. I may want to list it again later, tnx Harold W4PQW

# 5372. Re: 7417 IC Substitute

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <679rmd$ohq@nntp02.primenet.com>
Source record: 88183

johnz@utxvms.cc.utexas.edu (John Moore) wrote:

>I would like to do a project that calls for an IC 7417. I can't find
>one. There are plenty of IC's that have 7417 in the number but they look
>to have a different function. Perhaps I am looking in the wrong place.
>Any ideas?

Jameco lists the 7417: 14 pin Hex buffer/driver O.C. high voltage.
They cost $0.35 for 1-9.

# 5373. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: "Doug, N0LKK" <dougy@ruraltel.net>
Message-ID: <3498115D.7F1D@ruraltel.net>
Source record: 88184

Nick wrote:
> 
> Check this month's Practical Wireless. They have an article about cavity
> filters using large food tincans & copper waterpipe. Not too practical for
> 6m, but interesting reading.
> 
> Chris Williams wrote in message <34967fec.16046770@sirius.data-io.com>...
> >Hi all...
> > 
> >anyone got any info or experience in building cavities for low VHF??
> > 
> >Im looking for a simple desig whcih can be fabricated without the need
> >for turning or milling... ie a few old tin cans and a long bolt etc
> >:-)
> > 
> >cheers....
> > 
> >Chris Williams - g7nbp
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

I rcall once seeing a set of plans for cavities in the "other" amateur
radio handbook, I think the book is by Bill Orr. They wasn't tin can,
but made from sheetmetal some how.
> > 

--
73, Doug Younker, N0LKK
near Plainville, KS
dougy@ruraltel.net

# 5374. Re: Crimp connectors for RG-8X Cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Jerome Buie <djbuie@nettally.com>
Message-ID: <349893F0.1EB6F18B@nettally.com>
Source record: 88185
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hutton Communications can provide both either from RF industries or from Cambridge.
Hutton number 800-741-3811
John Ackermann wrote:

> Anyone know of a source for BNC and UHF crimp-style connectors for RG-8X
> (mini RG-8) cable? Searching Amphenol's web page and the Digikey
> catalog didn't turn any up.
>
> John
> --
> John Ackermann Amateur Radio N8UR (ex-AG9V)
> home: jra@febo.com http://www.febo.com
> work: john.ackermann@daytonOH.ncr.com

# 5375. Re: Ericsson GA628

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Nathan Hull <nathan@hullnet.demon.co.uk>
Message-ID: <2tZTfHAa3Am0Ew8y@hullnet.demon.co.uk>
Source record: 88186
Cross-posted to: alt.cellular.gsm,alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

In article <6788i9$n1p@news.EUnet.pt>, Andre Antunes
<andre.antunes@mail.eunet.pt> writes
>Hello everybody,
>I acidentaly changed the code for the keypad lock. Now, whenever in
>introduce my pin the celular phone (Ericsson GA628) asks me for the block
>key code, and I don't know it. What can I do? Is there any chance of
>reseting the phone?
>Thanks to all.
>Please reply by mail.
>
>--
>Andre Antunes
>andre.antunes@mail.eunet.pt
>
>
why not try contacting the phone company that you 'bought' it from?
--
Nathan Hull

# 5376. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: minilinx <minilinx@netaccess.co.nz>
Message-ID: <676jvc$3d$1@titania.telstra.net.nz>
Source record: 88248

Gary,

Thanks for the reply.

Do your calculations take into account the fact that the
input impedance is modified depending on what is
connected to the output and visa-versa ?

Could you give me some of those simple calculations
to convert S-Parameters into Zin and Zout.

Much appreciated.

Regards
Dave Huisman

# 5377. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971217002100.TAA20748@ladder02.news.aol.com>
Source record: 88249

>
>Gee, that is in this month's QST. Uses a DDS oscillator, I think.
>
>Al WD5GNR
>http://www.al-williams.com/wd5gnr
>
>Joseph H Allen wrote in message ...
>>Speaking of S parameters, has anyone tried building their own network
>>analyzer for low frequencies? It shouldn't be too hard: feed a VFO
>
>
>

I always thought a Network Analyzer displayed both amplitude AND phase.

W4ZCB

# 5378. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971217002600.TAA21427@ladder02.news.aol.com>
Source record: 88250

>
>anyone got any info or experience in building cavities for low VHF??
>
>Im looking for a simple desig whcih can be fabricated without the need
>for turning or milling... ie a few old tin cans and a long bolt etc
>:-)
>
>cheers....
>
>Chris Williams - g7nbp

Try the 30 gallon metal garbage can approach. QST about 10-15 years ago. If you cannot look it up, let me know and I'll try a search on it.

W4ZCB

# 5379. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: kd9fb@xnet.com
Message-ID: <349c2b21.4862917@flood.xnet.com>
Source record: 88251

On Tue, 16 Dec 1997 18:44:55 -0000, "Nick" <nick@no.spam.for.me.ta> wrote:

I remember those from years ago. They actually worked. The q was the greatest,
but for next to nothing....

>Check this month's Practical Wireless. They have an article about cavity
>filters using large food tincans & copper waterpipe. Not too practical for
>6m, but interesting reading.
>
>
>Chris Williams wrote in message <34967fec.16046770@sirius.data-io.com>...
>>Hi all...
>>
>>anyone got any info or experience in building cavities for low VHF??

Peter Mikalajunas
kd9fb@xnet.com
http://www.xnet.com/~kd9fb

# 5380. Re: Where to get rack panel silk screening

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: jnpotter@prodigy.net
Message-ID: <34972cb3.38232455@news.prodigy.net>
Source record: 88252

"John Welton" <John_Welton@unc.NoSpam.edu> wrote:

>Anyone know where we can send out a rack panel for silk screening (at a
>reasonable price)? We're building an interface board for our repeater
>system and putting it in a Jameco rack/chassis and would like to do
>something better than label makers on the front panel.
>
Look under "screen printers" in the yellow pages. Some of the T shirt
companies can do electronic panels. Also, you might find one who
cpecializes in electronic panels.

I use Toltec in Albuquerque. They do a good job for a reasonable
price.

Jim Potter

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

# 5381. Re: CQ QRP Ops: Why Isn't There More 30 Meter Activity?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: nv0y@horizon.hit.net
Message-ID: <677cg8$db6$3@opal.southwind.net>
Source record: 88253

In article <cliffkot.235.00625206@interaccess.com>,
cliffkot@interaccess.com (Cliff Kotchka) says:
>
>Hi Guys,
>
>During the past couple of months I've been reading everything I
can about QRP
>design with the idea of building a small single bander for
camping. The big
>question is always -- what band?
>
>A survey of the construction literature seems to indicate that
the most
>popular bands are 40 or 20 meters and my listening confirms
this finding. It
>seems to me however that 30 meters would be a more suitable QRP
band.
>
>On the average I would think that propagation conditions would
allow a longer
>daily period of operation on 30 meters than either 40 or 20.
Also, power on
>this band is limited so the competition would be only 10 to 15
db louder
>causing less QRM, so the simple NE602 mixers you all seem to
be using would
>do an adequet job without overload.
>
>The big question is why isn't there more 30 meter activity?
>
>Cliff
>WA9YXG
>
>

Cliff- I wondered the same thing. I built a 30m 5w
transmitter and have had a blast. Considering it's a cw band
and unique and interesting propagation I hope I hear you soon.

Mike NV0Y

# 5382. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <34a439f9.11932918@news.gate.net>
Source record: 88254

On 11 Dec 1997 07:26:01 -0700, Jim Pennino <specsol@primenet.com>
wrote:

>Crash Knorr <mediumwave@hotmail.com> wrote:
>: What are the advantages of using solder that is 2% silver, compared
>: to solder that is only tin and lead?
>
>: --
>: They call me "Crash" because that's the only way I can get into parties.
>
>It's like the advantages of a tack hammer compared to a sledge hammer;
>depends on what you're doing.
>
>Silver solder is higher temperature, mechanically stronger, and doesn't
>leach lead.

Indium patse solder is 2% silver and melts at 215 degrees C.
Definitely a stronger joint.
>
>In electronic assembly, about the only place silver solder is appropriate
>is in soldering to metalized ceramics; the metalization is typically
>silver based (though other metals are used) and lead solders tend to
>leach the metalization off the ceramic.
>

Actually used more in micro electronics. Surface mounted parts and
many electronic firms use silver bearing solder paste for surface
mount technology.

>The old Tektronics oscilloscopes with the components mounted on ceramic
>carriers instead of circuit boards came from the factory with a small
>spool of silver solder inside for makeing repairs. It helped keep people
>from wiping out the carriers when they replaced a component.
>
>When used on circuit boards, the high temperature of silver solder tends
>to cause the pads to lift; not an appropriate use.
>
>It's good for mechanical assembly. I had a radiator in a car once that
>wouldn't stay together until I silver soldered all the joints. Kinda
>pricy, but cheaper than a new radiator.
>
>--
>-----------------------------------------------------------------------------
>Jim Pennino
>jimp@specsol.com

>----------

# 5383. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <34a53af6.12185361@news.gate.net>
Source record: 88255

On Wed, 10 Dec 1997 23:23:49 -0800, Dennis Erwin Thurlow
<geosynq@trader.com> wrote:

>> What are the advantages of using solder that is 2% silver, compared
>> to solder that is only tin and lead?
>
>None, IMHO. The stuff is crappy, but you can't find lead solder
>any more. If anyone knows a source for rosin core 60/40, I'd
>like to buy some.

Yopu can find it but no one will ship by FED EX . In fact the only
way it is shipped now is by ground. FED EX and UPS will not send by
air. They may charge a harzardoues material surcharge to your order.

regards
James

>--
>geosynq@trader.com
>Elder - Westminster Presbyterian
>TRA #2693
>N9VEM

# 5384. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <34975208.10092084@news.azstarnet.com>
Source record: 88256

On 16 Dec 1997 13:54:17 GMT, davidn3213@aol.com (DavidN3213) wrote:
[snip]

>What you'd do to get your transistor's input R+ jX, for instance, is set up a
>simple one-port circuit consisting of a TWO, characterized by your S parameter
>data, with a 50-ohm resistor connected across its output and its one port
>connected to the TWO's input. After analyzing the circuit, ask Report Editor
>to plot RZ11 (the real part of Z11) and IZ11 (the imaginary part of Z11) for
>the circuit. This gives you your device's input R+jX at (and interpolated
>between) the frequency points in your S-parameter data.
>
>For output R+jX, you'd set up a circuit consisting of a TWO, again
>characterized by your S parameter data, but this time with a 50-ohm resistor
>connected across its *input* and the circuit's one port connected to its
>output. Plotting RZ11 and IZ11 for *this* circuit would give you your device's
>output R+jX at (and interpolated between) the frequency points in your S
>parameter data.

Why not just set it up as a two port in the first place and not worry
about the 50 ohm terminations?

N7WS

# 5385. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: rohrwerk@pconline.com
Message-ID: <677oji$quf$1@bell.pconline.com>
Source record: 88257

Gary Coffman (ke4zv@bellsouth.net) wrote:
: What Radio Designer does, it does quite well. But it doesn't do a lot.
: Get MicroSim's free demo CD for DesignLab and you may find that it
: does everything you need (the demo is limited to 30 components, but
: otherwise is their full product including schematic capture, board layout,
: auto-router, Spice simulator with simulated scope probes, and it does
: digital as well as analog, including programable gate arrays). If DesignLab
: can't do it, you probably don't need it. If the demo version's 30 component
: limit is too constraining, spring the $13,000 for the real thing.
:
: I find that 30 components is enough for most circuit modules, so I
: use their demo almost exclusively. I'd pay at least as much as I paid
: for Radio Designer to up the limit to 100 components, but there's
: no way I'm forking over $13,000. (They offer a student deal for $1,300,
: but that's still a little bit too steep for me.)

Gary, thank you, thank you for a nice free answer to my prayers :-) .
DesignLab's demo is even downloadable at http://www.microsim.com -- 15
megs, plus documentation in .pdf format, 7 or 8 modules in the 1 to 4 meg
range.

It's going to take some work to learn, but for heaven's sake, you can
enter the schematic graphically and not deal with netlisting like Radio
Designer!

Interesting they don't mention prices in dollars on the web site... but
the "educational discount" is quoted as 95%!

John Seboldt K0JD

# 5386. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <677tqc$mit@nntp02.primenet.com>
Source record: 88258

jdaggett@gate.net wrote:

>On Wed, 10 Dec 1997 23:23:49 -0800, Dennis Erwin Thurlow
><geosynq@trader.com> wrote:

>>> What are the advantages of using solder that is 2% silver, compared
>>> to solder that is only tin and lead?
>>
>>None, IMHO. The stuff is crappy, but you can't find lead solder
>>any more. If anyone knows a source for rosin core 60/40, I'd
>>like to buy some.

Mouser's catalog (oops, Purchasing Manual) 592, prices guaranteed until
January 31, 1998, lists 60/40 rosin core Kester 44 in eleven different sizes/
weights. They also have 60/40 solid wire and bar solder.

>Yopu can find it but no one will ship by FED EX . In fact the only
>way it is shipped now is by ground. FED EX and UPS will not send by
>air. They may charge a harzardoues material surcharge to your order.

No mention is made about shipping limitations or surcharges for either
ground or air. But they do say that there is a UPS hazardous material
charge per shipping carton for both liquid ferric chloride and dry ammonium
persulphate powder, but do not say anything about ground only.

# 5387. Re: Crimp connectors for RG-8X Cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Nobody <none@none.net>
Message-ID: <34977F14.5552@none.net>
Source record: 88259
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

John Ackermann wrote:
>
> Anyone know of a source for BNC and UHF crimp-style connectors for RG-8X
>

Yes, I do.

# 5388. Re: Conversion to Wilson WU-1510 to 440 Ham band ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Nobody <none@none.net>
Message-ID: <34977E2B.7144@none.net>
Source record: 88260

Terry Nixon wrote:
>
> Looking for anyone who has ever convered a commercial Wilson model
> WU-1510 mobile to the ham band (440-450 mHz).
>
There is no conversion necessary - just program in the desired
frequencies and retune to the amateur band. Tuneup is a bitch,
esp. the coils in the first stages of the transmitter which also
provide the L.O. signal for the receiver.

Finding a book shouldn't be too hard. Wilson doesn't make them
anymore but Regency (or RELM) makes the same radio with a different
model number.

Note: If yours is the 10 channel version, there are some differences
between the programming of the older 10 channel and the newer 16
channel radios. Good luck !

# 5389. Ericsson GA628

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Andre Antunes <andre.antunes@mail.eunet.pt>
Message-ID: <6788i9$n1p@news.EUnet.pt>
Source record: 88261
Cross-posted to: alt.cellular.gsm,alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Hello everybody,
I acidentaly changed the code for the keypad lock. Now, whenever in
introduce my pin the celular phone (Ericsson GA628) asks me for the block
key code, and I don't know it. What can I do? Is there any chance of
reseting the phone?
Thanks to all.
Please reply by mail.

--
Andre Antunes
andre.antunes@mail.eunet.pt

# 5390. Re: Where to get rack panel silk screening

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: GRay <ggpray@gte.net>
Message-ID: <6789gg$8hg$1@gte2.gte.net>
Source record: 88262

> Anyone know where we can send out a rack panel for silk screening (at a
> reasonable price)?

I used to work at a screen printer.It will be at LEAST $50 to do what
you want via silk-screen.A lot cheaper method is to use a graphic art
program on your pc to draw the panel you want,take the disk to your
local photo shop that will print files,have them print it on a
bumper-sticker type material,then apply that to your panel,then mount
the hardware.

--
To reply via E-mail,please remove the extra letter g from the address
line of my e-mail..

There is only one thing that makes a mistake faster than a
computer........
A combination of handguns and Tequila........Egads!

## 5391. Universe5500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Wim Hodenius <wim.hodenius@ehv.ce.philips.com>
Message-ID: <6780sp$1t3@ns1.nl.cis.philips.com>
Source record: 88263

I am looking for the electrical diagram of universe5500 AM/SSB CB transceiver.

I like to modify this set for use on 10 meters.

Thanks,

73's de Wim, PA3BQP

## 5392. Gray Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: John Marlow <John@equine.demon.co.uk>
Message-ID: <585389489wnr@equine.demon.co.uk>
Source record: 88264

I could use some help with a Gray code disc please. IE How to make one
and then to read it into a pc.

I wish to find wind direction via my pc.

--
John Marlow G1ORP

# 5393. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: RJBurden@BigPond.com
Message-ID: <3497dae4.1747505@news.bigpond.com>
Source record: 88265

"minilinx" <minilinx@netaccess.co.nz> wrote:

<snip>,
>
>I need theses values in terms of R + jX. so that I can match for
>1) optimum load for Power Amplifier
>2) interstage match between pre-driver and Power Amp.
Dave,
I hope someone has pointed out that "both Y and S parameters for a power transistor are called small-signal parameters, and should not be considered in the design of rf power amplifiers" (Bowick) Rather, the manufacturer's data sheet should be consulted for the input and output impedances.

Regards,
Richard

Bowick, C. 1987, "RF Circuit Design", Howard Sams

---
Richard VK6FKB
"Nothing better than home-brew, except perhaps an absence of Spam"

# 5394. Re: Weller WLC100 Soldering Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: geotek@flex.net
Message-ID: <3497d1a6.87965765@news.zippo.com>
Source record: 88266

Just my two cents.
The best deal going on a good quality soldering station is the WCC100.
Tucker has it for $105.
The WLC100 has old fashion tips that are held in with a screw from the
side. This can only lead to big problems when you want to change the
tip and find the screw frozen in place. I have used the WCC100 for
everything from large power supply lugs to fine pitch Flash ROMs.
Stay away from the irons that use the magnetic temperature control.
These use the tips with the 6,7, or 8 on the end. Many surface mount
components have magnetic leads that will stick to the of the tip and
barrel of the soldering iron and drive you crazy.

On Tue, 16 Dec 1997 12:44:08 -0600, "Al Williams"
<alw@al-williams.com> wrote:

>If you are thinking about buying a WLC100 Soldering Station (the one for
>about $30-$40), you might want to read my review.
>
>I don't sell them (or any kind of soldering iron, for that matter). I just
>bought one, have used it for awhile, and wanted to share my thoughts on it.
>
>You can find it under Construction tips at my Ham Web Site:
>http://www.al-williams.com/wd5gnr
>
>73,
>
>Al WD5GNR
>
>
>

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

# 5395. AD9850 DDS SSOP adapter PCB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <btGe8HAJI+I0EwhZ@lfheller.demon.co.uk>
Source record: 88267
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

If anyone is interested in prototyping with the AD9850 DDS chip, using "ugly" construction on a ground-plane, I've had some mounted on a small PCB (0.8 mm thick), with the leads brought out to staggered .05" spacing pads. You are unlikely to get usable 125 MHz operation with these, but they are ideal for experimentation, and should be OK at 75 MHz, for a wide-range DDS osc. covering < 1 Hz up to 30 MHz. I've just ordered a 75 MHz osc. to check it out.

I've got a simple circuit working using one of these PCBs, with a 25 MHz clock oscillator (the fastest I have in the junk box) configured via the PC printer port with a C program, using serial loading. I'm in the process of adding a 10 MHz LP filter to clean up the output. I'll eventually be using an Atmel AVR 1200 chip for controlling the DDS and an LCD, keyboard and rotary encoder I/F.

AD9850 data is available from www.anaolog.com.

Please email me for further details.

73, Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

## 5396. Junkbox component values??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Clinton Peebles <cpeebles_NOSPAM_@nel.auracom.com>
Message-ID: <678sdi$j8i$1@noc.vphos.net>
Source record: 88268

I have several circuit boards in my junk box and would like to know how to find the values of some of the components, mostly the coils. Is there a code for decoding the value of these or do different manufacturers use different codes? For example, one board has several Mitsumi coils on it and the tuning slugs are different colors. Do the colors signify the value or can I figure them out from the numbers? One with a purple slug has 101 5 7AF and 7.8KD. Others have no markings at all so I guess there is no way of telling the values..

---

Remove _NOSPAM to E-mail reply.
E-Mail - cpeebles@nel.auracom.com

# 5397. Re: silver-bearing solder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3497FB62.15F3@kfa-juelich.de>
Source record: 88269

jdaggett@gate.net wrote:
>
> On Wed, 10 Dec 1997 23:23:49 -0800, Dennis Erwin Thurlow
> <geosynq@trader.com> wrote:
>
> >> What are the advantages of using solder that is 2% silver, compared
> >> to solder that is only tin and lead?
> > >
> > >None, IMHO. The stuff is crappy, but you can't find lead solder
> > >any more. If anyone knows a source for rosin core 60/40, I'd
> > >like to buy some.
> >
> > Yopu can find it but no one will ship by FED EX . In fact the only
> > way it is shipped now is by ground. FED EX and UPS will not send by
> > air. They may charge a harzardoues material surcharge to your order.
> >
> > regards
> > James
> > > >geosynq@trader.com
> > >Elder - Westminster Presbyterian
> > >TRA #2693
> > >N9VEM
Is this for real or is it a misunderstanding? I have never heard normal
lead-tin alloys are so dangerous they cannot be shipped by normal
methods, including Fed Ex or UPS (air or surface). If shipping the
solder is forbidden, one might expect shipping electronics containing it
to be forbidden as well- but again, I have doubts.
I have used the solder with only tin (no lead) and 5 % silver and it
is certainly NOT crappy. The stuff is far stronger than the lead-tin
kind, and flows nicely.
--
Bob
IFF/Forschungszentrum- Juelich
D-52425 Juelich
Germany

Tel. (49) 24 61 / 61 42 59
FAX (49) 24 61 / 61 24 10

# 5398. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-17 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34980376.72573396@news.atl.bellsouth.net>
Source record: 88270
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

On Tue, 16 Dec 1997 14:05:50 -0500, Bob Lewis <aa4pb@erols.com> wrote:
>SCS has licensed Pactor-II to PacComm and, I believe is willing to license to
>others.

SCS gives PacComm *US manufacturing rights* to build *an exact copy* of
the PTC-II. It isn't a matter of just licensing the protocol so PacComm could
implement it on their own hardware design.

>The last I heard, HAL was holding on to the Clover rights - although just
>about anyone will license just about anything if you are willing to pay enough
>money.

HAL has repeatedly and publicly offered to license the Clover II protocol
to other manufacturers. I understand that they are even willing to do this
on a reciprocal basis, IE if Kantronics would give them a license for GTOR,
they would give Kantronics a license for Clover II for example. Now if you
wanted the source to their executable DSP code, that might be a different
matter. That *is* rightfully a proprietary competitive advantage that they
likely value rather highly.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5399. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: minilinx <minilinx@netaccess.co.nz>
Message-ID: <67998b$ls5$1@titania.telstra.net.nz>
Source record: 88187

Hi,
"RF Circuit Design" is one of the text's that I have been referring to.
Some of the larger power RF transistors from Motorola show part
of a Smith chart with impedances plotted but I am working with lower
power devices and they only give the data in S-Parameter format.
Check out Philips SC14 "RF Wideband transistors ...".
Lets say you want to design a 100mW output stage using the BFR90A.
If you looko at the data (Page 857), you will find that the device is
suitably characterised in S-Parameter format. Thus if I had the
conversion equations , Zin and Zout could be determined for a given
Vcc and Ic.
Also, when you talk about Large Signal versus small signal analysis,
What do you do for interstage matching (small signal) ?

To quote from "Radio Frequency Transistors, Principles and Applications" by
Motorola (Norm Dye and Helge Granberg).
"Today, all low power RF transistors introduced to the marketplace are
characteriezed with S-Parameters, ..."

Regards

Dave Huisman

# 5400. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <349d66d1.17918067@news.pipeline.com>
Source record: 88188

Get in thouch with Tulsa Rptr Org, tulsa, OK, usa.
They just tok one out of a location that had been there since
before Jesuse wore pants.
Ask for a description.
I think it is made of tin cans soldered together.
Or maybe downspout.
or both.

good luck
Lou H.

c.j.williams@tcat.ac.uk (Chris Williams) wrote:

>Hi all...
>
>anyone got any info or experience in building cavities for low VHF??
>
>Im looking for a simple desig whcih can be fabricated without the need
>for turning or milling... ie a few old tin cans and a long bolt etc
>:-)
>
>cheers....
>
>Chris Williams - g7nbp
>
>email : webboss@tcat.ac.uk
>or : c.williams@tcat.ac.uk
>or : g7nbp@hotmail.com
>
>web : www.tcat.ac.uk

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 5401. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: davidn3213@aol.com
Message-ID: <19971218045600.XAA18685@ladder02.news.aol.com>
Source record: 88189

I wrote:

>>What you'd do to get your transistor's input R+ jX, for instance, is set up
>a
>>simple one-port circuit consisting of a TWO, characterized by your S
>parameter
>>data, with a 50-ohm resistor connected across its output and its one port
>>connected to the TWO's input. After analyzing the circuit, ask Report
>Editor
>>to plot RZ11 (the real part of Z11) and IZ11 (the imaginary part of Z11) for
>>the circuit. This gives you your device's input R+jX at (and interpolated
>>between) the frequency points in your S-parameter data.

[repeat of same procedure for output deleted]

And Wes Stewart wrote:

>Why not just set it up as a two port in the first place and not worry
>about the 50 ohm terminations?

Because when you ask ARRL Radio Designer for RZ11 and IZ11 of a two-port network, the program leaves the network's output port unterminated. This can lead to significant errors in the values reported for RZ11 and IZ11 if the network doesn't exhibit very high reverse transmission gain, as will be the case for many active devices. (Likewise if you ask for RZ22 and IZ22 of a two-port; then, the program leaves the network's input port unterminated.) The "two-port as explicitly-terminated one-port" approach end-runs this effect by duplicating the opposite-port termination used in determining the network's S parameters.

Not that many of us could afford its five-figure price for home and hobby use, but the 32-bit successor to ARRL Radio Designer's parent program includes ZIN and ZOUT among its two-port responses. These allow you to set opposite-port terminations *within Report Editor* while reporting the analyzed two-port's input and output impedances, making the "two-port as explicitly terminated one-port" workaround unnecessary in characterizing the input and output impedances of two-ports.

Regards,

David Newkirk, W9VES

# 5402. Re: 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <3498DEBD.C077242B@rl.ac.uk>
Source record: 88190
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Peter Parker wrote:

> "Alan " <gilly@camtech.net.au> wrote:
>
> >
> >Has anyone had experience in constructing a 2M to 10m Transverter.
> >
> >Might seem the wrong way around, but a surplus 2M FM rig would be a nice
> >way to drive a Transverter to 10M and work a bit of 10fm mobile.
> >

Yes. I built one for 20m and have one of the Mutek ones that does allHF bands (which I never use). It is 10W out, which is nowhere near enough in the sunspot minimum.

You might find it more convinient to convert an FM CB rig. These have narrower filters than common 2m rigs to cope with 10 kHz channel spacing.

They are dirt cheap and you can leave it in the car without having to worry about it being pinched, though I see you are from Oz where crime is low anyway.

(Remove the space from the Email address to reply)

# 5403. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: c.j.williams@tcat.ac.uk
Message-ID: <3498ea6a.1776613@sirius.data-io.com>
Source record: 88191

Hi All (again!)

On Tue, 16 Dec 1997 18:44:55 -0000, "Nick" <nick@no.spam.for.me.ta>
wrote:

>Check this month's Practical Wireless. They have an article about cavity
>filters using large food tincans & copper waterpipe. Not too practical for
>6m, but interesting reading.

Hmmm.... I saw the article and thats what prompted me to post the
message...

cheers anyway Nick...

A few people have emailed me direct and asked for details of the use
of the cavities... possibly best to describe here rather than in 10
emails :-)

Basically, Ive got quite a few propogation monitoring projects running
at present - magnetometers (ECM and fluxgate), Barometric pressure
sensors, beacon monitor, etc linked up to my home network which is
building up a database of info. One project I wanted to add was a
widefreq averaging RX. The idea being that it would listen to ALL
freqs between 48 and 52Mhz and use a simple RF stage followed by a
rectifier giving an averaged voltage for all sigs (and noise) in the
range of RXd freqs.

Ive had the rear end of the RX built for some time, but have had
several iffy sessions of 7 pole filter designing and no real success
to date - Hence the thought of using a cavity. Because the unit
will be RX only and can tolerate an insertion loss of up to 10dB (Ive
got gain to spare in the rf stage) Im sure that beer barrel / Tin Can
designs will suffice, and most likely be more efficient and more
reproduceable than multi Pole LC filtration...

Repeatability is important as Im hoping to get a few people using
similar kit throughout the uk and collate info from all to null out
any localised QRM/QRN etc.

Eventually I hope to have the data from all prop monitoring equip
feeding live data to my website and to run a listserver with auto
mailout to subscribes with stats and alerts...

Thanks again to everyone who has e-mailed me direct on the cavities
and I would welcome any comments on the above project ;-)

cheers - Chris Williams - g7nbp

oh - almost forgot, Merry Christmas!

# 5404. Alkaline charger designs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: c.j.williams@tcat.ac.uk
Message-ID: <3498ed98.2590251@sirius.data-io.com>
Source record: 88192

Hi...

Ive seen a couple of threads on recharging alkaline cells....

Can anyone recomend a good circuit?

## 5405. 1950's 2 meter rig-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: "Don B." <brosseau@detnet.com>
Message-ID: <34992B86.1BF@detnet.com>
Source record: 88193

I am looking for a photo copy of a construction article that appeared
in QST ( if I remember corectly) in 1957 or 1956. It gave details of
a 2 Meter transmitter built in two 3" chassis box's. The final
amp consisted of two 6146's mounted horizontly in a (approx.) 7x12
inverted chassis box fastened on top of a (approx.) 10x17 chassis box
which contained the xtal osc. and multiplyer's/drivers. It may have
been in two issues.Power supply and modulater info. were not included.
I will be happy to pay for copy and mail or for magazine if avaliable.

Thanks ...Don N5XO

brosseau@detnet.com

# 5406. Re: How to make simple hi-pass filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: rstevew@armory.com
Message-ID: <67b9vc$27q@news.scruz.net>
Source record: 88194
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew,sci.electronics.basics

In article <voicebox-1612970751150001@dnai-207-181-210-215.dialup.dnai.com>,
DaveC <voicebox@dnai.com> wrote:
>> In article
>> <voicebox-0912970944580001@dnai-207-181-210-84.dialup.dnai.com>,
>> voicebox@dnai.com (DaveC) wrote:
>>
>> On my o'scope, I want to display ripple voltage present on a 30KHz signal.
>> I want to filter out the 30K signal and show only the ripple voltage. This
>> ripple frequency is somewhere between 20 and 40 times the 30K signal. The
>> voltage of the 30K signal is less than 1 volt p-p. The ripple voltage is
>> much smaller than this.
>>
>> If I remember my basic electronics correctly, I can get a not-at-all-sharp
>> filter with a few components (cap and coil? cap and res?).
>>
>> Component values and any other help would be greatly appreciated. Direct
>> e-mail replies doubly so.
>
>If you knew enough electronics to appreciate a useful response, you wouldn't
>have posted such a trivial question. Find a library and look up the answer in
>an
>electronics text - we like "The Art of Electronics" by Horowitz and Hill -
>ISBN 0-521-37095-7 but it was written as an undergraduate text for use at
>Harvard, so you may want to look out for something by Don Lancaster.
>
>=====
>
>Bill:
>I know enough to appreciate a useful response AND I posted this question.
>So what? You stick to books, I'll stick to newsgroups. You don't want to
>help? Fine. But we don't need negative responses. If you don't want to
>help, then don't.
>
>Public libraries are very time-inefficient. Getting there (it's out of the
>way, parking's a bitch); browsing the electronic catalog (must be a UNIX
>system; poorly cataloged titles); wandering the stacks; coming back with
>woefully inadequate information. Whereas the 'net is populated with
>MILLIONS of engineers, just overflowing with electronics knowledge they
>are happy to share (well, a few are not, it seems).
>
>But many people realize that the 'net is a great resource (yes, in some
>ways similar to a library-- but in many ways more like a neighborhood--
>only at your fingertips) and are GENEROUS enough to HELP each other

>without posting ANAL RETENTIVE responses.
>
>Thanks to the many who provided circuit suggestions to help me reach a solution.
>
>Enjoy,
>Dave
>--
>Dave Carpenter
>Sound Logic
---
No! I won't just "tell you the answer"! Why? Because I think that SOME
amount of research ability MUST be inculcated into every electronics
wannabe! In this case, you don't NEED to "go to a library: (drive, park,
browse without understanding Dewey decimal system, etc., <you moron, ask a
librarian!>), and it has NOTHING to do with the UNIX filesystem, which is
the simplest and most obvious of any OS. You simply need to have purchased
any old used thrift-store BOOK on electronics!! If you have NOT, then you
really aren't SERIOUS enough to take as deserviong of our free labors to
teach you!! Come back when you can ASK a question ABOUT something you tried
which didn't work as you had reason to expect, and quit expecting us to be
an encyclopedia for you!! We are NOT "MILLIONS" of engineers, actually
there are fairly few of us who POST, versus a ratio who LURK which is 15
TIMES greater!! Many engineers will not even COME here to talk to you,
they see you as LAUGHABLE!! It is ONLY a very few of us who feel some
responsibility for public education who BOTHER to come here!! MOST
engineers simply won't "work" for you without being paid, and see you and
even US as laughable and naive as to our understanding of your fatuousness!
Until we develop a teaching engine which can learn and surmise from among
all sources on the Net/Web, and which decides to deal with your questions
automagically, this all is going to require an amount of genuine human
EFFORT, which you seem to deride for YOURSELF, which is why you got CALLED
a silly ass in the FIRST PLACE!! You don't value YOUR effort, why should WE
expend OURS on you? I got news for you by way of a HINT: It's a trivial
question found in any book on basic AC studies and RC circuits!! It's found
in virtually EVERY ONE OF THEM!! It's too basic for US to rewrite for you
in this instence. THAT'S what you were being told by the previous poster!
Go READ something! THEN ask questions!!
-Steve
--
-Steve Walz rstevew@armory.com ftp://ftp.armory.com:/pub/user/rstevew
-Electronics Site!! 1000 Files/50 Dirs!! http://www.armory.com/~rstevew
Europe:(Italy) http://ftp.cised.unina.it/pub/electronics/ftp.armory.com

# 5407. Re: 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Jim Valdes <jvaldes@whoi.edu>
Message-ID: <3499436A.C788AD@whoi.edu>
Source record: 88195
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Mike Willis wrote:
>
> Peter Parker wrote:
>
> > "Alan " <gilly@camtech.net.au> wrote:
> >
> > > >
> > > >Has anyone had experience in constructing a 2M to 10m Transverter.
> > > >
> > > >Might seem the wrong way around, but a surplus 2M FM rig would be a
> nice
> > > >way to drive a Transverter to 10M and work a bit of 10fm mobile.
> > > >
>
> Yes. I built one for 20m and have one of the Mutek ones that does
> allHF bands
> (which I never use). It is 10W out, which is nowhere near
> enough in the sunspot minimum.
>
> You might find it more convinient to convert an FM CB rig. These have
> narrower filters than common 2m rigs to cope with 10 kHz channel
> spacing.
>
> They are dirt cheap and you can leave it in the car without having to
> worry
> about it being pinched, though I see you are from Oz where crime is
> low
> anyway.
>
> (Remove the space from the Email address to reply)

Check the June 1986 issue of 73 magazine, it has a 2 to 10 meter
transverter for FM use. I have a couple of the PC boards (available
through FAR Circuits) and hope to make a 6 meter version of it.

Jim, WA1GPO

# 5408. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Jim Valdes <jvaldes@whoi.edu>
Message-ID: <349941F6.2347C622@whoi.edu>
Source record: 88196

Chris Williams wrote:
>
> Hi all...
>
> anyone got any info or experience in building cavities for low VHF??
>
> Im looking for a simple desig whcih can be fabricated without the need
> for turning or milling... ie a few old tin cans and a long bolt etc
> :-)
>
> cheers....
>
> Chris Williams - g7nbp
>
> email : webboss@tcat.ac.uk
> or : c.williams@tcat.ac.uk
> or : g7nbp@hotmail.com
>
> web : www.tcat.ac.uk

here's a site that might of interest.

Jim

# 5409. Re: need tube info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Steve Robertson <stephen.h.robertson@cpmx.saic.com.xxx>
Message-ID: <349936E7.5812@cpmx.saic.com.xxx>
Source record: 88197

David Hatch wrote:
>
> Greetings,
> I recently acquired a pair of tube audio amplifiers. No particular
> markings, except for the power xfmr, so I found AC power
> in easy enough(!). The output xfmr was also a no-brainer. They at
> least somewhat work. There is a gain pot on the input, and I can
> inc/dec to get varying levels of hum. But when I hook up my sig. gen
> to the input, there is *much* more hum than signal. They're fairly
> simple; 2 stages of 12AX7's and a 6AQ5A, with a 6X4 for HV
> rectification. The output xfmr is a Triad S-53X Universal. 6 output
> lugs, but not labeled for any particular impedance. There is also
> a can about 1 1/2" dia x 3" tall, labeled James C-1800 6 volt 60 cps.
> On one amp it is very noisy. The other is quiet. No idea what it is.
> What I would like is if anyone could direct me a bit as to
> what to look for signal-wise. I don't have much tube background, so
> maybe a book or two to look up? If someone wants to go more in-depth,
> I could probably come up with a schematic in .bmp by next Monday.
>
> Thx, 73's
> David

The hum is probably from bad filter caps. Just replace all electrolytic caps with new ones of same or greater capacity and same or greater DC working voltage. Be sure to observe polarity and connection points (i.e., the negative lead(s) may not necessarily be connected to the chassis groun as one might expect!). Remove the old caps from the circuit entirely.

As to the "James" unit - my guess is that it's a vibrator. You may have an amp that is AC/DC - designed to work either from household mains or from 6v DC. All the tubes will work with 6v on the heaters and the vibrator is used to mechanically chop the DC into something close enough to AC to be stepped up via a transformer for B+. Vibrators were very common in pre-transistor car radios.

73 de Steve, KE4OH
--
To get my real e-mail address, remove the characters ".xxx" at the end of my address.

## 5410. 10m amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: ssrick@hotmail.com
Message-ID: <34993fde.282635@news.mc.net>
Source record: 88198

Does anyone have plans for a solid state or tube type amplifier?
Please post or e-mail. Thanks..... ssrick@hotmail.com

# 5411. Tubes for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Rs <dudley@yournet.com>
Message-ID: <01bd0bca$16334500$cde660ce@default>
Source record: 88199

The majority of these tube are Philco The rest are RCA an GE etc. This is a Caddy I carried on Service calls in the 50s and early 60s. I would prefer selling entire inventory to high offer. All will be shipped COD / Amount plus shipping. unless other form of payment arranged.
All reasonable offers considered.
Denver
voice 870-743-6400
fax 870-743-6416
dudley@yournet.com

1-6J6 1-6DE6 2-3BN6
1-12SN7 2-12D4 1-6AX4
4-6AM8 1-12AZ7 1-6DQ7
1-3BZ6 1-7AU7 1-6X8
4-6AK5 1-9BR7 1-4CS6
4-6DT5 1-6DA4 1-9AU7
1-6AQ5 1-3V4 1-12CA5
5-6CB6A 1-3AV6 1-12AT6
2-5X8 1-6AW8 1-2EN5
1-6T8 1-6CG7 1-12DE5
1-1V2 1-6EW6 1-12AZ7
3-6AK5 2-10DE7 1-6HK5
2-6BZ7 1-6DS4 2-5U4
1-6FQ7 1-6T8 1-6BQ6
14-6BQ7 1-6KZ8 1-17DQ7
3-6BZ7 1-12DQ6

1-HV SOCKET PHILCO PART NO#27-6310-3
1-TUNER BALUM COIL PHILCO PART NO#32-4527
1-5.2 MEG VAR POT PHILCO PART NO#33-5592-29
1- PHILCO PHONO CARTRIDGE w/needles PHILCO PART NO#325-8024

# 5412. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <349948b1.76431786@news.crosslink.net>
Source record: 88200

On 14 Dec 1997 04:18:34 GMT, "Bert Douglas"
<G_Herbert_Douglas@msn.com> wrote:

>Would someone please explain the Smith Chart to me?

Dear Bert,

You've already received several links to written material on the subject and a couple of explanations ( I like Madjid's explanation the best), but I would like to give you something that may be easier to visualize or relate to.

The Smith Chart can be thought of as a "Visual", as opposed to "mathematical", way of transforming one impedance into one or more different impedances by means of a length of transmission line. Remember that a piece of coax or balanced transmission line is a distributed transformer, whose transformation effect is a function of its length and characteristic impedance, and the frequency.

If you want to perform the necessary calculations mathematically, you may do so, but the use of the Smith Chart makes it more like a nomogram or slide rule, in that you have a visual procedure for moving around on the complex plane in a specified way (around a circle of constant SWR) in order to obtain the results quickly.

A computer program can do the job with less fuss and with greater accuracy. I have one on my Web site that you can download for free. Look for SC.EXE

http://www.qsl.net/w9dmk
ftp://qsl.net/pub/w9dmk
73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 5413. Re: CQ QRP Ops: Why Isn't There More 30 Meter Activity?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: LA8AK@3y8ak.cw
Message-ID: <34987153.9558103@news.online.no>
Source record: 88201

On 17 Dec 1997 22:39:18 GMT, mailfrmpa@aol.com (MailfrmPA) wrote:

>>>cliffkot@interaccess.com (Cliff Kotchka) wrote:
>
>>>>The big question is why isn't there more 30 meter activity?
>
> 30m is FULL of qrp signals. Its just that no one can hear them.....
>
>K0MB

is that the reason why every stn is so weak?
I planned QRP on 30m, but it seems not good for QRP, you need 100W
with a halfwave vertical to be heard....

---
Jan-Martin Noeding - LA8AK at online dot no
N-4623 KristiansandS

Tel.+47-380-87178

# 5414. Re: 813 AMP FOR SELL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: bad@earthlink.net
Message-ID: <349991E2.6B3@earthlink.net>
Source record: 88202

TS950SDX wrote:
>
> IVE GOT A HOMEBREW AMP THAT RUNS 2 813 GG AT 2500 VDC
> NICE CASE BLACK WITH CHROME FACE 2 METERS PLATE AND GRID
> BIG HEAVY C-1 AND C-2 CAPS FULL OUTPUT " INPUT AT 120VAC"
> SINGLE BANDED AT 75 METERS ONLY
> BEST OFFER GETS IT
> JOE KF4TOH
>
Well I could have bought this piece of junk at the Chattanooga Hamfest

for $ 50 last Oct. so what is it worth now?.

## 5415. Icom CT-17

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Emil <emilgborys@worldnet.att.com>
Message-ID: <67br1h$o4b@bgtnsc03.worldnet.att.net>
Source record: 88203

Looking for a schematic or article on Icom CT-17.
--
emil, ak9i

## 5416. Pin diode circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: "Ralph M. Ferrara" <rmf218@servtech.com>
Message-ID: <34996E23.EDB617EE@servtech.com>
Source record: 88204

I am looking for a schematic of a simple pin diode tx/rx switch to be used with a preamp on 2M. It should be capable of being battery powered, ( 9V). If you have any information which would help me finish the preamp project please let me know at rmf218@servtech.com. Thanks...73 Ralph WA2NTK

## 5417. Availability of Cinch Jones Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: lordell@aol.com
Message-ID: <19971218185601.NAA04427@ladder02.news.aol.com>
Source record: 88205

The older 50's rigs and WW2 military rigs used a lot of Cinch Jones connectors. (Silver-plated flat pins with black bakelite insulation). Can anyone
direct me to a source of these in the USA? Joe--W1PNH

# 5418. Re: Cavity filters @ 50Mhz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Fred <fred@you.must.be.joking>
Message-ID: <67bsg7$det$1@heliodor.xara.net>
Source record: 88206

Chris Williams wrote in message <3498ea6a.1776613@sirius.data-io.com>...
>>Check this month's Practical Wireless. They have an article about cavity
>>filters using large food tincans & copper waterpipe. Not too practical for
>>6m, but interesting reading.
>
>Hmmm.... I saw the article and thats what prompted me to post the
>message...
>
>cheers anyway Nick...
>
>A few people have emailed me direct and asked for details of the use
>of the cavities... possibly best to describe here rather than in 10
>emails :-)

Just a thought, if you want to stick with cavities, you could try air-conditioning ducting from a local installer. 1.5m of the stuff shouldn't be too expensive. The ends could be a flanged plate rather than a cap. I'm not sure if you can solder to galvanised steel though - not something I've tried.

>Basically, Ive got quite a few propogation monitoring projects running
>at present - magnetometers (ECM and fluxgate), Barometric pressure
>sensors, beacon monitor, etc linked up to my home network which is
>building up a database of info. One project I wanted to add was a
>widefreq averaging RX. The idea being that it would listen to ALL
>freqs between 48 and 52Mhz and use a simple RF stage followed by a
>rectifier giving an averaged voltage for all sigs (and noise) in the
>range of RXd freqs.

Also, why is is important to monitor the average across the band, bearing in mind that different signals within the band would beat & the result could be odd to say the least, especially if you're just taking a DC value in the end.

How about.. You could try a standard Rx design, but using a 4MHz wide sweep as the local osc to sweep the band. Then rectify the IF output into a low pass filter / integrator or whatever.

73
Nick g7ufg

# 5419. Re: 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34997d90.0@newshost.pcug.org.au>
Source record: 88207
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Mike Willis <"M.J.Willis "@rl.ac.uk> wrote:
>

>Yes. I built one for 20m and have one of the Mutek ones that does allHF bands
>(which I never use). It is 10W out, which is nowhere near
>enough in the sunspot minimum.
>

I disagree - I find powers around 10 watts sufficient, particularly on 10 metres. Even that sort of power to a fairly mediocre antenna (eg a 6ft mobile whip) when used pedestrian mobile on 10m has yielded many solid contacts on SSB and a few on AM. However on FM a bit more power may make operating a bit more pleasant.

>You might find it more convinient to convert an FM CB rig. These have
>narrower filters than common 2m rigs to cope with 10 kHz channel spacing.
>
>They are dirt cheap and you can leave it in the car without having to worry
>about it being pinched, though I see you are from Oz where crime is low
>anyway.
>

All CB here is SSB/AM, and not FM. There are nowhere near as many FM sets here as there are in the UK - any 27 MHz FM set would have to come from a CB pirate.

73,
--


---
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.


---

# 5420. Three 5v 200a Supplies - Verify Info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd0bed$57b3d580$0b8a92d0@bitnet.bit-net.com>
Source record: 88208

I have acquired three 5V 200A power supplies (amazingly small, about 12"deep x 5"wide x 8"high, though very solid and heavy). (They came with a bunch of other stuff)

They are JETA Power Systems, Inc. Model G1001-1
Label says Input: 3 phase 208v 3.5a 47-400hz
or 230v 9.6a 47-60hz
Output: 5v 200a

Each unit has its own built in fan, massive plated connection posts, etc.

Do I assume correctly that I can run standard 220-230v into one of these little beasts (at the properly labeled terminals)and get 5v at 200a out?

So if I tie the outputs of two in series and crank the voltage up to 6 or 6 1/2v (there's a voltage adjustment slot), I could end up with usable 12-13v at 200a?

What's the potential downside as a shack supply?

Anyone know these specific devices? Anyone have a schematic, etc, to share?
--
Thanks & 73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

## 5421. Microwave ATV from a Microwave!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Jabran Soubeih <soubeih@expert.cc.purdue.edu>
Message-ID: <Pine.SOL.3.91.971218161553.19610D-100000@expert.cc.purdue.edu>
Source record: 88209

Hello,
I am currently working on a Microwave ATV transmitter from a microwave oven. The project was documented in a 1989 issue of 73's magazine, authored by David Pacholok. I have some info available on my website. here is the url http://expert.cc.purdue.edu/~soubeih/wireless.html Feel free to take a look and give me feedback. I am interested in discussing this project with anyone who has attempted to or successfully constructed it. I am updating the web page weekly during heavy working times.

73's
Jabran
N9KZA

# 5422. Re: Availability of Cinch Jones Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971218214001.QAA19056@ladder02.news.aol.com>
Source record: 88210

>
>The older 50's rigs and WW2 military rigs used a lot of Cinch Jones
>connectors. (Silver-plated flat pins with black bakelite insulation). Can
>anyone
>direct me to a source of these in the USA? Joe--W1PNH

Digi Key has a very complete stock.

W4ZCB

## 5423. Re: Alkaline charger designs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: miker <&miker@ethergate.com>
Message-ID: <3499A32F.6A81@ethergate.com>
Source record: 88211

Chris Williams wrote:
>
> Hi...
>
> Ive seen a couple of threads on recharging alkaline cells....
>
> Can anyone recomend a good circuit?

Any good alkaline charging circuit should include a heavy steel
case lined with plastic. The plastic keeps the caustic stuff that
drips out of the battery from weakening the steel case that keeps
in the explosion.
OH, rose-colored glasses will help you believe you're actually
recharging them. :-)
miker
--
Please remove & from return address before replying.

# 5424. Re: Availability of Cinch Jones Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: lordell@aol.com
Message-ID: <19971218232300.SAA29536@ladder02.news.aol.com>
Source record: 88212

Thanks to those who replied to my question. It seems that both
Digi-Key and Newark stock the old timers. 73---W1PNH

## 5425. 73 magazine article needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Bob <Bob@NoSpamForMe.Com>
Message-ID: <01bd0c0c$d4085a60$LocalHost@default>
Source record: 88213

A few years back, (~1995) there was an article in 73 magazine on building a direct digital synthesizer that had thumb wheel controls. Can anyone fax me a copy?
Bob
kb8tl
--
pierfelice AT MCI2000 DOT COM

# 5426. Ramsey FM-10 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: "K.Klevesahl" <slipbit@spnt.com>
Message-ID: <34996103.28D2@spnt.com>
Source record: 88214

I'm really having a lot of fun with this sterio xmitr,
BUT, is it possible to somehow use a crystal to stablize the xmit
freq????.
I'm getting tired of having to adjust the inductor so that the freq
stay's put as the battery voltage drops, or when the antanna cable is
moved, not to mention it what happens as my hand gets within 6 inches to
adjust it.
Also, has anybody figured out who makes the chip? or better yet, know
of a source for more and data sheets?
I'd like to layout a new bourd using a bit better shielding and smt
componets.
Of course if somebody has already done this, I'd like to hear of your
experiance(s).
Thanks
Kevin K.

# 5427. Re: Availability of Cinch Jones Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: dick@libelle.com
Message-ID: <dick-ya02408000R1812972102440001@news.zippo.com>
Source record: 88215

In article <19971218232300.SAA29536@ladder02.news.aol.com>, lordell@aol.com (Lordell) wrote:

>Thanks to those who replied to my question. It seems that both
>Digi-Key and Newark stock the old timers. 73---W1PNH

Believe it or not, but Radio Shack still carries the 2-prong version. They call them Heavy Duty Polarized Connectors, #274-201 and -202.

73, Dick
--
Dick Flanagan W6OLD CFII Minden, Nevada DM09db (South of Reno)
Visit http://www.qsl.net/w7di/

## 5428. computer / radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-18 00:00:00 UTC
From: Paul Crum <pjcrum@csrlink.net>
Message-ID: <3499FFCC.38C0@csrlink.net>
Source record: 88216

How can I as a person get my computer hookedp up to the interenet via
Satalite and also have a fast download rate.

## 5429. QRP? news group?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: leo_whiteway@bc.sympatico.ca
Message-ID: <67d2ic$d1q$2@news.bctel.net>
Source record: 88121

Hi there; Is there a news group dedicated to QRP? I would like to take part in discussions regarding use and construction the the QRP ham radio field. If anyone knows of a news group or possibly a web site, I will be grateful for the information.

Leo (Bing) Whiteway
Kelowna, BC Canada

From the messy desk of Leo Bing Whiteway VE7UW

Net-Tamer V 1.08.1 - Test Drive

# 5430. Service Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: MLS@BOB.kaman.COM
Message-ID: <01IRCE6KSFKM0024BF@MR.KAMAN.COM>
Source record: 88122

```
--Boundary (ID nu9jw5SeSXegl0fo8ZWwtA)
Content-type: TEXT/REPORT

Report on your message to: /R=AM/U=jpieszcynski/@MR.KAMAN.COM
Reason: Failed to transfer; communications failure (0)
Diagnostic: Maximum time expired (5)
Extension-id: 1
Arrival-date: Fri, 19 Dec 1997 01:41:01 EDT

--Boundary (ID nu9jw5SeSXegl0fo8ZWwtA)
Content-type: MESSAGE/RFC822

Received: from fwitnl.kaman.com (fwitnl) by BOB.KAMAN.COM (PMDF V5.0-6 #16964)
id <01IRAVKE5GJK001OD1@BOB.KAMAN.COM> for jpieszcynski-cos3@BOB.KAMAN.COM;
Thu, 18 Dec 1997 01:40:15 -0400 (EDT)
Received: from sealint.kaman.com by fwitnl.kaman.com
(5.65v3.2/1.1.10.5/29May97-0244PM) id AA01579; Thu, 18 Dec 1997 01:42:59 -0500
Received: by sealex.kaman.com; (5.65v3.2/1.3/10May95) id AA03953; Thu,
18 Dec 1997 01:42:30 -0500
Received: from mlist.ucsd.edu by sealex.kaman.com (smtpxd); id XA03955
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1])
by mlist.ucsd.edu (8.8.5/8.6.9) with ESMTP id WAA09622 for
<ham-homebrew-ddist@mlist.ucsd.edu>; Wed, 17 Dec 1997 22:15:33 -0800 (PST)
Received: (from daemon@localhost) by mail.ucsd.edu; Wed,
17 Dec 1997 22:15:31 -0800 ( PST)
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #726
To: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>
Errors-to: Owner-Ham-Homebrew@ucsd.edu
Reply-to: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>
Message-id: <199712180615.WAA21793@mail.ucsd.edu>
Autoforwarded: false
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII
Importance: normal
Precedence: List
X400-MTS-identifier: [;05041081217991/978331@BOB]

Ham-Homebrew Digest Wed, 17 Dec 97 Volume 97 : Issue 726

Today's Topics:
7417 IC Substitute (2 msgs)
AD9850 DDS SSOP adapter PCB
ant analyzer
Cavity filters @ 50Mhz?? (2 msgs)
CQ QRP Ops: Why Isn't There More 30 Meter Activity?
```

Crimp connectors for RG-8X Cable?
FS Garmin GPS 20s
GPS Antenna AMP plans (2 msgs)
Gray Code
Hamcomm and AMTOR
helical resonator appl schema
Homebrew 813, 811 mod.
Junkbox component values?? (2 msgs)
New S-Parameter Thread (3 msgs)
silver-bearing solder
Spectrum Analyser
Weller WLC100 Soldering Station

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
Loop-Detect: Ham-Homebrew:97/726
------------------------------------------------------------------------

Date: Wed, 17 Dec 1997 14:59:36 -0600
From: johnz@utxvms.cc.utexas.edu (John Moore)
Subject: 7417 IC Substitute

I would like to do a project that calls for an IC 7417. I can't find
one. There are plenty of IC's that have 7417 in the number but they look
to have a different function. Perhaps I am looking in the wrong place.
Any ideas?

Thnaks
John AB5YQ

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Date: 17 Dec 1997 17:45:01 -0700
From: dmturner@primenet.com (Dave Turner)
Subject: 7417 IC Substitute

johnz@utxvms.cc.utexas.edu (John Moore) wrote:

>I would like to do a project that calls for an IC 7417. I can't find
>one. There are plenty of IC's that have 7417 in the number but they look
>to have a different function. Perhaps I am looking in the wrong place.
>Any ideas?

Jameco lists the 7417: 14 pin Hex buffer/driver O.C. high voltage.
They cost $0.35 for 1-9.

---

Date: Wed, 17 Dec 1997 14:30:33 +0000
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: AD9850 DDS SSOP adapter PCB

If anyone is interested in prototyping with the AD9850 DDS chip, using "ugly" construction on a ground-plane, I've had some mounted on a small PCB (0.8 mm thick), with the leads brought out to staggered .05" spacing pads. You are unlikely to get usable 125 MHz operation with these, but they are ideal for experimentation, and should be OK at 75 MHz, for a wide-range DDS osc. covering < 1 Hz up to 30 MHz. I've just ordered a 75 MHz osc. to check it out.

I've got a simple circuit working using one of these PCBs, with a 25 MHz clock oscillator (the fastest I have in the junk box) configured via the PC printer port with a C program, using serial loading. I'm in the process of adding a 10 MHz LP filter to clean up the output. I'll eventually be using an Atmel AVR 1200 chip for controlling the DDS and an LCD, keyboard and rotary encoder I/F.

AD9850 data is available from www.anaolog.com.

Please email me for further details.

73, Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/rcm.htm for details of a
low-cost reconfigurable computing module using the XC6216 FPGA

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Date: 17 Dec 1997 20:05:56 GMT
From: "Emil" <emilgborys@worldnet.att.net>
Subject: ant analyzer

does anyone have a reference article for construction of an antenna analyzer. thanks.

emil, ak9i

---

Date: Thu, 18 Dec 1997 02:13:43 GMT
From: aruder@pipeline.com (Lou Hinshaw)
Subject: Cavity filters @ 50Mhz??

Get in thouch with Tulsa Rptr Org, tulsa, OK, usa.
They just tok one out of a location that had been there since
before Jesuse wore pants.
Ask for a description.
I think it is made of tin cans soldered together.
Or maybe downspout.

or both.

good luck
Lou H.

c.j.williams@tcat.ac.uk (Chris Williams) wrote:

>Hi all...
>
>anyone got any info or experience in building cavities for low VHF??
>
>Im looking for a simple desig whcih can be fabricated without the need
>for turning or milling... ie a few old tin cans and a long bolt etc
>:-)
>
>cheers....
>
>Chris Williams - g7nbp
>
>email : webboss@tcat.ac.uk
>or : c.williams@tcat.ac.uk
>or : g7nbp@hotmail.com
>
>web : www.tcat.ac.uk

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

---

Date: Wed, 17 Dec 1997 09:52:29 -0800
From: "Doug, N0LKK" <dougy@ruraltel.net>
Subject: Cavity filters @ 50Mhz??

Nick wrote:
>
> Check this month's Practical Wireless. They have an article about cavity
> filters using large food tincans & copper waterpipe. Not too practical for
> 6m, but interesting reading.
>
> Chris Williams wrote in message <34967fec.16046770@sirius.data-io.com>...
> >Hi all...
> >
> >anyone got any info or experience in building cavities for low VHF??
> >
> >Im looking for a simple desig whcih can be fabricated without the need
> >for turning or milling... ie a few old tin cans and a long bolt etc
> >:-)
> >

> >cheers....
> >
> >Chris Williams - g7nbp
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

I rcall once seeing a set of plans for cavities in the "other" amateur
radio handbook, I think the book is by Bill Orr. They wasn't tin can,
but made from sheetmetal some how.
> >

--
73, Doug Younker, N0LKK
near Plainville, KS
dougy@ruraltel.net

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Date: 17 Dec 1997 22:39:18 GMT
From: mailfrmpa@aol.com (MailfrmPA)
Subject: CQ QRP Ops: Why Isn't There More 30 Meter Activity?

>>cliffkot@interaccess.com (Cliff Kotchka) wrote:

>>>The big question is why isn't there more 30 meter activity?

30m is FULL of qrp signals. Its just that no one can hear them.........

K0MB

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Date: Wed, 17 Dec 1997 22:09:37 -0500
From: Jerome Buie <djbuie@nettally.com>
Subject: Crimp connectors for RG-8X Cable?

Hutton Communications can provide both either from RF industries or from
Cambridge.
Hutton number 800-741-3811
John Ackermann wrote:

> Anyone know of a source for BNC and UHF crimp-style connectors for RG-8X
> (mini RG-8) cable? Searching Amphenol's web page and the Digikey
> catalog didn't turn any up.
>
> John
> --
> John Ackermann Amateur Radio N8UR (ex-AG9V)
> home: jra@febo.com http://www.febo.com
> work: john.ackermann@daytonOH.ncr.com

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Date: Wed, 17 Dec 1997 13:06:52 -0500
From: Steve Allen <caipurc@sover.net>
Subject: FS Garmin GPS 20s

Used Garmin GPS 20 receivers(very inexpensive), interconnect cable and
pinout included.

Respond to:

Steve at caipurc@sover.net

---

Date: 17 Dec 1997 18:50:13 GMT
From: obb3009@InfoNET.st-johns.nf.ca (David Dawe)
Subject: GPS Antenna AMP plans

Anyone built a low noise,amp,5 volts,50 ohms in/out
What IC should I use?

--
Dave -- Atlantic Canada--N4731.0 W05254.0

---

Date: Wed, 17 Dec 1997 15:52:24 -0600
From: Jim Strohm <jstrohm@txeas.net>
Subject: GPS Antenna AMP plans

Almost any MMIC will give acceptable gain to 2 GHz. For a start,
take a look at the November 1997 QST pre-amp article.

For frequencies above 500 MHz, the PC board material and geometries
are more critical -- there have been a number of articles in QST
and QEX on this particular topic over the last decade. G-10
(the standard light green glass-epoxy) is marginally usable
to 2 GHz if you're lucky. Rogers has some inexpensive substrates
available now that are very good (and they sample if you ask right).
Duroid 5880 or similar is not required -- but it's easy to use,
easy to make work, and easy to have a seizure over the price.

For specifics on good MMICs to use, see the Mini-Circuits Designer's
Handbook. You should be able to talk that company out of a
free copy. MMICs are typically in the $3. each range, so you
can afford to blow a few up while experimenting.

50-ohm stripline design is trivial if you know the characteristics
and thickness of the substrate. And MMIC design apps are trivial,
except that biasing needs to be done right.

N6OTQ

---

Date: Wed, 17 Dec 1997 14:21:55 GMT
From: John Marlow <John@equine.demon.co.uk>
Subject: Gray Code

I could use some help with a Gray code disc please. IE How to make one
and then to read it into a pc.

I wish to find wind direction via my pc.

--
John Marlow G1ORP

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Date: Wed, 17 Dec 1997 17:03:44 GMT
From: ke4zv@bellsouth.net (Gary Coffman)
Subject: Hamcomm and AMTOR

On Tue, 16 Dec 1997 14:05:50 -0500, Bob Lewis <aa4pb@erols.com> wrote:
>SCS has licensed Pactor-II to PacComm and, I believe is willing to license to
>others.

SCS gives PacComm *US manufacturing rights* to build *an exact copy* of
the PTC-II. It isn't a matter of just licensing the protocol so PacComm could
implement it on their own hardware design.

>The last I heard, HAL was holding on to the Clover rights - although just
>about anyone will license just about anything if you are willing to pay enough
>money.

HAL has repeatedly and publicly offered to license the Clover II protocol
to other manufacturers. I understand that they are even willing to do this
on a reciprocal basis, IE if Kantronics would give them a license for GTOR,
they would give Kantronics a license for Clover II for example. Now if you
wanted the source to their executable DSP code, that might be a different
matter. That *is* rightfully a proprietary competitive advantage that they
likely value rather highly.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

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Date: Wed, 17 Dec 1997 16:11:35 -0600
From: aziz@turnet.net.tr
Subject: helical resonator appl schema

hi there :

I need circuit of hamtronics R144 FM Receiver or helical resonator
amplifier .

I need info , how to built helical resonators (3 pole) ?.
I have 2m receiver and I want to make adapt helical resonator .
73,s de TA2AD Sua

--
A . Sua TORTU
aziz@turnet.net.tr
Z O N G U L D A K

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

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Date: 17 Dec 1997 23:28:09 GMT
From: w4pqwhs@aol.com (W4pqw HS)
Subject: Homebrew 813, 811 mod.

Please remov this ad. I may want to list it again later, tnx Harold W4PQW

---

Date: Wed, 17 Dec 1997 07:51:33 -0800
From: "Clinton Peebles" <cpeebles_NOSPAM_@nel.auracom.com>
Subject: Junkbox component values??

I have several circuit boards in my junk box and would like to know how to find the values of some of the components, mostly the coils. Is there a code for decoding the value of these or do different manufacturers use different codes? For example, one board has several Mitsumi coils on it and the tuning slugs are different colors. Do the colors signify the value or can I figure them out from the numbers? One with a purple slug has 101 5 7AF and 7.8KD. Others have no markings at all so I guess there is no way of telling the values..
----
Remove _NOSPAM to E-mail reply.
E-Mail - cpeebles@nel.auracom.com

---

Date: Wed, 17 Dec 1997 12:50:52 -0600
From: Jim Strohm <jstrohm@txeas.net>
Subject: Junkbox component values??

Yes and no.

Inductors are commonly marked with a color code that approximates the resistor color code, but the multiplier is not always defined.

But there's more -- some inductors are color-coded by PART NUMBER, same as some sub-watt zener diodes. And small tubular capacitors. And that make life hell.

Your safest bet is to test for value. You can get a cheap but reasonably repeatable and accurate digital inductance meter for under US$100. nowadays, and it's a handy device for quick guesses.

FWIW, most components change value with age -- most notably, capacitors (which should be junked when they're old enough to vote) and carbon resistors, which all need to be checked before re-use.

But hey, why do we call it the junk box, after all?

---

Date: Wed, 17 Dec 1997 14:09:51 GMT
From: RJBurden@BigPond.com (Richard Burden)
Subject: New S-Parameter Thread

"minilinx" <minilinx@netaccess.co.nz> wrote:

<snip>,
>
>I need theses values in terms of R + jX. so that I can match for
>1) optimum load for Power Amplifier
>2) interstage match between pre-driver and Power Amp.
Dave,
I hope someone has pointed out that "both Y and S parameters for a power transistor are called small-signal parameters, and should not be considered in the design of rf power amplifiers" (Bowick) Rather, the manufacturer's data sheet should be consulted for the input and output impedances.

Regards,
Richard

Bowick, C. 1987, "RF Circuit Design", Howard Sams

---
Richard VK6FKB
"Nothing better than home-brew, except perhaps an absence of Spam"

---

Date: 16 Dec 1997 13:54:17 GMT
From: davidn3213@aol.com (DavidN3213)
Subject: New S-Parameter Thread

Dave Huisman wrote:

>Hi,
>Thanks all for feedback on Scattering Parameter - Impedance Conversion.
>From the replies received, it seems a drawn out affair to use S-parameters
>to find transistor input and output impedance.
>This was a surprise to me as all literature I have read so far states that
>S-Parameters is a simply way of obtaining transistor characteristics.

An RF design program that's capable of using S parameters to characterize a generic two-port element may also be usable in determining a equivalent R+jX values for a device's input and output. One program I know of that can be so used is ARRL Radio Designer (http://www.arrl.org/ard/), which includes a generic two-port element (called TWO) that can be characterized by S, Y or Z parameters.

What you'd do to get your transistor's input R+ jX, for instance, is set up a simple one-port circuit consisting of a TWO, characterized by your S parameter data, with a 50-ohm resistor connected across its output and its one port connected to the TWO's input. After analyzing the circuit, ask Report Editor to plot RZ11 (the real part of Z11) and IZ11 (the imaginary part of Z11) for the circuit. This gives you your device's input R+jX at (and interpolated between) the frequency points in your S-parameter data.

For output R+jX, you'd set up a circuit consisting of a TWO, again characterized by your S parameter data, but this time with a 50-ohm resistor connected across its *input* and the circuit's one port connected to its output. Plotting RZ11 and IZ11 for *this* circuit would give you your device's output R+jX at (and interpolated between) the frequency points in your S parameter data.

This technique is highly conditional, for a host of reasons--a set of S parameters is derived only a a given bias point, for one instance; for another, S-parameter data doesn't characterize an active device's noise performance (and ARRL Radio Designer therefore won't be able to tell you anything useful about your device's noise performance through this TWO-based approach)--but can be quite useful for a first cut at a linear amplifier design.

Regards,

David Newkirk, W9VES

---

Date: 18 Dec 1997 04:56:55 GMT
From: davidn3213@aol.com (DavidN3213)
Subject: New S-Parameter Thread

I wrote:

>>What you'd do to get your transistor's input R+ jX, for instance, is set up
>a
>>simple one-port circuit consisting of a TWO, characterized by your S
>parameter
>>data, with a 50-ohm resistor connected across its output and its one port
>>connected to the TWO's input. After analyzing the circuit, ask Report
>Editor
>>to plot RZ11 (the real part of Z11) and IZ11 (the imaginary part of Z11) for
>>the circuit. This gives you your device's input R+jX at (and interpolated
>>between) the frequency points in your S-parameter data.

[repeat of same procedure for output deleted]

And Wes Stewart wrote:

>Why not just set it up as a two port in the first place and not worry
>about the 50 ohm terminations?

Because when you ask ARRL Radio Designer for RZ11 and IZ11 of a two-port network, the program leaves the network's output port unterminated. This can lead to significant errors in the values reported for RZ11 and IZ11 if the network doesn't exhibit very high reverse transmission gain, as will be the case for many active devices. (Likewise if you ask for RZ22 and IZ22 of a two-port; then, the program leaves the network's input port unterminated.) The "two-port as explicitly-terminated one-port" approach end-runs this effect by duplicating the opposite-port termination used in determining the network's S parameters.

Not that many of us could afford its five-figure price for home and hobby use, but the 32-bit successor to ARRL Radio Designer's parent program includes ZIN and ZOUT among its two-port responses. These allow you to set opposite-port terminations *within Report Editor* while reporting the analyzed two-port's input and output impedances, making the "two-port as explicitly terminated one-port" workaround unnecessary in characterizing the input and output impedances of two-ports.

Regards,

David Newkirk, W9VES

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Date: Wed, 17 Dec 1997 15:57:17 -0500
From: Bob Lewis <aa4pb@erols.com>
Subject: silver-bearing solder

Digikey sells Multicore of the 60/40 and 63/37 variety in multiple sizes. No mention of shipping limitations.

jdaggett@gate.net wrote:

> On Wed, 10 Dec 1997 23:23:49 -0800, Dennis Erwin Thurlow
> <geosynq@trader.com> wrote:
>
> >> What are the advantages of using solder that is 2% silver, compared
> >> to solder that is only tin and lead?
> >
> >None, IMHO. The stuff is crappy, but you can't find lead solder
> >any more. If anyone knows a source for rosin core 60/40, I'd
> >like to buy some.
>
> Yopu can find it but no one will ship by FED EX . In fact the only
> way it is shipped now is by ground. FED EX and UPS will not send by
> air. They may charge a harzardoues material surcharge to your order.
>
> regards
> James
>
> >--
> >geosynq@trader.com
> >Elder - Westminster Presbyterian
> >TRA #2693
> >N9VEM

---

Date: Tue, 16 Dec 1997 15:39:04 +0200
From: Mikael Nordman <mikael.nordman@lmf.ericsson.se>
Subject: Spectrum Analyser

Hi,
Does anybody know if:

-There exist any software that turns a PC soundcard into a AF spectrum
analyser ?
-There exist any RF spectrum analyser cards that use a PC as display and
control panel ?

73 de Mike/OH2AUN

---

Date: Wed, 17 Dec 1997 13:31:54 GMT
From: geotek@flex.net (George Carlson)
Subject: Weller WLC100 Soldering Station

Just my two cents.
The best deal going on a good quality soldering station is the WCC100.
Tucker has it for $105.
The WLC100 has old fashion tips that are held in with a screw from the
side. This can only lead to big problems when you want to change the
tip and find the screw frozen in place. I have used the WCC100 for
everything from large power supply lugs to fine pitch Flash ROMs.
Stay away from the irons that use the magnetic temperature control.
These use the tips with the 6,7, or 8 on the end. Many surface mount
components have magnetic leads that will stick to the of the tip and
barrel of the soldering iron and drive you crazy.

On Tue, 16 Dec 1997 12:44:08 -0600, "Al Williams"
<alw@al-williams.com> wrote:

>If you are thinking about buying a WLC100 Soldering Station (the one for
>about $30-$40), you might want to read my review.
>
>I don't sell them (or any kind of soldering iron, for that matter). I just
>bought one, have used it for awhile, and wanted to share my thoughts on it.
>
>You can find it under Construction tips at my Ham Web Site:
>http://www.al-williams.com/wd5gnr
>
>73,
>
>Al WD5GNR
>
>
>

George Carlson KC5RCC
Geotek Design Services
http:www.flex.net/~geotek/hmsc/index.htm

---

End of Ham-Homebrew Digest V97 #726
******************************

--Boundary (ID nu9jw5SeSXegl0fo8ZWwtA)--

# 5431. Re: 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <349A2E28.44DC2874@rl.ac.uk>
Source record: 88123
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Peter Parker wrote:

>
>
> I disagree - I find powers around 10 watts sufficient, particularly on 10
> metres. Even that sort of power to a fairly mediocre antenna (eg a 6ft
> mobile whip) when used pedestrian mobile on 10m

6ft! That is nearly 2m long!

> All CB here is SSB/AM, and not FM. There are nowhere near as many FM
> sets here as there are in the UK - any 27 MHz FM set would have to come
> from a CB pirate.

You could get one from the UK, but if you can get an SSB/AM set cheaplyyou can
soon convert it to FM/CW as well. Much simpler than building a transverter.

--
Mike

(Remove the space from the Email address to reply)

# 5432. Re: Alkaline charger designs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Emil <emilgborys@worldnet.att.com>
Message-ID: <67dqdu$fon@mtinsc04.worldnet.att.net>
Source record: 88124

Actually, any alkaline cell can be recharged, however, there is an very
critical "terminal to terminal Vmax" that cannot be exceeded.
Said voltage is not much greater than the no load terminal voltage, and
since dc current flow is resistance/voltage difference, it is not possible
to recharge to origional capacity. If the critical terminal voltage is
exceeded briefly, in the order of hundreds of millivolts, the plastic
lined, heavy steel case, is a necessity.
emil, ak9i

miker <&miker@ethergate.com> wrote in article
<3499A32F.6A81@ethergate.com>...
> Chris Williams wrote:
> >
> > Hi...
> >
> > Ive seen a couple of threads on recharging alkaline cells....
> >
snip
> case lined with plastic. The plastic keeps the caustic stuff that
snip

# 5433. Re: QRP? news group?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Glenn Schultz <glenn@spacestar.net>
Message-ID: <01bd0c80$116f5ca0$9cc0bfce@larry.spacestar.net>
Source record: 88125

Try this website, good pics and info...

http://www.qsl.net/mnqrp

---
---
Glenn
N0VYK
10X #68391
n0vyk@spacestar.net
glenn@spacestar.net
Check out the N0VYK Antique and Amateur Radio Homepage:
http://www.spacestar.net/users/glenn/index.html
---
---

leo_whiteway@bc.sympatico.ca wrote in article
<67d2ic$d1q$2@news.bctel.net>...
>
>
> Hi there; Is there a news group dedicated to QRP? I would like to take
part
> in discussions regarding use and construction the the QRP ham radio
field.
> If anyone knows of a news group or possibly a web site, I will be
grateful
> for the information.
>
> Leo (Bing) Whiteway
> Kelowna, BC Canada
>
> From the messy desk of Leo Bing Whiteway VE7UW
>
> Net-Tamer V 1.08.1 - Test Drive

>

## 5434. Icom CT-17 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Emil <emilgborys@worldnet.att.com>
Message-ID: <67e21u$t5c@bgtnsc03.worldnet.att.net>
Source record: 88126

Would like any info on building an ICOM CT-17 level converter. Tnx, emil,
ak9i
--
emil, ak9i

# 5435. Re: Curtis 8044

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <uwOm9bJD9GA.289@ntdwwaaw.compuserve.com>
Source record: 88127

Alltronics usually advertises them. You can find them at www.alltronics.com

I keep a list of parts places at http://www.al-williams.com/wd5gnr

73,

Al Williams

GEnnis wrote in message <01bd0c1b$f37dcc40$a110aacc@ennis>...
>Does anyone know a source for the Curtis Keyer 8044 chip?

## 5436. plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Matt Stock <mstock@ptd.net>
Message-ID: <349AA3F4.9039188E@ptd.net>
Source record: 88128

```
out of gonset 101 linear 1880 volts noload .great for homebrew 811 or
572-b amp 50.00
```

# 5437. Need info about cell phone protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: nabaut@ibm.NET
Message-ID: <199712191851.SAA64260@out2.ibm.net>
Source record: 88129

Does anybody know where I can find info about this subject? How cells controls the phones etc etc etc.

Thanks in advance! Merry x-mas and happy new year to you all!

73 de PY2NI - Horta
gg66rk

## 5438. AM7910 chip needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: mdowning@amberjack.rdatasys.com
Message-ID: <67eivs$c1k$1@herring.rdatasys.com>
Source record: 88130

I am looking for an AM7910 or AM7911 chip. Anyone know of a source,
or perhaps have one?

--Mark

--
Mark A. Downing Relational Data Systems
Phone:(714)263-3899 x157 30 Executive Park, Suite 260
Reply to: mdowning@rdatasys.com Irvine, CA 92714
http://www.rdatasys.com/ or http://www.wm7d.net/

# 5439. FS: >> Heavy 5 Volt Filament Transformers <<

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: "Jeffrey L. Bauman" <wb5kzw@hotmail.com>
Message-ID: <67egud$ifq@bgtnsc03.worldnet.att.net>
Source record: 88131
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors

Have the following "heavy Iron" for sale:

5 volt filament transformers

Raytheon 5.0 volt, 22 Amp (have two) $20 each

Raytheon 5.1 volt, one 43.0 amp winding, one 14.5 amp - $30

Capacitor: .005 ufd, 50,000 volts $20

Neon Tube transformer, 115vac in, 15,000 V @ 30 ma out
AND
Neon Tube transformer, 115vac in, 9,000 V @ 30 ma out $20 for both

Prefer pickup.
Shipping extra from 48322.

Thanks,
Jeff

--
WB5KZW
Near Detroit
Jeffrey L. Bauman
24 hrs (248) 435-4000

# 5440. Re: 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <349acf4c.0@newshost.pcug.org.au>
Source record: 88132
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

Mike Willis <"M.J.Willis "@rl.ac.uk> wrote:

>
>6ft! That is nearly 2m long!
>

But still quite manageable for a pedestrian mobile station if you mount it on a solid hand-carried box that also contains the radio and the battery. Provided you also use a 2.5m trailing wire for the ground, there's no reason why a pedestrian mobile station on 10m need be much less effective than a similar station installed in a car.

You've touched on one of the big problems with hand-held rigs, whether commercially-made or homebrew. It's hard to attach any sort of decent antenna on them - the slightest movement of a substantial antenna as one was walking along would put strain on the antenna connector and a big antenna with a little radio is mechanically unbalanced and a bit hard to carry. Better to use a mobile radio, substantial box and a standard mobile antenna mount for durability. A shoulder strap or handles makes carrying such a station (though it may be heavier than a hand-held) much easier than using a hand-held with an antenna of eqivalent efficiency. The other benefit is the bigger battery possible - 2 or 3 hours of operating time (at 12w PEP) is no problem for a decent pedestrian mobile station.

A 6ft whip would be a bit tricky to use on a bus or train. It should be possible to use a 3 ft whip on board, but it would be less efficient and I've never done it.

73,
--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

_____________________________________________________

# 5441. Re: S-parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <67eict$1mv@nntp02.primenet.com>
Source record: 88133

JohnsonHE <johnsonhe@aol.com> wrote:
: >
: >Joseph H Allen wrote in message ...
: >>Speaking of S parameters, has anyone tried building their own network
: >>analyzer for low frequencies? It shouldn't be too hard: feed a VFO
: >

: I always thought a Network Analyzer displayed both amplitude AND phase.

Not necessarily, Scalar network analyzers only measure and
display magnitude, using broad-band detectors. These are commonly used
in conversion systems, such as superheterodyne receivers, where the
output and input are of different frequencies. Measuring phase under
those conditions takes a lot of effort and $$.

The Wiltron 640 is a good example of a scalar analyzer.

,----------------------. Circuit Design for the
/ What's all this \ RF Impaired
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ ATG Design Services
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ Technical Editor,
. ( ) \ QRP Quarterly
'-| )__| :. \ QRP ARCI 9464
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com
http://www.primenet.com/~ctrask

Graphics by Loek Frederiks

## 5442. Re: QRP? news group?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <349ad293.0@newshost.pcug.org.au>
Source record: 88134

leo_whiteway@bc.sympatico.ca wrote:
>
>Hi there; Is there a news group dedicated to QRP?

As far as I no there is no QRP newsgroup, though there are at least two QRP mailing lists - gqrp-l and qrp-l. There'e also links to a lot of QRP info through my QRP home page (URL below).

73,
--

---

Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

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# 5443. 2M to 10M Transverter ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: tlang@freeway.DIALix.oz.au
Message-ID: <f7b_9712201149@freeway.DIALix.oz.au>
Source record: 88135
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.homebrew

It's 18 Dec 97 18:28,
We'll return to "M.J.Willis and All's
discussion of 2M to 10M Transverter ??

"M> You might find it more convinient to convert an FM CB rig. These have
"M> narrower filters than common 2m rigs to cope with 10 kHz channel
"M> spacing.
"M> They are dirt cheap and you can leave it in the car without having to
"M> worry about it being pinched, though I see you are from Oz where crime
"M> is low anyway.

Only problem is that FM CBs are a tad hard to find here. However, you
could convert an old CB to FM and then tweak it up. I once started on
this, but never finished the project.

... Those who say it can't be done are interrupted by those doing it.
--
| Fidonet: Tony Langdon 3:632/367.2
| Internet: tlang@freeway.DIALix.oz.au
|
| Freeway Internet Gateway, Melbourne, Australia. For information about
| our services and conditions of use, e-mail:
| info@freeway.DIALix.oz.au, to receive a copy of the FAQ.

# 5444. Simple Relay Circuit Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: annen@execpc.com
Message-ID: <882579431.1656619011@dejanews.com>
Source record: 88136
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I need a simple relay circuit that will connect a PTT line to a transmitter when the device that triggers the relay (or whatever is needed) conducts. I have found an unused pin out on a motorola MC3359P that is in my scanner that conducts when the squelch is open. You see, when the squelch is open, I would like the transmitter to . Pin 16 AUDIO MUTE is connected to ground when the squelch is open. But what is REALLY neat is that pin 16 isnt even used, meaning I can do whatever I want with it. One hitch though, very small current (a few ma) and no more than .7V can be used. Please tell me if you can help. Greatly appreciated.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5445. Re: 10m amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <349B4519.6EA2@txeas.net>
Source record: 88137

Doc Holiday wrote:
>
> Does anyone have plans for a solid state or tube type amplifier?
> Please post or e-mail. Thanks..... ssrick@hotmail.com

Input/output power levels?

The 1997 ARRL Handbook has a big 'un on p. 13.29, and a smaller
6-meter amp that could be padded down to 10 meters on p. 13.38.

I think Motorola Application Notes EB-63, AN-762, and AN-758
are still in print. These will light your fire -- all these
designs are adaptable to nearly any NPN RF transistor that works
in HF.

I have a stack of amp plans that date back to the 1950s, and
I've kept the ones that are easiest and cheapest to build.
But I won't completely give away all my best secrets.

Try this:
http://www.motorola.com
and search for the application notes. It'll do you good.

Jim N6OTQ

Give a man a fish, and he will eat for a day. Teach a man to fish,
and he will eat for a lifetime. Stick a fish in his ear, and you're
reading "Hitchhiker's Guide To The Galaxy."

# 5446. Re: computer / radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <67fgtr$asd@mtinsc03.worldnet.att.net>
Source record: 88138

Try checking out DirectPC. Don't know much about them, but some ISPs
can be redirected to download through DPC. Will take their special gear
to access.... Woody

Paul Crum wrote:
>
> How can I as a person get my computer hookedp up to the interenet via
> Satalite and also have a fast download rate.

--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the
Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing
stuff.
http://www.geocities.com/capecanaveral/3722
.

# 5447. Re: Microwave ATV from a Microwave!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <349B46FB.25DA@txeas.net>
Source record: 88139

I'd be interested to hear the results of your work.

I read that article with some interest, and made some minor
forays into the experiment -- but with the foreknowledge that
it appeared in the APRIL issue, and Wayne Green has been known
to pull some legs.

It's worthy to note that a kilowatt on 2400 MHz is still a kilowatt,
no matter what it began life as. I'm surprised that there's not
more experimentation with microwave oven magnetrons. Seems like
there should be a relatively cost-effective way to provide frequency
stabilization for moonbounce work -- cost-effective relative
to what a TWT or solid-state alternative would cost.

Because of the high power levels involved, I'd be reluctant
to use this much juice for point-to-point terrestrial contacts.
I'm bookmarking your page.

Jim N6OTQ

P.S. Check this out:

http://lonestar.texas.net/~jstrohm/babies/

# 5448. Re: 7417 IC Substitute

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: John Fakan <usscod@en.com>
Message-ID: <349B5E35.E3623216@en.com>
Source record: 88140

Hi, John,

The TTL 7417 is a hex buffer/driver. It does not invert so its logic function is trivial. (The 7416 is the inverting version.) Its primary use is simply to buffer an input signal to solid TTL levels.

If you are sure that is what you want just send me an address and I'll send you a few.

John, KB8MU

John Moore wrote:

> I would like to do a project that calls for an IC 7417. I can't find
> one. There are plenty of IC's that have 7417 in the number but they look
> to have a different function. Perhaps I am looking in the wrong place.
> Any ideas?
>
> Thnaks
> John AB5YQ

# 5449. Re: need circuit for mic preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: Dave Eckhardt <dave_eckhardt@hp.com>
Message-ID: <349AF3A5.2797@hp.com>
Source record: 88141

Grant Youngman wrote:
>
> MR DXER wrote:
> >
> > looking to build a mic pre amp
> > anyone know a easy circuit to build
>
> Look in the ARRL Handbook. You will find suitable single transistor
> circuits for both low and high Z mics.
>
> Grant/NQ5T
>
> nq5t@gte.net
> http://home1.gte.net/nq5t
>>>>>>>>>>>>>>>>>>>>>>>>>>>>> <<<<<<<<<<<<<<<<<<<<<<<<<<

Seems to me about any op amp, including the ole standard 741, would make
a dandy mic preamp.

Dave - W6LEV

# 5450. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <3499c567.5848930@news.gate.net>
Source record: 88217

On Wed, 17 Dec 1997 14:09:51 GMT, RJBurden@BigPond.com (Richard
Burden) wrote:

>"minilinx" <minilinx@netaccess.co.nz> wrote:
>
><snip>,
>>
>>I need theses values in terms of R + jX. so that I can match for
>>1) optimum load for Power Amplifier
>>2) interstage match between pre-driver and Power Amp.
>Dave,
>I hope someone has pointed out that "both Y and S parameters for a power
>transistor are called small-signal parameters, and should not be considered
>in the design of rf power amplifiers" (Bowick) Rather, the manufacturer's
>data sheet should be consulted for the input and output impedances.
>
>Regards,
>Richard
>
>Bowick, C. 1987, "RF Circuit Design", Howard Sams
>

>-----------------------
>Richard VK6FKB
>"Nothing better than home-brew, except perhaps an absence of Spam"

If you are useing RF power FETs in low power range 100 mW to 1 watt
range the small signal S-parameters will get you very close. It will
not be an exact solution, but close enough if using variable component
to gain a decent match.

Regards
James WA4BZJ

# 5451. Re: need tube info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: oak@texas.net
Message-ID: <67cim7$kkf$1@news3.texas.net>
Source record: 88218

In article <349936E7.5812@cpmx.saic.com.xxx>,
stephen.h.robertson@cpmx.saic.com.xxx says...
>
>David Hatch wrote:
>>
>> Greetings,
>> I recently acquired a pair of tube audio amplifiers. No
particular
>> markings, except for the power xfmr, so I found AC power
>> in easy enough(!). The output xfmr was also a no-brainer. They at
>> least somewhat work. There is a gain pot on the input, and I can
>> inc/dec to get varying levels of hum. But when I hook up my sig. gen
>> to the input, there is *much* more hum than signal. They're fairly
>> simple; 2 stages of 12AX7's and a 6AQ5A, with a 6X4 for HV
>> rectification. The output xfmr is a Triad S-53X Universal. 6 output
>> lugs, but not labeled for any particular impedance. There is also
>> a can about 1 1/2" dia x 3" tall, labeled James C-1800 6 volt 60 cps.
>> On one amp it is very noisy. The other is quiet. No idea what it is.
>> What I would like is if anyone could direct me a bit as to
>> what to look for signal-wise. I don't have much tube background, so
>> maybe a book or two to look up? If someone wants to go more in-depth,
>> I could probably come up with a schematic in .bmp by next Monday.
>>
>> Thx, 73's
>> David
>
>The hum is probably from bad filter caps. Just replace all
electrolytic
>caps with new ones of same or greater capacity and same or greater DC
>working voltage. Be sure to observe polarity and connection points
>(i.e., the negative lead(s) may not necessarily be connected to the
>chassis groun as one might expect!). Remove the old caps from the
>circuit entirely.
>
>As to the "James" unit - my guess is that it's a vibrator. You may
have
>an amp that is AC/DC - designed to work either from household mains or
>from 6v DC. All the tubes will work with 6v on the heaters and the
>vibrator is used to mechanically chop the DC into something close
enough
>to AC to be stepped up via a transformer for B+. Vibrators were very
>common in pre-transistor car radios.
>
>73 de Steve, KE4OH

>--
>To get my real e-mail address, remove the characters ".xxx" at the end
>of my address.

Seasons Greetings,

Good call, Steve....:-}

The old vibrators were used, as Steve stated, to turn DC into something that resembled AC, which could be stepped up for plate voltages, screen voltages, or whatever was needed. They were neat devices with a set of "break" contacts in series with the relay type winding. The timing on the break was designed so that it gave even pulses which were then filtered before stepping up in voltage. The contacts had a bad habbit of burning out. They were pretty common in the junque-yard car radios from which we scrounged parts when I was a kid in the early 1960's.

73's....de...K7RMJ... Frank dit..dit

## 5452. Curtis 8044

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: GEnnis <gennis@enter.net>
Message-ID: <01bd0c1b$f37dcc40$a110aacc@ennis>
Source record: 88219

Does anyone know a source for the Curtis Keyer 8044 chip?

# 5453. Re: GPS Antenna AMP plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-19 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <67cm7l$59i$1@news1.teleport.com>
Source record: 88220

In article <34984995.39C0@txeas.net>, jstrohm@.texas.net wrote:

>. . .
>For frequencies above 500 MHz, the PC board material and geometries
>are more critical -- there have been a number of articles in QST
>and QEX on this particular topic over the last decade. G-10
>(the standard light green glass-epoxy) is marginally usable
>to 2 GHz if you're lucky. . .

"Usable" is a relative term. I'm currently developing a product operating at 5.8 GHz, and it's entirely on epoxy-glass board. I know of one similar commercial product operating at 10 GHz on epoxy-glass. Both include an oscillator and simple receiver. The board loss would very possibly be enough to degrade a low-noise amplifier, though, and I wouldn't try to make a high-Q filter on it at these frequencies.

Roy Lewallen, W7EL

# 5454. Re: Icom CT-17 info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <349C665D.623C@icss.net>
Source record: 88071

Emil wrote:
>
> Would like any info on building an ICOM CT-17 level converter. Tnx, emil,
> ak9i
> --
> emil, ak9i

Try jbi@apci.net

# 5455. Re: Spectrum Analyser

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <ELGsx1.268@news2.new-york.net>
Source record: 88142
Cross-posted to: rec.radio.amateur.homebrew,lmfmin@ericsson.fi

Mikael Nordman <mikael.nordman@lmf.ericsson.se> wrote:

>Hi,
>Does anybody know if:
>-There exist any software that turns a PC soundcard into a AF spectrum
>analyser ?

For a very nice program do a web search for DTMF_FFT (don't recall the
web page), or email the author emil@interlog.com

here are some details:

DTMF_FFT version 1.00
a DTMF & CTCSS generator and decoder &
a spectrum analyzer program for DOS
Copyright (C) 1996 Philip VanBaren & (C) 1996 Emil Laurentiu
(YO3GGH)

PROGRAM FILES:

DTMF_FFT.EXE is a program for the Soundblater compatible cards.

The program samples the input, performs an FFT, and graphs the output.
It
also decodes and generates DTMF numbers and the sub-audible CTCSS
tones.

INI file and command line options provide the user with the ability to
select linear/log frequency and amplitude scales as well as sampling
rates,
length of the FFT, DTMF generating speed, threshold DTMF and CTCSS
level etc.

## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

# 5456. Re: Alkaline charger designs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <ELGtnp.31s@news2.new-york.net>
Source record: 88143

"Emil" <emilgborys@worldnet.att.com> wrote:

>Actually, any alkaline cell can be recharged, however, there is an very
>critical "terminal to terminal Vmax" that cannot be exceeded.
>Said voltage is not much greater than the no load terminal voltage, and
>since dc current flow is resistance/voltage difference, it is not possible
>to recharge to origional capacity. If the critical terminal voltage is
>exceeded briefly, in the order of hundreds of millivolts, the plastic
>lined, heavy steel case, is a necessity.
>emil, ak9i

After the joking of my fellow friends, I'll try to give you a
technical answer: In a word, NO.
I personally own a commercial, specially designed charger for
alkalines from Saitek. It implements a special charging algorithm
(designed to eliminate the need for that plastic lined steel case. I
originally bought it because I had equipment (a palmtop PC) that
required the 1.5V of alkalines and wouldn't work on 1.25V NiCd cells
due to insifficient voltage. Well, I did manage to recharge some but I
never was sure how full they were recharged. What ended the story was
that they started spilling after several recharges, once inside my
scanner (lucky it had a removable - and washable - battery cage, and
that this has not happened in my palmtop!). Conclusion: I won't take
chances anymore, although I've heard there are special rechargable
Alkalines designed for this application with a special charger, all
from Rayovac.
Just my 2 cents...hope that helps.
cheers!

## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

# 5457. Re: Microwave ATV from a Microwave!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <ELGtrt.3G1@news2.new-york.net>
Source record: 88144

Jabran Soubeih <soubeih@expert.cc.purdue.edu> wrote:

>Hello,
>I am currently working on a Microwave ATV transmitter from a microwave
>oven.

Better BE CAREFUL working with that powerfull microwave energy (and
warn others too)...This is no game, both the lethal voltages present
as well as the dangerious microwave energy itself.

good luck...

## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

# 5458. Re: Need info about cell phone protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <ELGtur.3tz@news2.new-york.net>
Source record: 88145

nabaut@ibm.NET (Horta) wrote:

> Does anybody know where I can find info about this subject? How
>cells controls the phones etc etc etc.

try: http://radiophone.dhp.com/
## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

# 5459. ## Modifying a radio receiver for High speed digital data reception ##

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <ELGtyA.46F@news2.new-york.net>
Source record: 88146

Hello All,

I'm trying to modify my radio to receive high speed digital data, such as packet radio. Apparantly, just tapping the discriminator and adding a data slicer isn't enough. The data comes in as junk, due to phase distortion by the IF filter. I probably need to replace the IF filter. Is anyone here experienced in this field and can give a helping hand? I'm talking about 8000 baud and up (packet is 9600?).
Thank's a bunch for any help offered. Cheers!

## Note: when Replying, please email me directly in addition to posting here, so no responses are missed. Don't forget to remove the "97" from my email address inserted as an anti-spam counter measure...:-)

Thanks and best regards,
Tinkerman

## 5460. F.S. tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <67f9i9$4pt$3@newsfeed.smartt.com>
Source record: 88147

The following tubes for sale:

- (7) 6JR6 new for $20.00 U.S. each
- (5) 6LQ6 used(test like new) for $15.00 U.S. each.
- (2) 6LX6 used(like new) for $10.00 U.S. each.
- (1) 6A3 NOS for $25.00 U.S.

For any info. Contact me. THANKS
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5461. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <349b3204.8590819@news.azstarnet.com>
Source record: 88148

On 18 Dec 1997 04:56:55 GMT, davidn3213@aol.com (DavidN3213) wrote:

>I wrote:
>
>>>What you'd do to get your transistor's input R+ jX, for instance, is set up
>>a
>>>simple one-port circuit consisting of a TWO, characterized by your S
>>parameter
>>>data, with a 50-ohm resistor connected across its output and its one port
>>>connected to the TWO's input. After analyzing the circuit, ask Report
>>Editor
>>>to plot RZ11 (the real part of Z11) and IZ11 (the imaginary part of Z11) for
>>>the circuit. This gives you your device's input R+jX at (and interpolated
>>>between) the frequency points in your S-parameter data.

>[repeat of same procedure for output deleted]

>And Wes Stewart wrote:

>>Why not just set it up as a two port in the first place and not worry
>>about the 50 ohm terminations?

>Because when you ask ARRL Radio Designer for RZ11 and IZ11 of a two-port
>network, the program leaves the network's output port unterminated. This can
>lead to significant errors in the values reported for RZ11 and IZ11 if the
>network doesn't exhibit very high reverse transmission gain, as will be the
>case for many active devices. (Likewise if you ask for RZ22 and IZ22 of a
>two-port; then, the program leaves the network's input port unterminated.) The
>"two-port as explicitly-terminated one-port" approach end-runs this effect by
>duplicating the opposite-port termination used in determining the network's S
>parameters.

>Not that many of us could afford its five-figure price for home and hobby use,
>but the 32-bit successor to ARRL Radio Designer's parent program includes ZIN
>and ZOUT among its two-port responses. These allow you to set opposite-port
>terminations *within Report Editor* while reporting the analyzed two-port's
>input and output impedances, making the "two-port as explicitly terminated
>one-port" workaround unnecessary in characterizing the input and output

>Regards,

>David Newkirk, W9VES

Well, I should have known this, as I reported this behavior to you and
Dr Rohde almost three years ago. Only, after talking to Dr. Rohde on
the telephone at that time, I thought that he was going to fix this
among other problems with the release of version 1.5.

You should recall that I offered the example of a 3 dB pad that consists of two shunt 17.6 ohm resistors on the input and output respectively, with a 292 ohm in series between them.

Radio designer will correctly report an S21 of -3.00 dB, and an S11 of -71.1 dB. However, it will incorrectly report a MZ11 of 150.3 ohm. It does indeed magically disconnect the output 50 ohm port to report the MZ11.

As I pointed out to Dr. Rohde, when I use my HP8510C network analyzer, to actually measure something such as this, it doesn't disconnect itself when presenting the magnitude of the input impedance.

When my company spends five figures for RF CAD stuff, its HP/Eesof, so I can't comment on the "pro" version of Compact.

Of course, most of the blame for the confusion lies with the absolutely absymal manual supplied with the program. It seems to be a cut-and-paste job using the Super-Compact manuals as a source and it suffers accordingly. I mean really, why is there stuff on time-domain analysis in the manual, when the program doesn't have it?

73, N7WS

## 5462. Tripp-Lite 1-KW invertor schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <349b2c50.49963660@news.pipeline.com>
Source record: 88149

Anybody got something on that?
I have a PV-1000 FC, which I got at a pawn shoppe,
and need to replace some E-lytic caps, and test
some other stuff, and maybe build an inrush current
limiter, and who knows what else, like maybe a
sinewave oscillator, and I need the papers on it.

Any suggestions?

TIA.

Lou (WB0NRU) H
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 5463. WTB:8877 sockets and chimneys

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: kb9sikk@aol.com
Message-ID: <19971220041500.XAA22228@ladder02.news.aol.com>
Source record: 88150

Need a pair of each for the 8877. Prefer Eimac but what you got?

73,
K-K

# 5464. Re: Alkaline charger designs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: ka0yos@aol.com
Message-ID: <19971220042201.XAA22973@ladder02.news.aol.com>
Source record: 88151

Guys,

Why reinvent the wheel? The "Renewal" stuff from Ray O Vac works VERY
well!
The cells are manufactured a little different, but the the system works!
Remember unlike NiCads Renewals like to be charged (No memory). Recharge after each use, NOT when they die. I have some that have been charged over 100 times and going strong. The charger is cheaper than you or I could build anyway. NO steel case, and a nice (LED goes out) indication of when they are charged.

If you are curious about the brass tacks of the deal QEX did a really nice article a while back. Contact the ARRL for more info.

73,
Joe

## 5465. Hundreds of resources for Homebrewers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <349a64ae.528660@news.mnsinc.com>
Source record: 88152

You can find a web site with Hundreds of resources for Homebrewers.

We list hundreds of sources of parts, with both mail-ordering
information, catalog sources, web links etc etc.

Ideal for folks homebrewing or restoring ham gear of all kinds.

Have a great visit to:

http://www.mnsinc.com/bry/mega/partsupp.htm

AND

http://www.mnsinc.com/bry/mega/megakits.htm

Also, don't miss:

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

Have a Happy Holiday, 73 to all,

Bry

# 5466. need 1600v transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <67fjp2$ab5$1@news3.microserve.net>
Source record: 88153

good day,

I am looking for a 1600v 250ma transformer with 110v primary.
It need not have any other windings. Hope to find something
about 4 to 5 inches square. The smaller, the better. It is
for a 4CX250 2mtr amp.
73 TNX

# 5467. Re: Gray Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: derekw@alphalink.com.au
Message-ID: <882611056.241631248@dejanews.com>
Source record: 88154

In article <585389489wnr@equine.demon.co.uk>,
John@equine.demon.co.uk wrote:
>
> I could use some help with a Gray code disc please. IE How to make one
> and then to read it into a pc.
>
> I wish to find wind direction via my pc.

There may be an easier way to do what you want.

Theres a homebrew anemometer at
http://www.alphalink.com.au/~derekw/ane/anemain.htm
which may be of interest. It reads speed and direction.
It has a serial port, so your computer can read the wind data.

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5468. Re: Microwave ATV from a Microwave!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <Qz+UwLAuV5m0EwoB@pacsat.demon.co.uk>
Source record: 88155

In article <349B46FB.25DA@txeas.net>, Jim Strohm <jstrohm@txeas.net>
writes
>I'd be interested to hear the results of your work.
>
>I read that article with some interest, and made some minor
>forays into the experiment -- but with the foreknowledge that
>it appeared in the APRIL issue, and Wayne Green has been known
>to pull some legs.
>
>It's worthy to note that a kilowatt on 2400 MHz is still a kilowatt,
>no matter what it began life as. I'm surprised that there's not
>more experimentation with microwave oven magnetrons. Seems like
>there should be a relatively cost-effective way to provide frequency
>stabilization for moonbounce work -- cost-effective relative
>to what a TWT or solid-state alternative would cost.

Ehhhhhh!

Sounds V dangerous! An italian amateur did the same a few years ago
(reported in RSGB Radcomic)

Be careful! but good luck!

Be interested in a report for the newsletter if you get time!

73 Simon GM4PLM EMN Editor
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 5469. FS: QRP Rig....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Mitch <mitchell@kdsi.net>
Message-ID: <349BD606.6C1A@kdsi.net>
Source record: 88156

I have forsale or trade for SWR/Watt Meter a Heath Kit HW-7 3 Band QRP Rig...Asking $100.00 or trade for SWR/Watt Meter.... Thanks

Raymond
KB0IOK
Oskaloosa, Iowa...
mitchell@kdsi.net

## 5470. Re: QRP? news group?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <349BD512.17F@ix.netcom.com>
Source record: 88157

leo_whiteway@bc.sympatico.ca wrote:
>
> Hi there; Is there a news group dedicated to QRP? I would like to take part
> in discussions regarding use and construction the the QRP ham radio field.
> If anyone knows of a news group or possibly a web site, I will be grateful
> for the information.
>
> Leo (Bing) Whiteway
> Kelowna, BC Canada
>
> From the messy desk of Leo Bing Whiteway VE7UW
>
> Net-Tamer V 1.08.1 - Test Drive
---
Hi Leo --- no news group that I know of -- but several Mail Lists at
URL:
http://pw2.netcom.com/~ac6v/pageae.html

73 es happy Holidays
Rod in San Diego
--
AC6V's HAM AND DX REFERENCE GUIDE
70 PAGES AND OVER 2000 LINKS TO DX AND HAM RADIO!
Main Page: http://pw2.netcom.com/~ac6v/index.html
Master Index: http://pw2.netcom.com/~ac6v/pageas.html

# 5471. Herring Aid 40m receiver article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Chris Whiteside <cfwhiteside@earthlink.net>
Message-ID: <349BD2A0.79DA@earthlink.net>
Source record: 88158

I'm looking for a copy of the 40m DC receiver article from QST in the late 70's which was built in a herring (fish) can. Does anyone have old QST's or an index and could tell me which QST it was in? Will pay postage and copy costs if you have it.

73,

Chris K6FP
cfwhiteside@earthlink.net

# 5472. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: davidn3213@aol.com
Message-ID: <19971220151801.KAA02058@ladder01.news.aol.com>
Source record: 88159

Wes Stewart wrote:

>>>Why not just set it up as a two port in the first place and not worry
>>>about the 50 ohm terminations?

I wrote:

>>Because when you ask ARRL Radio Designer for RZ11 and IZ11 of a two-port
>>network, the program leaves the network's output port unterminated. This
>can
>>lead to significant errors in the values reported for RZ11 and IZ11 if the
>>network doesn't exhibit very high reverse transmission gain, as will be the
>>case for many active devices. (Likewise if you ask for RZ22 and IZ22 of a
>>two-port; then, the program leaves the network's input port unterminated.)

[deletions]

Wes Stewart wrote:

>Well, I should have known this, as I reported this behavior to you and
>Dr Rohde almost three years ago. Only, after talking to Dr. Rohde on
>the telephone at that time, I thought that he was going to fix this
>among other problems with the release of version 1.5.

It's actually not a problem; it's appropriate behavior, because what we're asking for by requesting Z responses in ARD are--as I'm sure you know--*Z parameters*, which by definition are determined for a given port by leaving the opposite port(s) unterminated. If you go after Z parameters with a real Z-parameter test set, it, too, will unterminate the opposite port of the device under test. (In my earlier post, I used the phrase *significant errors* in the sense that what Dave Huisman sought was his two-port's input and output R+jX, not the the real and imaginary parts of its Z parameters Z11 and Z22.)

Super-Compact and Microwave Harmonica 6.5, supersets of ARRL Radio Designer 6.5, also exhibit this (appropriate) behavior in the reporting of Z parameters. So does their 32-bit successor--but it also includes ZIN and ZOUT, as well as YIN and YOUT, response options--which allow you to report a two-port network's port impedance (ZIN/ZOUT) or admittance (YIN/YOUT) in the presence of explicit, definable-after-analysis terminations.

>You should recall that I offered the example of a 3 dB pad that
>consists of two shunt 17.6 ohm resistors on the input and output
>respectively, with a 292 ohm in series between them.

>Radio designer will correctly report an S21 of -3.00 dB, and an S11 of
>-71.1 dB. However, it will incorrectly report a MZ11 of 150.3 ohm.
>It does indeed magically disconnect the output 50 ohm port to report

>the MZ11.
>
>As I pointed out to Dr. Rohde, when I use my HP8510C network analyzer,
>to actually measure something such as this, it doesn't disconnect
>itself when presenting the magnitude of the input impedance.

It will disconnect itself if what it's actually measuring are *Z parameters*--unless, in determining Z parameters it's actually measuring S parameters and then doing the necessary math to convert them to Z parameters. :-D Again, remember: measuring a network's input and output R+jX and input and output Z parameters may validly result in *different numbers*, depending on the terminations used in determining R+jX.

That said, for the record, bring up Modify Reports for the MZ11 report for your 3-dB pad and look carefully at the terminations reported for that response. You'll see *no* termination shown for Port 2--as is appropriate considering the definition of Z parameters. If ARD didn't report MZ11 as 150.3 ohms under that condition, it would be defective. If what you're trying to do is use ARD's Z-parameter reporting ability to get R+jX, you must hard-code the appropriate termination across the opposite port unless you want to report R+jX with the opposite port open.

[deletion]

>Of course, most of the blame for the confusion lies with the
>absolutely absymal manual supplied with the program. It seems to be a
>cut-and-paste job using the Super-Compact manuals as a source and it
>suffers accordingly.

Yes, the ARRL Radio Designer manuals were based on the Super-Compact manuals--as was appropriate in keeping costs down--with some value added by yours truly. Writing an entirely new book would have made it impossible to bring the product to market at the asking price and in a reasonable amount of time. For the money and within the constraints of its element library and netlist-based circuit entry, it's a very good RF-circuit simulator--as those interested in using its extant features rather than complaining about its absent features know. ;-D

>I mean really, why is there stuff on time-domain
>analysis in the manual, when the program doesn't have it?

Wes, the time-domain features documented are present and functional. ARD Tech Support can provide you with several example circuits to exercise them. That said, don't expect anything like SPICE; it's still linear, small-signal analysis.

Regards,

David Newkirk, W9VES

# 5473. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <NhK8NbAMi4m0EwbQ@ifwtech.demon.co.uk>
Source record: 88160

Wes Stewart wrote:
>Of course, most of the blame for the confusion lies with the
>absolutely absymal manual supplied with the program. It seems to be a
>cut-and-paste job using the Super-Compact manuals as a source and it
>suffers accordingly. I mean really, why is there stuff on time-domain
>analysis in the manual, when the program doesn't have it?
>
It is a manual of two parts. The part that was written specifically for ARRL-RD is an excellent introduction, but it doesn't cover all the available functions. The "reference" part copied from the Super-Compact manual covers all the functions (and more, as Wes says!) but it doesn't explain how to use them.

There is a clear need for a series of Application Notes or FAQ documents to fill this gap.

By the way, what has happened to the ARRL RF-CAD reflector? AFAIK I'm still subscribed, but haven't receved a message for several months.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

## 5474. Microwave ovens for ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <349BE7A7.6A33169E@tri.net>
Source record: 88161

Just urban lore, but there was some discussion at one of the VHF meetings some years ago about 3 hams working with microwave ovens for moonbounce. Probably a little loose on shielding while tuning. Word was that one or two of them developed brain tumors. The other ceased the attempt.

Power is power. Your eyes (or the holes for them) become waveguides somewhere up there.

As always, careful, careful.

N0UU

# 5475. Need info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Steve Carter <sjcarte@tconl.com>
Message-ID: <349BEFB5.5C52@tconl.com>
Source record: 88162

Can some help me find info on building a small RF amp 50-100w 3-30Mhz
I am look for info on the input and output Xformers and design specs
Thanks Steve
--

http://www.tconl.com/~sjcarte/ OPS Engine Info
http://members.aol.com/mutineers/
http://members.aol.com/apba17/
Thanks Steve Carter

# 5476. Re: Ramsey FM-10 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierELI267.FLp@netcom.com>
Source record: 88163

In article <34996103.28D2@spnt.com>, K.Klevesahl <slipbit@spnt.com> wrote:
>I'm really having a lot of fun with this sterio xmitr,
> BUT, is it possible to somehow use a crystal to stablize the xmit
>freq????.
> I'm getting tired of having to adjust the inductor so that the freq
>stay's put as the battery voltage drops, or when the antanna cable is
>moved, not to mention it what happens as my hand gets within 6 inches to
>adjust it.

Try adding a voltage regulator, like a LM317. And a metal cabinet.
Or get an FM-25 (?).

> Also, has anybody figured out who makes the chip? or better yet, know
>of a source for more and data sheets?

Rohm, a japanese manufacturer. The BA1404 is now discontinued.
But a couple of distributors still sell it. Ramsey and DC Electronics,
as I remember.

There's been at least one scanned copy of the datasheet on the web,
I found it from a pointer in alt.radio.pirate several years back.
It's pretty sparse. It's also in a book with the grand and phony
title (as I remember it) of, "International Encyclopedia of Integrated
Circuits" by Stan Gibilisco, published by TAB circa 1987-1989.

More information may be had out of various magazine project articles.
One in Radio-Electronics/Electronics Now, July 1992. Also the FM-10
was project article in Popular Electronics a couple of years later.
( both http://www.gernsback.com). Another source would be Don
Lancaster's columns for various magazines. Try http://www.tinaja.com.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

# 5477. Re: Need info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Jim Strohm <jstrohm@txeas.net>
Message-ID: <349C153F.27DF@txeas.net>
Source record: 88164

Steve Carter wrote:
>
> Can some help me find info on building a small RF amp 50-100w 3-30Mhz
> I am look for info on the input and output Xformers and design specs

The input/output transformer specs are in the 1997 Handbook. They've
been there for 25 years. There is an article in QST in (I believe)
1980 called "Build this Solid-State Titan," authored by Helge
Granberg (SK), that details a simple broadbanded push-pull
two-transistor HF amp. This design appeared in the 1981 Handbook
and some later editions as well. Your most significant change
to the plans is to convert from a TO-8 pinout LM723 to a
DIP LM723. This is a trivial change. You may want to device
a COR for the amp. This is also trivial.

Because this amp could be mis-used for Class D service (you will
see EXACTLY this layout on every chicken-band amp you ever open up),
I am not going to give you more specific references than this.
You have to do enough work on your own.

But I'll give you a hint -- most TV sets built after 1970 have
a balun core on the 300-to-75 ohm UHF tuner input that is PERFECT
for the input transformer, and you can stack three to five Amidon
cores on each side of the output transformer (use a suitable
permeability) if you cannot locate the correct Stackpole cores
specified in Granberg's article.

And if you can't build, there are several sources on the net to BUY
these amps. Their disclaimer says something like "for ISM usage
only." Again,you have to do your own research but the information
is easily accessible.

73
N6OTQ

# 5478. Re: Gray Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <349C0B1B.4BFE@pop.removethistomailme.net>
Source record: 88165

John Marlow wrote:
>
> I could use some help with a Gray code disc please. IE How to make one
> and then to read it into a pc.
>
> I wish to find wind direction via my pc.
>
> --
> John Marlow G1ORP

Once you get the encoder disc built, you may find the following snippet
of code useful (I wrote it to interpret the output of a tuning-dial
shaft encoder salvaged from an old Icom rig):

```
//
// Shaft-encoder state table for 95S-1 tuning
//

int shaft_rotation[] = { 0, 3, 1, 2 };

#define ROTATE_NONE 0
#define ROTATE_CW 1
#define ROTATE_CCW 2

...

//
// Check for dial rotation
//

static unsigned char
shaft_state,last_shaft_state,input,rotate,last_rotate;

rotate = ROTATE_NONE;

input = inp(in_port);

shaft_state = shaft_rotation[((input & 0x80) >> 6)
|
((input & 0x20) >> 5)];

if ((shaft_state != last_shaft_state) &&
(last_shaft_state != 0xff))
{
if (((shaft_state == 0) && (last_shaft_state == 1)) ||
((shaft_state == 1) && (last_shaft_state == 2)) ||
((shaft_state == 2) && (last_shaft_state == 3)) ||
((shaft_state == 3) && (last_shaft_state == 0)))
```

```
{
rotate = ROTATE_CCW;
}
else
{
rotate = ROTATE_CW;
}

if (last_rotate != rotate)
{
last_rotate = rotate;
rotate = ROTATE_NONE;
}

++pulse_count;
}

last_shaft_state = shaft_state;

...
```

"pulse_count" is incremented when the disc turns either way. You can use this to gauge the speed of rotation with a simple timing loop (i.e., see how many pulses you get per 18.2 Hz timer tick on the PC, by reading the timer count at segment 0, offset 0x46c). "rotate" is set to ROTATE_CW, ROTATE_CCW, or ROTATE_NONE. The code is set up to respond only on successive pulses in the same direction, to provide some additional immunity to vibration and jitter.

This particular shaft encoder is hooked up to my PC via the parallel printer port, whose data port is at "in_port". Bits 7 and 5 receive the I and Q signals from the shaft encoder in my code above, corresponding to pins 11 and 12 on the parallel port connector. You'll have to adapt this part of the code to whatever interface scheme you use for your anemometer disc.

-- jm (de KE5FX)

---
Note: My E-mail address has been altered to avoid spam
---

# 5479. Davis Weather Wizard III Protocol

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Lenny Story <storys@ma.ultranet.com>
Message-ID: <349C2C3B.75AEEF09@ma.ultranet.com>
Source record: 88166

Greetings,

Anyone know the protocol for the Davis Weather Wizard III ?? The docs
say that it needs their software to get it to work. I am trying to write

software to integrate it into my station.

Thanks In advance.

Lenny Story
N1YEZ

## 5480. Help.w/autoAntTuner....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Mitch <mitchell@kdsi.net>
Message-ID: <349C579A.D73@kdsi.net>
Source record: 88167

Hello all....I remember seeing in either QST or 73 magazine and article telling how to automatically set the Screwdriver Antenna to resonance by just dialing in the freq on your rig...I would like to construct such a project....Does anyone know the location of that article....Thanks

Raymond
KB0IOK
Oskaloosa, Iowa
mitchell@kdsi.net

## 5481. transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Rob Pickard <unclerobbie@msn.com>
Message-ID: <67hi1t$4q71@ha2.ntr.net>
Source record: 88168

I have a kenyon transformer rated at 5.2 volts at 30 amps.This unit was designed for 2 3-500z or 2 4-400.This transformer is brand new.I am asking for 35.00 on this,which is a bargain!! Rob

## 5482. powersuply help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Ace <ace-dsgn@ctaz.com>
Message-ID: <67hmf3$1vv$1@bigdog.eli.net>
Source record: 88169
Body handling: Inline uuencoded payload not displayed: circut.bmp

Hi im trying to build a powersuply and could use some help.

the problem is when i switch the power curent surgen into cap 1 and i blow a fuse.
Id rather not use a serise resistor sence its not needed after cat caps charged and will drop voltage acrost it......expecily at the 50 amps that the transistors can handle (at some Vce)

a quick sketch is atached.......id aprecate aney thoughts....thanks

[Inline uuencoded payload not displayed: circut.bmp]

# 5483. Re: need circuit for mic preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-20 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <67i24v$f0o$1@gte1.gte.net>
Source record: 88170

Jim Strohm wrote:
>
> Grant Youngman wrote:

> Well, which edition? There are 75 of them now.

Well, now, we can rule out a whole gob of those for a solid state
circuit can't we?
>

> Please, when you ref the handbook, give us a clue about what year,

Good gracious, guys. If you don't see one with a single 2N2222a or
MPF-102 or something, and there's a circuit in whatever version you have
that uses an op amp --- then presume you have a functioning cerebral
cortex, use THAT one and don't grumble that I didn't lead you to the
issue, chapter, page, and verse. If you don't have any older Handbooks,
they are worth far more than their typical hamfest used-book-pile cost,
and you can even learn something from them.

But to your point, look at the ARRL Handbook for 1994 (as en example),
Chapter 4, page 21 you will find FOUR suitable circuits using single
transistors for various mic impedances. Newer Handbooks have perfectly
good op amp circuits in them as well -- although they aren't necessarily
"better" in any sense, just apparently more "chic"

Grant
nq5t@gte.net
http://home1.gte.net/nq5t

# 5484. fs- New COLLINS filter $100-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19971221050100.AAA20023@ladder01.news.aol.com>
Source record: 88072

Hi Guys;
For SALE:
Collins Mechanical filter F 300 Z 6, s/n 1S2, p/n 526 9363 011.
Brand New $100-shipped Conus!
Please do not ask what it's used for, or the specs. I do not know, you'll need to do your own homework on this one, but it is new and in the original Collins box!
Thanks es 73.....RICH RLUCCH2098@aol.com

# 5485. Re: powersuply help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <67i936$7rl@bgtnsc02.worldnet.att.net>
Source record: 88073

Do use a series resistor. The trick is to also use either a voltage sensing rcircuit or timer and a relay to short out the resistor when the caps have charged a bit...
Woody

Ace wrote:
>
> Hi im trying to build a powersuply and could use some help.
>
> the problem is when i switch the power curent surgen into cap 1 and i blow a
> fuse.
> Id rather not use a serise resistor sence its not needed after cat caps
> snip>
--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing stuff.
http://www.geocities.com/capecanaveral/3722
.

# 5486. Service Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: MLS@BOB.kaman.COM
Message-ID: <01IRF0F945K60008L9@MR.KAMAN.COM>
Source record: 88074

```
--Boundary (ID 2uvXRJlMyuHVoHINXGkOww)
Content-type: TEXT/REPORT

Report on your message to: /R=AM/U=jpieszcynski/@MR.KAMAN.COM
Reason: Failed to transfer; communications failure (0)
Diagnostic: Maximum time expired (5)
Extension-id: 1
Arrival-date: Sat, 20 Dec 1997 22:40:32 EDT

--Boundary (ID 2uvXRJlMyuHVoHINXGkOww)
Content-type: MESSAGE/RFC822

Received: from fwitnl.kaman.com (fwitnl) by BOB.KAMAN.COM (PMDF V5.0-6 #16964)
id <01IRDHL34BEO000107@BOB.KAMAN.COM> for jpieszcynski-cos3@BOB.KAMAN.COM;
Fri, 19 Dec 1997 22:32:32 -0400 (EDT)
Received: from sealint.kaman.com by fwitnl.kaman.com
(5.65v3.2/1.1.10.5/29May97-0244PM) id AA21906; Fri, 19 Dec 1997 22:34:23 -0500
Received: by sealex.kaman.com; (5.65v3.2/1.3/10May95) id AA31760; Fri,
19 Dec 1997 22:33:53 -0500
Received: from mlist.ucsd.edu by sealex.kaman.com (smtpxd); id XA23848
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1])
by mlist.ucsd.edu (8.8.5/8.6.9) with ESMTP id SAA23406 for
<ham-homebrew-ddist@mlist.ucsd.edu>; Fri, 19 Dec 1997 18:53:26 -0800 (PST)
Received: (from daemon@localhost) by mail.ucsd.edu; Fri,
19 Dec 1997 18:53:25 -0800 ( PST)
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #730
To: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>
Errors-to: Owner-Ham-Homebrew@ucsd.edu
Reply-to: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>
Message-id: <199712200253.SAA04788@mail.ucsd.edu>
Autoforwarded: false
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII
Importance: normal
Precedence: List
X400-MTS-identifier: [;05932291217991/984276@BOB]

Ham-Homebrew Digest Fri, 19 Dec 97 Volume 97 : Issue 730

Today's Topics:
## Modifying a radio receiver for High speed digital data reception ##
2M to 10M Transverter ?? (3 msgs)
Alkaline charger designs?? (2 msgs)
AM7910 chip needed
Curtis 8044
```

F.S. tubes.
FS: >> Heavy 5 Volt Filament Transformers <<
Icom CT-17 info
Microwave ATV from a Microwave!!!
Need info about cell phone protocol (2 msgs)
New S-Parameter Thread
plate transformer
QRP? news group? (2 msgs)
S-parameters
Simple Relay Circuit Needed
Spectrum Analyser

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
Loop-Detect: Ham-Homebrew:97/730
------------------------------------------------------------------------

Date: Sat, 20 Dec 1997 02:09:35 GMT
From: tinkerman97@usa.net (Tinkerman)
Subject: ## Modifying a radio receiver for High speed digital data reception ##

Hello All,

I'm trying to modify my radio to receive high speed digital data, such
as packet radio. Apparantly, just tapping the discriminator and adding
a data slicer isn't enough. The data comes in as junk, due to phase
distortion by the IF filter. I probably need to replace the IF filter.
Is anyone here experienced in this field and can give a helping hand?
I'm talking about 8000 baud and up (packet is 9600?).
Thank's a bunch for any help offered. Cheers!

## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

------------------------------

Date: Fri, 19 Dec 1997 08:19:52 +0000
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Subject: 2M to 10M Transverter ??

Peter Parker wrote:

>
>
> I disagree - I find powers around 10 watts sufficient, particularly on 10
> metres. Even that sort of power to a fairly mediocre antenna (eg a 6ft
> mobile whip) when used pedestrian mobile on 10m

6ft! That is nearly 2m long!

> All CB here is SSB/AM, and not FM. There are nowhere near as many FM
> sets here as there are in the UK - any 27 MHz FM set would have to come
> from a CB pirate.

You could get one from the UK, but if you can get an SSB/AM set cheaplyyou can
soon convert it to FM/CW as well. Much simpler than building a transverter.

--
Mike

(Remove the space from the Email address to reply)

---

Date: 19 Dec 97 19:47:24 GMT
From: Peter Parker <parkerp@pcug.org.au>
Subject: 2M to 10M Transverter ??

Mike Willis <"M.J.Willis "@rl.ac.uk> wrote:

>
>6ft! That is nearly 2m long!
>

But still quite manageable for a pedestrian mobile station if you mount
it on a solid hand-carried box that also contains the radio and the
battery. Provided you also use a 2.5m trailing wire for the ground,
there's no reason why a pedestrian mobile station on 10m need be much
less effective than a similar station installed in a car.

You've touched on one of the big problems with hand-held rigs, whether
commercially-made or homebrew. It's hard to attach any sort of decent
antenna on them - the slightest movement of a substantial antenna as one
was walking along would put strain on the antenna connector and a big
antenna with a little radio is mechanically unbalanced and a bit hard to
carry. Better to use a mobile radio, substantial box and a standard
mobile antenna mount for durability. A shoulder strap or handles makes
carrying such a station (though it may be heavier than a hand-held) much
easier than using a hand-held with an antenna of eqivalent efficiency.
The other benefit is the bigger battery possible - 2 or 3 hours of
operating time (at 12w PEP) is no problem for a decent pedestrian mobile
station.

A 6ft whip would be a bit tricky to use on a bus or train. It should be
possible to use a 3 ft whip on board, but it would be less efficient and
I've never done it.

73,
--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home
Page and the STWG Web Site.
_____________________________________________________

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Date: 19 Dec 97 23:53:01
From: tlang@freeway.DIALix.oz.au (Tony Langdon)
Subject: 2M to 10M Transverter ??

It's 18 Dec 97 18:28,
We'll return to "M.J.Willis and All's
discussion of 2M to 10M Transverter ??

"M> You might find it more convinient to convert an FM CB rig. These have
"M> narrower filters than common 2m rigs to cope with 10 kHz channel
"M> spacing.
"M> They are dirt cheap and you can leave it in the car without having to
"M> worry about it being pinched, though I see you are from Oz where crime
"M> is low anyway.

Only problem is that FM CBs are a tad hard to find here. However, you
could convert an old CB to FM and then tweak it up. I once started on
this, but never finished the project.

... Those who say it can't be done are interrupted by those doing it.
--
| Fidonet: Tony Langdon 3:632/367.2
| Internet: tlang@freeway.DIALix.oz.au
|
| Freeway Internet Gateway, Melbourne, Australia. For information about
| our services and conditions of use, e-mail:
| info@freeway.DIALix.oz.au, to receive a copy of the FAQ.

------------------------------

Date: 19 Dec 1997 12:47:58 GMT
From: "Emil" <emilgborys@worldnet.att.net>
Subject: Alkaline charger designs??

Actually, any alkaline cell can be recharged, however, there is an very
critical "terminal to terminal Vmax" that cannot be exceeded.
Said voltage is not much greater than the no load terminal voltage, and
since dc current flow is resistance/voltage difference, it is not possible
to recharge to origional capacity. If the critical terminal voltage is
exceeded briefly, in the order of hundreds of millivolts, the plastic

lined, heavy steel case, is a necessity.
emil, ak9i

miker <&miker@ethergate.com> wrote in article
<3499A32F.6A81@ethergate.com>...
> Chris Williams wrote:
> >
> > Hi...
> >
> > Ive seen a couple of threads on recharging alkaline cells....
> >
snip
> case lined with plastic. The plastic keeps the caustic stuff that
snip

---

Date: Sat, 20 Dec 1997 02:03:13 GMT
From: tinkerman97@usa.net (Tinkerman)
Subject: Alkaline charger designs??

"Emil" <emilgborys@worldnet.att.com> wrote:

>Actually, any alkaline cell can be recharged, however, there is an very
>critical "terminal to terminal Vmax" that cannot be exceeded.
>Said voltage is not much greater than the no load terminal voltage, and
>since dc current flow is resistance/voltage difference, it is not possible
>to recharge to origional capacity. If the critical terminal voltage is
>exceeded briefly, in the order of hundreds of millivolts, the plastic
>lined, heavy steel case, is a necessity.
>emil, ak9i

After the joking of my fellow friends, I'll try to give you a
technical answer: In a word, NO.
I personally own a commercial, specially designed charger for
alkalines from Saitek. It implements a special charging algorithm
(designed to eliminate the need for that plastic lined steel case. I
originally bought it because I had equipment (a palmtop PC) that
required the 1.5V of alkalines and wouldn't work on 1.25V NiCd cells
due to insifficient voltage. Well, I did manage to recharge some but I
never was sure how full they were recharged. What ended the story was
that they started spilling after several recharges, once inside my
scanner (lucky it had a removable - and washable - battery cage, and
that this has not happened in my palmtop!). Conclusion: I won't take
chances anymore, although I've heard there are special rechargable
Alkalines designed for this application with a special charger, all
from Rayovac.
Just my 2 cents...hope that helps.
cheers!

## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to

remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

---

Date: 19 Dec 1997 19:47:08 GMT
From: mdowning@amberjack.rdatasys.com (Mark Downing)
Subject: AM7910 chip needed

I am looking for an AM7910 or AM7911 chip. Anyone know of a source,
or perhaps have one?

--Mark

--
Mark A. Downing Relational Data Systems
Phone:(714)263-3899 x157 30 Executive Park, Suite 260
Reply to: mdowning@rdatasys.com Irvine, CA 92714
http://www.rdatasys.com/ or http://www.wm7d.net/

---

Date: Fri, 19 Dec 1997 09:43:26 -0600
From: "Al Williams" <alw@al-williams.com>
Subject: Curtis 8044

Alltronics usually advertises them. You can find them at www.alltronics.com

I keep a list of parts places at http://www.al-williams.com/wd5gnr

73,

Al Williams

GEnnis wrote in message <01bd0c1b$f37dcc40$a110aacc@ennis>...
>Does anyone know a source for the Curtis Keyer 8044 chip?

---

Date: 20 Dec 1997 02:12:25 GMT
From: epirtyak@bcinternet.com
Subject: F.S. tubes.

The following tubes for sale:

- (7) 6JR6 new for $20.00 U.S. each
- (5) 6LQ6 used(test like new) for $15.00 U.S. each.
- (2) 6LX6 used(like new) for $10.00 U.S. each.
- (1) 6A3 NOS for $25.00 U.S.

For any info. Contact me. THANKS
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

---

Date: 19 Dec 1997 19:12:13 GMT
From: "Jeffrey L. Bauman" <wb5kzw@hotmail.com>
Subject: FS: >> Heavy 5 Volt Filament Transformers <<

Have the following "heavy Iron" for sale:

5 volt filament transformers

Raytheon 5.0 volt, 22 Amp (have two) $20 each

Raytheon 5.1 volt, one 43.0 amp winding, one 14.5 amp - $30

Capacitor: .005 ufd, 50,000 volts $20

Neon Tube transformer, 115vac in, 15,000 V @ 30 ma out
AND
Neon Tube transformer, 115vac in, 9,000 V @ 30 ma out $20 for both

Prefer pickup.
Shipping extra from 48322.

Thanks,
Jeff

--
WB5KZW
Near Detroit
Jeffrey L. Bauman
24 hrs (248) 435-4000

---

Date: 19 Dec 1997 14:58:06 GMT
From: "Emil" <emilgborys@worldnet.att.net>
Subject: Icom CT-17 info

Would like any info on building an ICOM CT-17 level converter. Tnx, emil,
ak9i
--
emil, ak9i

---

Date: Sat, 20 Dec 1997 02:05:42 GMT
From: tinkerman97@usa.net (Tinkerman)
Subject: Microwave ATV from a Microwave!!!

Jabran Soubeih <soubeih@expert.cc.purdue.edu> wrote:

>Hello,
>I am currently working on a Microwave ATV transmitter from a microwave
>oven.

Better BE CAREFUL working with that powerfull microwave energy (and
warn others too)...This is no game, both the lethal voltages present

as well as the dangerious microwave energy itself.

good luck...

## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

---

Date: 19 Dec 97 18:51:20 GMT
From: nabaut@ibm.NET (Horta)
Subject: Need info about cell phone protocol

Does anybody know where I can find info about this subject? How
cells controls the phones etc etc etc.

Thanks in advance! Merry x-mas and happy new year to you all!

73 de PY2NI - Horta
gg66rk

---

Date: Sat, 20 Dec 1997 02:07:28 GMT
From: tinkerman97@usa.net (Tinkerman)
Subject: Need info about cell phone protocol

nabaut@ibm.NET (Horta) wrote:

> Does anybody know where I can find info about this subject? How
>cells controls the phones etc etc etc.

try: http://radiophone.dhp.com/
## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

---

Date: Sat, 20 Dec 1997 02:49:16 GMT
From: n7ws@azstarnet.com (Wes Stewart)
Subject: New S-Parameter Thread

On 18 Dec 1997 04:56:55 GMT, davidn3213@aol.com (DavidN3213) wrote:

>I wrote:
>

>>>What you'd do to get your transistor's input R+ jX, for instance, is set up
>>a
>>>simple one-port circuit consisting of a TWO, characterized by your S
>>parameter
>>>data, with a 50-ohm resistor connected across its output and its one port
>>>connected to the TWO's input. After analyzing the circuit, ask Report
>>Editor
>>>to plot RZ11 (the real part of Z11) and IZ11 (the imaginary part of Z11) for
>>>the circuit. This gives you your device's input R+jX at (and interpolated
>>>between) the frequency points in your S-parameter data.

>[repeat of same procedure for output deleted]

>And Wes Stewart wrote:

>>Why not just set it up as a two port in the first place and not worry
>>about the 50 ohm terminations?

>Because when you ask ARRL Radio Designer for RZ11 and IZ11 of a two-port
>network, the program leaves the network's output port unterminated. This can
>lead to significant errors in the values reported for RZ11 and IZ11 if the
>network doesn't exhibit very high reverse transmission gain, as will be the
>case for many active devices. (Likewise if you ask for RZ22 and IZ22 of a
>two-port; then, the program leaves the network's input port unterminated.) The
>"two-port as explicitly-terminated one-port" approach end-runs this effect by
>duplicating the opposite-port termination used in determining the network's S
>parameters.

>Not that many of us could afford its five-figure price for home and hobby use,
>but the 32-bit successor to ARRL Radio Designer's parent program includes ZIN
>and ZOUT among its two-port responses. These allow you to set opposite-port
>terminations *within Report Editor* while reporting the analyzed two-port's
>input and output impedances, making the "two-port as explicitly terminated
>one-port" workaround unnecessary in characterizing the input and output

>Regards,

>David Newkirk, W9VES

Well, I should have known this, as I reported this behavior to you and
Dr Rohde almost three years ago. Only, after talking to Dr. Rohde on
the telephone at that time, I thought that he was going to fix this
among other problems with the release of version 1.5.

You should recall that I offered the example of a 3 dB pad that
consists of two shunt 17.6 ohm resistors on the input and output
respectively, with a 292 ohm in series between them.

Radio designer will correctly report an S21 of -3.00 dB, and an S11 of
-71.1 dB. However, it will incorrectly report a MZ11 of 150.3 ohm.
It does indeed magically disconnect the output 50 ohm port to report
the MZ11.

As I pointed out to Dr. Rohde, when I use my HP8510C network analyzer,
to actually measure something such as this, it doesn't disconnect
itself when presenting the magnitude of the input impedance.

When my company spends five figures for RF CAD stuff, its HP/Eesof, so
I can't comment on the "pro" version of Compact.

Of course, most of the blame for the confusion lies with the
absolutely absymal manual supplied with the program. It seems to be a
cut-and-paste job using the Super-Compact manuals as a source and it
suffers accordingly. I mean really, why is there stuff on time-domain
analysis in the manual, when the program doesn't have it?

73, N7WS

---

Date: Fri, 19 Dec 1997 16:42:34 GMT
From: Matt Stock <mstock@ptd.net>
Subject: plate transformer

out of gonset 101 linear 1880 volts noload .great for homebrew 811 or
572-b amp 50.00

---

Date: 19 Dec 1997 13:11:27 GMT
From: "Glenn Schultz" <glenn@spacestar.net>
Subject: QRP? news group?

Try this website, good pics and info...

http://www.qsl.net/mnqrp

---
---
Glenn
N0VYK
10X #68391
n0vyk@spacestar.net
glenn@spacestar.net
Check out the N0VYK Antique and Amateur Radio Homepage:
http://www.spacestar.net/users/glenn/index.html
---
---

leo_whiteway@bc.sympatico.ca wrote in article
<67d2ic$d1q$2@news.bctel.net>...
>
>
> Hi there; Is there a news group dedicated to QRP? I would like to take
part
> in discussions regarding use and construction the the QRP ham radio
field.
> If anyone knows of a news group or possibly a web site, I will be

grateful
> for the information.
>
> Leo (Bing) Whiteway
> Kelowna, BC Canada
>
> From the messy desk of Leo Bing Whiteway VE7UW
>
> Net-Tamer V 1.08.1 - Test Drive

>

---

Date: 19 Dec 97 20:01:23 GMT
From: Peter Parker <parkerp@pcug.org.au>
Subject: QRP? news group?

leo_whiteway@bc.sympatico.ca wrote:
>
>Hi there; Is there a news group dedicated to QRP?

As far as I no there is no QRP newsgroup, though there are at least two
QRP mailing lists - gqrp-l and qrp-l. There'e also links to a lot of QRP
info through my QRP home page (URL below).

73,
--

_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home
Page and the STWG Web Site.
_____________________________________________________

---

Date: 19 Dec 1997 12:37:01 -0700
From: Christopher Trask <ctrask@primenet.com>
Subject: S-parameters

JohnsonHE <johnsonhe@aol.com> wrote:
: >
: >Joseph H Allen wrote in message ...
: >>Speaking of S parameters, has anyone tried building their own network
: >>analyzer for low frequencies? It shouldn't be too hard: feed a VFO
: >

: I always thought a Network Analyzer displayed both amplitude AND phase.

Not necessarily, Scalar network analyzers only measure and
display magnitude, using broad-band detectors. These are commonly used
in conversion systems, such as superheterodyne receivers, where the
output and input are of different frequencies. Measuring phase under
those conditions takes a lot of effort and $$.

The Wiltron 640 is a good example of a scalar analyzer.

,----------------------. Circuit Design for the
/ What's all this \ RF Impaired
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ ATG Design Services
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ Technical Editor,
. ( ) \ QRP Quarterly
'-| )__| :. \ QRP ARCI 9464
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com
http://www.primenet.com/~ctrask

Graphics by Loek Frederiks

---

Date: Fri, 19 Dec 1997 19:01:25 -0600
From: annen@execpc.com
Subject: Simple Relay Circuit Needed

I need a simple relay circuit that will connect a PTT line to a
transmitter when the device that triggers the relay (or whatever is
needed) conducts. I have found an unused pin out on a motorola MC3359P
that is in my scanner that conducts when the squelch is open. You see,
when the squelch is open, I would like the transmitter to . Pin 16 AUDIO
MUTE is connected to ground when the squelch is open. But what is REALLY
neat is that pin 16 isnt even used, meaning I can do whatever I want with
it. One hitch though, very small current (a few ma) and no more than .7V
can be used. Please tell me if you can help. Greatly appreciated.

--------------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

---

Date: Sat, 20 Dec 1997 01:47:14 GMT
From: tinkerman97@usa.net (Tinkerman)
Subject: Spectrum Analyser

Mikael Nordman <mikael.nordman@lmf.ericsson.se> wrote:

>Hi,
>Does anybody know if:

>-There exist any software that turns a PC soundcard into a AF spectrum
>analyser ?

For a very nice program do a web search for DTMF_FFT (don't recall the
web page), or email the author emil@interlog.com

here are some details:

DTMF_FFT version 1.00
a DTMF & CTCSS generator and decoder &
a spectrum analyzer program for DOS
Copyright (C) 1996 Philip VanBaren & (C) 1996 Emil Laurentiu
(YO3GGH)

PROGRAM FILES:

DTMF_FFT.EXE is a program for the Soundblater compatible cards.

The program samples the input, performs an FFT, and graphs the output.
It
also decodes and generates DTMF numbers and the sub-audible CTCSS
tones.

INI file and command line options provide the user with the ability to
select linear/log frequency and amplitude scales as well as sampling
rates,
length of the FFT, DTMF generating speed, threshold DTMF and CTCSS
level etc.

## Note: when Replying, please email me directly in addition
to posting here, so no responses are missed. Don't forget to
remove the "97" from my email address inserted as an anti-spam
counter measure...:-)

Thanks and best regards,
Tinkerman

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End of Ham-Homebrew Digest V97 #730
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--Boundary (ID 2uvXRJlMyuHVoHINXGkOww)--

# 5487. NOS TUBES 4 SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19971221070400.CAA28002@ladder02.news.aol.com>
Source record: 88075

For Sale:
I have a large inventory of quality NOS tubes and a wide variety of radio related publications. Also available are radios, test equipment and misc. radio parts. My schematic service is the best price around at just $3 delivered for schematics and tuning info. Quality, tested used tubes are also available. If I don't have it, I'll try to help you find it! Hundreds of happy customers have used my service. Ask Rog42@aol.com for an e-mail copy of my latest offerings - list #1220.

# 5488. Re: Simple Relay Circuit Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: darkman@eis.net.au
Message-ID: <349CFF9E.3E1F25EE@eis.net.au>
Source record: 88076
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

annen@execpc.com wrote:
>
> I need a simple relay circuit that will connect a PTT line to a
> transmitter when the device that triggers the relay (or whatever is
> needed) conducts. I have found an unused pin out on a motorola MC3359P
> that is in my scanner that conducts when the squelch is open. You see,
> when the squelch is open, I would like the transmitter to . Pin 16 AUDIO
> MUTE is connected to ground when the squelch is open. But what is REALLY
> neat is that pin 16 isnt even used, meaning I can do whatever I want with
> it. One hitch though, very small current (a few ma) and no more than .7V
> can be used. Please tell me if you can help. Greatly appreciated.
>
> ----------====  Posted via Deja News ====----------
> http://www.dejanews.com/ Search, Read, Post to Usenet

You could try using an optocoupler from pin 16, if it requires too much current or voltage, use a small signal transistor with the base on pin 16, and drive the optocoupler from the transistor. On the output of the optocoupler you can use an external power supply to run the relay.

# 5489. Service Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: MLS@BOB.kaman.COM
Message-ID: <01IRFKVHYKBA000AXD@MR.KAMAN.COM>
Source record: 88077

```
--Boundary (ID 8tipgJzxCEYIAjdoFtrmqw)
Content-type: TEXT/REPORT

Report on your message to: /R=AM/U=jpieszcynski/@MR.KAMAN.COM
Reason: Failed to transfer; communications failure (0)
Diagnostic: Maximum time expired (5)
Extension-id: 1
Arrival-date: Sun, 21 Dec 1997 08:25:38 EDT

--Boundary (ID 8tipgJzxCEYIAjdoFtrmqw)
Content-type: MESSAGE/RFC822

Received: from fwitnl.kaman.com (fwitnl) by BOB.KAMAN.COM (PMDF V5.0-6 #16964)
id <01IRE2B3ATUO0003OC@BOB.KAMAN.COM> for jpieszcynski-cos3@BOB.KAMAN.COM;
Sat, 20 Dec 1997 08:25:10 -0400 (EDT)
Received: from sealint.kaman.com by fwitnl.kaman.com
(5.65v3.2/1.1.10.5/29May97-0244PM) id AA23431; Sat, 20 Dec 1997 08:27:57 -0500
Received: by sealex.kaman.com; (5.65v3.2/1.3/10May95) id AA01600; Sat,
20 Dec 1997 08:27:27 -0500
Received: from mlist.ucsd.edu by sealex.kaman.com (smtpxd); id XA32133
Received: from mail.ucsd.edu (ucsd.ucsd.edu [132.239.1.1])
by mlist.ucsd.edu (8.8.5/8.6.9) with ESMTP id EAA01888 for
<ham-homebrew-ddist@mlist.ucsd.edu>; Sat, 20 Dec 1997 04:52:16 -0800 (PST)
Received: (from root@localhost) by mail.ucsd.edu; Sat,
20 Dec 1997 04:30:41 -0800 ( PST)
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V97 #731
To: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>
Errors-to: Owner-Ham-Homebrew@ucsd.edu
Reply-to: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>
Message-id: <199712201230.EAA07984@mail.ucsd.edu>
Autoforwarded: false
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII
Importance: normal
Precedence: List
X400-MTS-identifier: [;31528002217991/984659@BOB]

Ham-Homebrew Digest Sat, 20 Dec 97 Volume 97 : Issue 731

Today's Topics:
10m amp.
7417 IC Substitute
Alkaline charger designs??
Cavity filters @ 50Mhz??
computer / radio (2 msgs)
```

Gray Code
Hundreds of resources for Homebrewers
Microwave ATV from a Microwave!!! (2 msgs)
need 1600v transformer
Tripp-Lite 1-KW invertor schematic?
WTB:8877 sockets and chimneys

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
Loop-Detect: Ham-Homebrew:97/731
------------------------------------------------------------------------

Date: Fri, 19 Dec 1997 22:10:08 -0600
From: Jim Strohm <jstrohm@txeas.net>
Subject: 10m amp.

Doc Holiday wrote:
>
> Does anyone have plans for a solid state or tube type amplifier?
> Please post or e-mail. Thanks..... ssrick@hotmail.com

Input/output power levels?

The 1997 ARRL Handbook has a big 'un on p. 13.29, and a smaller
6-meter amp that could be padded down to 10 meters on p. 13.38.

I think Motorola Application Notes EB-63, AN-762, and AN-758
are still in print. These will light your fire -- all these
designs are adaptable to nearly any NPN RF transistor that works
in HF.

I have a stack of amp plans that date back to the 1950s, and
I've kept the ones that are easiest and cheapest to build.
But I won't completely give away all my best secrets.

Try this:
http://www.motorola.com
and search for the application notes. It'll do you good.

Jim N6OTQ

Give a man a fish, and he will eat for a day. Teach a man to fish,
and he will eat for a lifetime. Stick a fish in his ear, and you're
reading "Hitchhiker's Guide To The Galaxy."

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Date: Fri, 19 Dec 1997 23:57:09 -0600
From: John Fakan <usscod@en.com>
Subject: 7417 IC Substitute

Hi, John,

The TTL 7417 is a hex buffer/driver. It does not invert so its logic function is trivial. (The 7416 is the inverting version.) Its primary use is simply to buffer an input signal to solid TTL levels.

If you are sure that is what you want just send me an address and I'll send you a few.

John, KB8MU

John Moore wrote:

> I would like to do a project that calls for an IC 7417. I can't find
> one. There are plenty of IC's that have 7417 in the number but they look
> to have a different function. Perhaps I am looking in the wrong place.
> Any ideas?
>
> Thnaks
> John AB5YQ

---

Date: 20 Dec 1997 04:22:12 GMT
From: ka0yos@aol.com (Ka0yos)
Subject: Alkaline charger designs??

Guys,

Why reinvent the wheel? The "Renewal" stuff from Ray O Vac works VERY well!
The cells are manufactured a little different, but the the system works! Remember unlike NiCads Renewals like to be charged (No memory). Recharge after each use, NOT when they die. I have some that have been charged over 100 times and going strong. The charger is cheaper than you or I could build anyway. NO steel case, and a nice (LED goes out) indication of when they are charged.

If you are curious about the brass tacks of the deal QEX did a really nice article a while back. Contact the ARRL for more info.

73,
Joe

---

Date: Wed, 17 Dec 1997 01:31:53 GMT
From: kd9fb@xnet.com (Peter Mikalajunas)
Subject: Cavity filters @ 50Mhz??

On Tue, 16 Dec 1997 18:44:55 -0000, "Nick" <nick@no.spam.for.me.ta> wrote:

I remember those from years ago. They actually worked. The q was the greatest,
but for next to nothing....

>Check this month's Practical Wireless. They have an article about cavity
>filters using large food tincans & copper waterpipe. Not too practical for
>6m, but interesting reading.
>
>
>Chris Williams wrote in message <34967fec.16046770@sirius.data-io.com>...
>>Hi all...
>>
>>anyone got any info or experience in building cavities for low VHF??

Peter Mikalajunas
kd9fb@xnet.com
http://www.xnet.com/~kd9fb

---

Date: Thu, 18 Dec 1997 21:02:04 -0800
From: Paul Crum <pjcrum@csrlink.net>
Subject: computer / radio

How can I as a person get my computer hookedp up to the interenet via
Satalite and also have a fast download rate.

---

Date: Fri, 19 Dec 1997 23:18:02 -0500
From: Woody White <"eMail "@my.www.page.Mailto>
Subject: computer / radio

Try checking out DirectPC. Don't know much about them, but some ISPs
can be redirected to download through DPC. Will take their special gear
to access.... Woody

Paul Crum wrote:
>
> How can I as a person get my computer hookedp up to the interenet via
> Satalite and also have a fast download rate.

--
de Woody, WB4QXE

Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewing", computers , shade tree mechanic "the
Gravel Garage".

On the www page: Scanning Electron images and Ham Radio Homebrewing
stuff.
http://www.geocities.com/capecanaveral/3722
.

---

Date: Sat, 20 Dec 1997 04:11:05 -0600
From: derekw@alphalink.com.au
Subject: Gray Code

In article <585389489wnr@equine.demon.co.uk>,
John@equine.demon.co.uk wrote:
>
> I could use some help with a Gray code disc please. IE How to make one
> and then to read it into a pc.
>
> I wish to find wind direction via my pc.

There may be an easier way to do what you want.

Theres a homebrew anemometer at
http://www.alphalink.com.au/~derekw/ane/anemain.htm
which may be of interest. It reads speed and direction.
It has a serial port, so your computer can read the wind data.

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

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Date: Sat, 20 Dec 1997 04:26:37 GMT
From: bry@NOSPAM.mnsinc.com (Bry)
Subject: Hundreds of resources for Homebrewers

You can find a web site with Hundreds of resources for Homebrewers.

We list hundreds of sources of parts, with both mail-ordering
information, catalog sources, web links etc etc.

Ideal for folks homebrewing or restoring ham gear of all kinds.

Have a great visit to:

http://www.mnsinc.com/bry/mega/partsupp.htm

AND

http://www.mnsinc.com/bry/mega/megakits.htm

Also, don't miss:

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

Have a Happy Holiday, 73 to all,

Bry

---

Date: Fri, 19 Dec 1997 22:18:10 -0600
From: Jim Strohm <jstrohm@txeas.net>
Subject: Microwave ATV from a Microwave!!!

I'd be interested to hear the results of your work.

I read that article with some interest, and made some minor
forays into the experiment -- but with the foreknowledge that
it appeared in the APRIL issue, and Wayne Green has been known
to pull some legs.

It's worthy to note that a kilowatt on 2400 MHz is still a kilowatt,
no matter what it began life as. I'm surprised that there's not
more experimentation with microwave oven magnetrons. Seems like
there should be a relatively cost-effective way to provide frequency
stabilization for moonbounce work -- cost-effective relative
to what a TWT or solid-state alternative would cost.

Because of the high power levels involved, I'd be reluctant
to use this much juice for point-to-point terrestrial contacts.
I'm bookmarking your page.

Jim N6OTQ

P.S. Check this out:

http://lonestar.texas.net/~jstrohm/babies/

---

Date: Sat, 20 Dec 1997 09:52:46 +0000
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Subject: Microwave ATV from a Microwave!!!

In article <349B46FB.25DA@txeas.net>, Jim Strohm <jstrohm@txeas.net>
writes
>I'd be interested to hear the results of your work.
>
>I read that article with some interest, and made some minor
>forays into the experiment -- but with the foreknowledge that
>it appeared in the APRIL issue, and Wayne Green has been known
>to pull some legs.
>
>It's worthy to note that a kilowatt on 2400 MHz is still a kilowatt,
>no matter what it began life as. I'm surprised that there's not
>more experimentation with microwave oven magnetrons. Seems like
>there should be a relatively cost-effective way to provide frequency
>stabilization for moonbounce work -- cost-effective relative
>to what a TWT or solid-state alternative would cost.

Ehhhhhh!

Sounds V dangerous! An italian amateur did the same a few years ago
(reported in RSGB Radcomic)

Be careful! but good luck!

Be interested in a report for the newsletter if you get time!

73 Simon GM4PLM EMN Editor
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

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Date: 20 Dec 1997 05:06:42 GMT
From: dcowey@cyberia.com (gudmundur)
Subject: need 1600v transformer

good day,

I am looking for a 1600v 250ma transformer with 110v primary.
It need not have any other windings. Hope to find something
about 4 to 5 inches square. The smaller, the better. It is
for a 4CX250 2mtr amp.
73 TNX

------------------------------

Date: Sat, 20 Dec 1997 02:58:14 GMT
From: aruder@pipeline.com (Lou Hinshaw)
Subject: Tripp-Lite 1-KW invertor schematic?

Anybody got something on that?
I have a PV-1000 FC, which I got at a pawn shoppe,
and need to replace some E-lytic caps, and test
some other stuff, and maybe build an inrush current
limiter, and who knows what else, like maybe a
sinewave oscillator, and I need the papers on it.

Any suggestions?

TIA.

Lou (WB0NRU) H
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

------------------------------

Date: 20 Dec 1997 04:15:26 GMT
From: kb9sikk@aol.com (Kb9sikk)
Subject: WTB:8877 sockets and chimneys

Need a pair of each for the 8877. Prefer Eimac but what you got?

73,
K-K

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End of Ham-Homebrew Digest V97 #731
******************************

--Boundary (ID 8tipgJzxCEYIAjdoFtrmqw)--
```

## 5490. Any advice on filters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.f0725cd13d9db5498968f@news.infoave.net>
Source record: 88078

I'm seeking some advice on rolling my own crystal filters for my new Icom IC-706 Mk II. I spent all my money on the radio, and can't afford the $100 commercial filters. Was I foolish? Perhaps, but I'm enjoying the heck out of the radio! Anyhow, is anyone aware of any technical article on the 'net which would specifically show in detail, but without the technicalities, how to select components, what components are inside, etc. where to connect them inside the radio? There are two accessory filter slots, and I've settled on a 350Hz CW/RTTY filter, and a 1.8KHz SSB filter. What do I need to buy to get something going? I'd like to build a "first class filter". Any info on this subject would be appreciated. I have ARRL handbooks, the Radio Handbook by W6SAI, and QST's dating back to 1980- but as I'm sure any of you would be well aware, the IC-706 Mk II is a new radio, and no filter construction info is available specifically for _this_ radio. Anybody buy one of Icoms factory filters and take it apart to see what's inside? 73, -Web

# 5491. Re: Three 5v 200a Supplies - Verify Info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: davem@cs.ubc.ca
Message-ID: <67jp2t$rm@redgreen.cs.ubc.ca>
Source record: 88079

"DavidC" <davidc@bit-net.com> writes:
>I have acquired three 5V 200A power supplies (amazingly small, about
>12"deep x 5"wide x 8"high, though very solid and heavy). (They came with a
>bunch of other stuff)

Can you tell whether they are linear or switching supplies? A linear
supply will have a large transformer that is most of the weight of
the supply. A switcher will have a much smaller transformer, still
with quite heavy wire for the secondary winding.

From your description of their small size, they're probably switchers.
Keep in mind that switching supplies in general have a *minimum* load
as well as a maximum load. If the current drawn goes below the minimum,
the output voltage may go out of regulation, or the supply may repeatedly
start up and shut down. This may be a problem when powering a transceiver,
since current on receive is so much less than current during full-power
transmit.

Dave

# 5492. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <349d8a44.224898506@news.atl.bellsouth.net>
Source record: 88080

On Wed, 17 Dec 1997 08:10:50 +1300, "minilinx" <minilinx@netaccess.co.nz> wrote:
>Gary,
>
>Thanks for the reply.
>
>Do your calculations take into account the fact that the
>input impedance is modified depending on what is
>connected to the output and visa-versa ?

S parameter measurements assume that the ports are
terminated in a matched impedance (typically 50 ohms)
by the test fixture.

>Could you give me some of those simple calculations
>to convert S-Parameters into Zin and Zout.

See previous posts in this thread for the equations.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

## 5493. F.S. tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <67k7in$93m$1@newsfeed.smartt.com>
Source record: 88081

The following tubes for sale:

- (7) 6JR6 new for $20.00 U.S. each
- (5) 6LQ6 used(test like new) for $15.00 U.S. each.
- (2) 6LX6 used(like new) for $10.00 U.S. each.
- (1) 6A3 NOS for $25.00 U.S.

For any info. Contact me. THANKS
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5494. Re: Gray Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <34a19ffc.2542486@news.pipeline.com>
Source record: 88082

John Marlow <John@equine.demon.co.uk> wrote:

>I could use some help with a Gray code disc please. IE How to make one
>and then to read it into a pc.
>
>I wish to find wind direction via my pc.

Not on Gray Code, but on directions, have you ever noticed that's
what is in your mouse? If a switch gets bouncy and you buy a new
mouse, then you have a pair of small shaft encoders in your old
mouse.

It's a thought.

Lou H.
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical of the Breed)
Tulsa OK, USA

# 5495. Re: Herring Aid 40m receiver article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <349DE159.58C0@erols.com>
Source record: 88083

Chris Whiteside wrote:
>
> I'm looking for a copy of the 40m DC receiver article from QST in the
> late 70's which was built in a herring (fish) can. Does anyone have old
> QST's or an index and could tell me which QST it was in? Will pay
> postage and copy costs if you have it.
>
> 73,
>
> Chris K6FP
> cfwhiteside@earthlink.net

= = = = = = = =

Although there is something distinctly fishy about this request:

Herring Aid Five Receiver QST July 1976

Tuna Tin Two Transmitter QST May 1976

;^} 73, Dave K7HMP

# 5496. Re: Radar Jammer Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: <>
Message-ID: <nospam-2112972255070001@nash-max194.dynamic.usit.net>
Source record: 88084

In article <19971222031800.WAA29763@ladder01.news.aol.com>, trur@aol.com (Trur) wrote:

> I'd greatly appreciate any info or where I could get info on a homebrew
> radar jammer.Any product that is already assembled doesn't seem to work so I
> guess I'll have to make my own. Thanks in advance.

Probaly the reason they do not work (if you want to jam police radar) is the goverment does not allow intentional jamming of a radio frequency. The Feds have charged some of the manfactures of such devices in court. Would you want your local repeater, local FM radio station, local TV station blocked out of service?????? Only because someone else did not want to hear it? If you do not wnat to be cought speeding slow down.

The same laws that protect thoes services also protect the radar. Think about it.

C.

--
To respond please remove "nospam@" from address

# 5497. 75.670 mhz Heathkit Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: Graphics ie <graphxie@ix.netcom.com>
Message-ID: <67ku2j$953@dfw-ixnews12.ix.netcom.com>
Source record: 88085

I am trying to restore the receiver module of the remote control from a Heathkit Hero-Jr robot. The 75.670 mhz crystal has been broken off the board and lost.

Any ideas on where I can find one.

Dave
graphxie@ix.netcom.com

# 5498. Re: Heath SB220 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-21 00:00:00 UTC
From: kd4qhh@gate.net
Message-ID: <349d4f50.10427346@news.gate.net>
Source record: 88086

Do yourself a favor....

Go to www.harbach.com for what you need.....

I have the article mentioned an drove 45 miles to get the parts [well most of them] had to scrounge for some of them... These type of parts are hard to find [HV] around SE Fla....

I have no connection with www.harbach.com > just got lucky an found their ad an contacted them.... Don't be affraid to e-mail them with your questions.... I got my answers the next day...

Good luck

Tom / KD4QHH

73'

On Mon, 22 Dec 1997 11:09:15 GMT, "Harry Brown" <123@voicenet.com> wrote:

>Can someone direct me to a list of modifications to the Heath SB220
>Anplifier?
>
>I believe that around 5 years ago, QST had an article on modifications
>(mainly mods to "beef" it up) but I cannot locate it.
>
>Any help would be appreciated.
>
>73, Harry, W3IIT
>

## 5499. Heathkit switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: k4gf@worldnet.att.net
Message-ID: <67ki33$edu@mtinsc03.worldnet.att.net>
Source record: 88087

Sorry, I am new at this URL and forgot to say I wanted that switch. Will take a carcass if necessary. TNX

## 5500. 70cm radio kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: reesbr@cba.COM.AU
Message-ID: <349EDAF4@sy7238>
Source record: 88088

I recently bought at a hamfest a Dick Smith Explorer (I think that is the name) 70 cm radio. This was built from a kit published in Electronics Australia I believe. Would anyone out there know what year/issue it was published in? I would really like to get it going....

73's
Brett Rees, VK2TMG

breree@ozemail.com.au (home), reesbr@cba.com.au (work)

## 5501. Radar Jammer Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: trur@aol.com
Message-ID: <19971222031800.WAA29763@ladder01.news.aol.com>
Source record: 88089

I'd greatly appreciate any info or where I could get info on a homebrew radar jammer.Any product that is already assembled doesn't seem to work so I guess I'll have to make my own. Thanks in advance.

## 5502. Convert Wilson WU-1510 Mobile to 440 ham band?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: TLNixon@worldnet.att.net
Message-ID: <67kooj$46t@mtinsc04.worldnet.att.net>
Source record: 88090

Looking for anyone who has converted and tuned-up a Wilson WU-1510
460 mHz mobile to the 440 Ham band. Also need manual and programming
info on the rig.

Any help will be appreciated.

Terry WB0VQP
<TLNixon@worldnet.att.net>

# 5503. Re: powersuply help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: Mike Stanton <mstanton@centuryinter.net>
Message-ID: <01bd0e91$5f815480$75a541ce@cen11212>
Source record: 88091

I am confused why a circuit that would supply 50 amperes would blow a fuse trying to charge a little ol' 68000 ufd cap.... Even if it was at some relatively higher voltages...

Anyway, one possible solution would be to use a 2 stage turn on circuit. One could try using a 1 pole double throw switch that is wired to normally short across a diode that fed one leg of the primary (or secondary, depending on the diode capablities). The idea being to have a diode in series with the primary to limit the actual voltage at the secondary (or vice versa), and then after a short delay, throw the switch to bypass the diode... I'm sure there are people with better ideas out there but this is the first thing to come to mind......

Mike mstanton@centuryinter.net

# 5504. Re: Simple Relay Circuit Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: Norman Hockler <norsan@bright.net>
Message-ID: <67kstb$lvk$1@cletus.bright.net>
Source record: 88092
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

annen@execpc.com writes:
> I need a simple relay circuit that will connect a PTT line to a
> transmitter when the device that triggers the relay (or whatever is
> needed) conducts. I have found an unused pin out on a motorola MC3359P
> that is in my scanner that conducts when the squelch is open. You see,
> when the squelch is open, I would like the transmitter to . Pin 16 AUDIO
> MUTE is connected to ground when the squelch is open. But what is REALLY
> neat is that pin 16 isnt even used, meaning I can do whatever I want with
> it. One hitch though, very small current (a few ma) and no more than .7V
> can be used. Please tell me if you can help. Greatly appreciated.
>
> ------------------==== Posted via Deja News ====----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet

Use a transistor like the 2n2222a to drive a 12 volt relay. connect
a 500 ohm resistor to pin 16 to the base of the transistor, ground the emitter,
connect a 12 volt relay coil from the collector to 12 vdc and a diode
accross the relay coil (bar to the 12 volts). This should work fine.
de Norm N8RGR

# 5505. Re: 70cm radio kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <349e1eaf.0@newshost.pcug.org.au>
Source record: 88093

reesbr@cba.COM.AU (Rees, Brett) wrote:
>
>I recently bought at a hamfest a Dick Smith Explorer (I think that is the
>name) 70 cm radio. This was built from a kit published in Electronics
>Australia I believe. Would anyone out there know what year/issue it was
>published in? I would really like to get it going....
>

Ah, you must be talking about the rig colloquially known as the
"Exploder"! A few people I know have one. It was published in EA
magazine towards the end of 1983 - maybe October or November 1983 - the
article was spread over 3 or 4 issues I think. Then there's the related
"Commander" (for 2 metres), that came out a bit later.

There have been various mods in other magazines to fix the TX and/or RX
audio quality. If I recall correctly, one such article appeared in
Amateur Radio mag around 1990.

73,
--


_____________________________________________________
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home
Page and the STWG Web Site.


_____________________________________________________

# 5506. Heath SB220 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: Harry Brown <123@voicenet.com>
Message-ID: <01bd0ec8$d67546a0$6e7667cf@default>
Source record: 88094

Can someone direct me to a list of modifications to the Heath SB220 Anplifier?

I believe that around 5 years ago, QST had an article on modifications (mainly mods to "beef" it up) but I cannot locate it.

Any help would be appreciated.

73, Harry, W3IIT

## 5507. Relay contact ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: Jeff Anderson <jeffa@ix.netcom.com>
Message-ID: <67lq88$fpb@sjx-ixn5.ix.netcom.com>
Source record: 88095

I recently picked up some inexpensive RF relays (BNC connectors)
and would like to use them as part of a remote antenna
switching network. Unfortunately, I don't know their contact
ratings. Does anyone know how to determine this by, say,
measuring the air gap or contact size?

Thanks,

- Jeff, WA6AHL

# 5508. Build a TLM beacon

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: maury <i862@rocketmail.com>
Message-ID: <67lni2$158$1@menelao.polito.it>
Source record: 88096
Cross-posted to: it.hobby.radioamatori,rec.radio.amateur.homebrew,rec.radio.amateur.space

I'd like to know where can I have info on buildin' a 2 mtrs transmitter
sending TLM (temp, curr, volt) like the ones on LeoSats for educaional
purposes. Try to imagine a beacon sending TLM not on Sat but on mountain
(solar cells) or top roof of buildings.
The TLM should be CW or 1200bps packet, easy decoded with simple software.
If you know TLM from RS and Dove sats you know what I mean..
Thanks for your attention !
Maurizio Bertolino
i121171@amsat.org

# 5509. Re: 75.670 mhz Heathkit Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: joe <jedent@jedavisent.com>
Message-ID: <349E6CCF.2573@jedavisent.com>
Source record: 88097

Graphics ie wrote:
>
> I am trying to restore the receiver module of the remote control from a
> Heathkit Hero-Jr robot. The 75.670 mhz crystal has been broken off the board
> and lost.
>
> Any ideas on where I can find one.
>
> Dave
> graphxie@ix.netcom.com
Jan Crystal in Fla, International Crystal in OK City, OK will make you
one. Better hurry while supplies last.

## 5510. Re: powersuply help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: cliffkot@interaccess.com
Message-ID: <cliffkot.240.003F3346@interaccess.com>
Source record: 88098

Try using a slow-blow fuse in the transformer primary.

Cliff

# 5511. Re: Radar Jammer Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: mulveyr@frontiernet.net
Message-ID: <slrn69t9o5.kl6.mulveyr@ll.aa2ys.ampr.org>
Source record: 88099

On 22 Dec 1997 03:18:32 GMT, Trur <trur@aol.com> wrote:
> I'd greatly appreciate any info or where I could get info on a homebrew
>radar jammer.Any product that is already assembled doesn't seem to work so I
>guess I'll have to make my own. Thanks in advance.
>

Try "alt.clueless.troller." Lots of opportunities for you there, I'm
sure.

- Rich

--
Rich Mulvey
mulveyr@frontiernet.net Rochester, NY USA
http://www.frontiernet.net/~mulveyr
Amateur Radio: aa2ys@amsat.org, aa2ys@wb2wxq.#wny.ny.usa

# 5512. Re: powersuply help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <349eb5a8.276688551@news.atl.bellsouth.net>
Source record: 88100

On Mon, 22 Dec 1997 10:53:28 -0600, cliffkot@interaccess.com (Cliff Kotchka) wrote:
>Try using a slow-blow fuse in the transformer primary.

Then the power supply diodes will act as the fuse. :-(

What's needed is a step start circuit. The discharged filter cap looks like an almost dead short, so you have to limit inrush current or you'll blow fuses, or diodes, or both. In smaller supplies, the transformer acts as the inrush limiter, but if you have a hefty transformer, that doesn't happen.

The circuit I use on brute force 12 VDC supplies is a 100 watt light bulb in series with the transformer primary. The NO contacts of a 12 volt relay bridge the lamp socket. The coil of the relay goes across the output bleeder resistor of the supply. At turn on, the lamp glows brightly, limiting current inrush to the transformer. As the cap charges, inrush current diminishes and the bulb grows dimmer. In a couple of seconds, the cap has charged enough that the pull in voltage of the relay is reached. It then shorts out the lamp and allows the supply to furnish full rated current to a load.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5513. Australian QRP Home Page Updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <349ebed9.0@newshost.pcug.org.au>
Source record: 88101
Cross-posted to: rec.radio.amateur.homebrew,aus.radio.amateur.misc,rec.radio.amateur.misc

The Australian QRP Home Page has just been updated. It now includes up to date details on QRP contests and nets as well as information on the latest Lo-Key magazine from the CW Operators' QRP Club.

You can find it by clicking on the URL below.

73,
--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.
_____

# 5514. Re: Radar Jammer Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: Nick <Nick@no.spam.for.me.ta>
Message-ID: <67mkdl$6g3$2@heliodor.xara.net>
Source record: 88102

Trur wrote in message <19971222031800.WAA29763@ladder01.news.aol.com>...
> I'd greatly appreciate any info or where I could get info on a homebrew
>radar jammer.Any product that is already assembled doesn't seem to work so
I
>guess I'll have to make my own. Thanks in advance.
>

Try a roll of ordinary aluminium cooking foil. Wrap it around the radar and
voila!

# 5515. Re: Heath SB220 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: "Dwight G. Bosselman" <dgbcms@netnet.net>
Message-ID: <349EDEDB.43A3FF13@netnet.net>
Source record: 88103

Did a search on the cmptr for yrs 79-92 on sb220 mods and this is what
turned up:

nov79 pg44
feb79 pg20
apr79 pg27
jul79 pg50

feb80 pg44

feb89 pg44

nov90 pg25 part 1
dec90 pg41 part 2

--
73 Dwight de W9YQ

Harry Brown wrote:

> Can someone direct me to a list of modifications to the Heath SB220
> Anplifier?
>
> I believe that around 5 years ago, QST had an article on modifications
> (mainly mods to "beef" it up) but I cannot locate it.
>
> Any help would be appreciated.
>
> 73, Harry, W3IIT

## 5516. JAN 1625 Vacuum Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: yrac@aol.com
Message-ID: <19971222221800.RAA16158@ladder02.news.aol.com>
Source record: 88104

Estate Sale. While cleaning out a deceased ham's belongings, the executor of the estate found a box of 1625 tubes, still in the original government cartons. Entertaining offers to 2 to 15 of these babies.

yrac@aol.com

# 5517. Re: powersuply help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19971222222901.RAA17346@ladder02.news.aol.com>
Source record: 88105

>The circuit I use on brute force 12 VDC supplies is a 100 watt light bulb
>in series with the transformer primary. The NO contacts of a 12 volt
>relay bridge the lamp socket. The coil of the relay goes across the
>output bleeder resistor of the supply. At turn on, the lamp glows
>brightly, limiting current inrush to the transformer. As the cap charges,
>inrush current diminishes and the bulb grows dimmer. In a couple of
>seconds, the cap has charged enough that the pull in voltage of the
>relay is reached. It then shorts out the lamp and allows the supply
>to furnish full rated current to a load.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |
>
>
>
>
>
>
>

Thats the way I do it too, I have a 100 amp power supply and wondered if
anybody else used a light bulb to limit inrush curent.

# 5518. 4 Sale Tribander $100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: jerryr@home.com
Message-ID: <349ef2e8.5055624@news>
Source record: 88106

Full size four element Cushcraft ATB-34 Tri-Bander in excellent condition $100. All joints are clean as new. Works great (very high gain). Not able to pack for shipping. In Westfield NJ 908 233-2511
Jerry WA2GFO

## 5519. Re: Radar Jammer Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: ka0yos@aol.com
Message-ID: <19971222231900.SAA22607@ladder02.news.aol.com>
Source record: 88107

The one for sale in the Damark catalog has worked for us. It is NOT illegall!
Just remember you will have a small area of protection

# 5520. Re: Heath SB220 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: sabinw@mwci.net
Message-ID: <882838179.1835139079@dejanews.com>
Source record: 88108

In article <01bd0ec8$d67546a0$6e7667cf@default>,
"Harry Brown" <123@voicenet.com> wrote:
>
> Can someone direct me to a list of modifications to the Heath SB220
> Anplifier?
>
> I believe that around 5 years ago, QST had an article on modifications
> (mainly mods to "beef" it up) but I cannot locate it.
>
> Any help would be appreciated.
>
> 73, Harry, W3IIT

QST Feb 89, Nov 90, Dec 90 articles

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

## 5521. Simple relay circuit needed: more info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: annen@execpc.com
Message-ID: <882856146.310706186@dejanews.com>
Source record: 88109

I have played with the IC and the pinouts all week end and have come to the conclusion that my approach is all worng. No matter what I attach to the squelch input, it drops the voltage to the point where the squelch is ALWAYS open. The audio mute pin, disappointingly, does not actually have a voltage. So I am going to have to forget about simply hooking up a transistor to this output. I just wish it was that easy. Furthermore, the audio mute pin is connected to the squelch input internally, so if I have anything that is hooked up externally, that too yeilds the squelch useless. I am lost. If someone can help me, look at the info on the MC3359 at the lookup area at motorola's webpage

http://www.design-net.com/cgi-bin/dlsrch

and try to help me make some sense of the IC. One more thought: There is a retail product called the "Nite Logger" that can do this too, but for a $70 price tag. All hookups are done externally through the Speaker and mic jacks. A lot of bells and whistles come along with the unit like a tape jack remote, audio level fine tuning, a cute box,etc. that I dont need. Can something be made externally that could be hooked up to the speaker jack, and when audio comes from the jack when the receiver is unsquelched, will be passed through to the mic input plug?

Here is what I have discovered through external connections. I tried hooking up a voltmeter to the speaker jack, but got no reading. Then I thought, maybe I need to have a load at the other end, so I hooked up the other end to the mic input. With a signal present at the receiver, I had to manually key the PTT on the radio, but heard an extremely distorted signal. Someone suggested I hook up a 470k resistor in series with the mic to drop the level of the incoming signal. while that worked, I still had to manually key the PTT. But the whole thing worked even better when I hooked a 2.2k ohm resistor parallel with the line. Then the audio signal was perfect, and the radio keys up on it's own, but it always stays on, even with no audio signal present. the scematic design for an external mic hookup as shown in the HT manual shows the mic element with the PTT switch as a simple SPST switch in series with the negative side of the mic element (does polarity matter?) connected to the neg. of the mic in. On the positive side is shown mic positive, then further down a 2.2k ohm resistor in parallel across the + and -, then a small value capacitor also across the + and -, ending with a connetion to the mic + input. What I need to do is design a circuit that will replace the SPST switch in the external mic hook up schematic (transisotr, relay, whatever is needed I don't know) and sense that audio is breaking the squelch. I suppose what i really need is a good book, but if someone has seen such a design or can help, please do so. Matt Annen KB9OIV

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5522. Re:Improve the Sony ICF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-22 00:00:00 UTC
From: ktchan <ktchan@hk.gin.net>
Message-ID: <349E6A63.9A00DBFE@hk.gin.net>
Source record: 88110

Hi

Does any one have any way to improve the Sony ICF 2001 by any way?
I have a Sony ICF2001 happy with it, but I think the receiver can be
addon to some external conntroller and control by computer.

Band converter
Ant booster
Scanner modify

Other wise I'll go to a PC radio card. Any response are welcome.

Thanks

K.T.Chan

# 5523. Re: Simple relay circuit needed: more info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <349feb90.314980505@news.atl.bellsouth.net>
Source record: 88022

On Mon, 22 Dec 1997 23:51:31 -0600, annen@execpc.com wrote:
> I have played with the IC and the pinouts all week end and have come to
>the conclusion that my approach is all worng. No matter what I attach to
>the squelch input, it drops the voltage to the point where the squelch is
>ALWAYS open. The audio mute pin, disappointingly, does not actually have
>a voltage. So I am going to have to forget about simply hooking up a
>transistor to this output. I just wish it was that easy. Furthermore,
>the audio mute pin is connected to the squelch input internally, so if I
>have anything that is hooked up externally, that too yeilds the squelch
>useless. I am lost. If someone can help me, look at the info on the
>MC3359 at the lookup area at motorola's webpage

The mute pin is a current sink, not a voltage source. Use a PNP
transistor and connect its base to pin 16 via a 10k resistor to avoid
loading the mute pin. This transistor can drive a low current reed
relay to do PTT for you.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5524. Manual for HP5257A Transfer Oscillator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: johnoz@indy.net
Message-ID: <349fecea.444095@news.indy.net>
Source record: 88023

I would like to buy a manual for this unit if you have one available. Alternatively would pay copying and postage costs for the section of the manual dealing with operation. The HP5257A is a plug-in for the HP5245A series of frequency counters, it enables the counter to be used from 0.05 to 18 GHz.

Thanks. John KB9MIE.

# 5525. Re: Improve the Sony ICF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <$$Wb5YADq6n0Ew0H@lfheller.demon.co.uk>
Source record: 88024

In article <349E6A63.9A00DBFE@hk.gin.net>, ktchan <ktchan@hk.gin.net>
writes
>Hi
>
>Does any one have any way to improve the Sony ICF 2001 by any way?
>I have a Sony ICF2001 happy with it, but I think the receiver can be
>addon to some external conntroller and control by computer.
>
>
>Band converter
>Ant booster
>Scanner modify
>
>
>Other wise I'll go to a PC radio card. Any response are welcome.

I've seen a mag. article on replacing the relatively wide AM filter by
one more suitable for SSB.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/dds.htm for details of my AD9850
DDS system - schematic and software.

# 5526. helical resonator appl sc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: aziz@turnet.net.tr
Message-ID: <882908780.1874264075@dejanews.com>
Source record: 88025

hi there :

I need circuit of hamtronics R144 FM Receiver or helical resonator
amplifier .

I need info , how to built helical resonators (3 pole) ?.
I have 2m receiver and I want to make adapt helical resonator .
73,s de TA2AD Sua

----------====  Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5527. Stolen ICOM IC-T22A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: Ayman El-Khashab <elkhasha@spec.com>
Message-ID: <87n2hriy42.fsf@realwork.spec.com>
Source record: 88026
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

two items were stolen from my vehicle in west austin, tx last tues.
morning. The ICOM T22A radio will power on with my first name 'ayman'
in the screen provided they haven't reprogrammed it. the radio
also has a longer rubber antenna that has a green stripe (NOT the
stock antenna).

The hp48GX has my name on a engraved on the back of it.

if you see these items pop up anywhere, please let me know by
e-mail or voice. I know its a long shot.

thanks.
- ayman

--
---
Ayman El-Khashab | Systems and Processes Engineering Corp
elkhashab@spec.com | P.O. Box 162487 Austin, Texas 78716-2487
512-306-1100 x2178 | http://www.spec.com

## 5528. 220 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19971223231400.SAA19238@ladder02.news.aol.com>
Source record: 88027

Harry you may be looking for Rich Measures articles in QSTNov.& Dec 1990 good stuff here . good luck 73 Harold W4pqw

# 5529. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: Nicholas R Kennedy <nkenned@entergy.com>
Message-ID: <34A03C55.BA3@entergy.com>
Source record: 88028

Reading about S-Parameters and wondering what I'm missing ...

Is S-Parameter analysis primarily used and UHF/microwave frequencies?
Or is it also useful in the 1.8 to 30 Mhz region?

I got the impression it's the former from the HP tutorial. Perhaps
reactive components of transistors are nearly negligible in the HF
region?

Regards,

Nick, WA5BDU

## 5530. 6 m repeaters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: Dennis Erwin Thurlow <geosynq@trader.com>
Message-ID: <34A05DCD.2E23@trader.com>
Source record: 88029

I seem to have misplaced my repeater book. I assume there
_are_ 6m fm repeaters. Can anyone give me a couple of
frequencies in/near Indianapolis?
Thanks.
--
geosynq@trader.com
Elder - Westminster Presbyterian
TRA #2693
N9VEM

# 5531. Re:S-Parameters WHY Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: Brooke <brooke@pacific.net>
Message-ID: <34A0859B.6FB1@pacific.net>
Source record: 88030

Nicholas R Kennedy wrote:
> 
> Reading about S-Parameters and wondering what I'm missing ...
> 
> Is S-Parameter analysis primarily used and UHF/microwave frequencies?
> Or is it also useful in the 1.8 to 30 Mhz region?
> 
> I got the impression it's the former from the HP tutorial. Perhaps
> reactive components of transistors are nearly negligible in the HF
> region?
> 
> Regards,
> 
> Nick, WA5BDU

Nick:

S-parameters came about because the common at the time parameters that were used were the h-parameters and y-parameters. These are defined (and were tested) with various terminals either open or short circuited. As the cutoff frequency of the active devices went up, they would frequently break into oscillation when open or short circuited. Since s-parameters are tested with the input and output at 50 Ohms, the devices could be measured.

Once you have the data, it makes no difference which design method you use.

73,

Brooke
N6GCE

# 5532. FS: MFJ 1274 Packet TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: jerryr@home.com
Message-ID: <349f2211.4531295@news>
Source record: 88111

MFJ 1274 packet TNC with original box, docs, cables, set for Kenwood radios in like new condition. Also a really nifty, very high tech terminal. It's a Microterm 5520. It is composed of a flat screen monitor and a keyboard. It has a built-in cmos which you enter with a keystroke where you can change literally a couple of dozen perameters. Unless you want to download something (??), a computer is not necessary. This works just great and can be left on at all times (has built in screen saver). Both for $85. Jerry @ 908 233-2511 or email. wa2gfo

## 5533. Webpage under construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: bigjoe@fnet.friendlynet.com
Message-ID: <349f12a6.0@news3.kcdata.com>
Source record: 88112
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur

Thank you for taking the time to read this.

My webpage titled "The KB8QLR Amateur Radio Page" is now under construction.
I hope all hams (as well as non-hams) will come to visit soon.

http://members.tripod.com/~roadmaker/index.html

73
Joe

This article was posted from <A HREF="http://www.slurp.net/">Slurp Net</A>.

# 5534. Wanted : Schematic for Morse keyer with dash-dot memory

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: prajna <prajna@hit.co.kr>
Message-ID: <67nchh$q9m$1@hiline.shinbiro.com>
Source record: 88113

I Need schematic and/or Instructions for Morse keyer with dash-dot/dot-dash
memory.
Recently I've built a keyer using cmos IC but it is a bit inconvenient
because it has no
dot-dash memory.
Any helpful information( including schmatics, WEB links, ... E.T.C.) would
be appreciated.
Thanks,

Lee, DS5IPL
mailto : ds5ipl@qsl.net.NO_SPAM
prajna@hit.co.kr.NO_SPAM
P.S. PSE remove '.NO_SPAM' to e-mail reply.

## 5535. Schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: n9szi@peaknet.NET
Message-ID: <349F40D2.8C984A38@peaknet.net>
Source record: 88114

I am looking for a circuit schematic of the TX buffer amp to interface
with a micor uhf into
a tapr/g3ruh modem. Can anyone help?

# 5536. Re: Webpage under construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: ken@cds1.net
Message-ID: <349F7DE6.ACA2D1BF@cds1.net>
Source record: 88115

And this appeared on rec.radio.amateur.homebrew because you wrote
the web page yourself, right?

KB8QLR wrote:
>
> Thank you for taking the time to read this.
>
> My webpage titled "The KB8QLR Amateur Radio Page" is now under construction.
> I hope all hams (as well as non-hams) will come to visit soon.
>
> http://members.tripod.com/~roadmaker/index.html
>
> 73
> Joe
>
> This article was posted from <A HREF="http://www.slurp.net/">Slurp Net</A>.

--

---

Ken Harrison - ken AT cds1.net - Amateur: N6MHG

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Visit the Sonoma County Radio Amateurs Web Site
http://www.cds1.net/scra
--> New Java Based Amateur Radio Chat Room! <--
Hank's Swap Shop
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

# 5537. Re: Gray Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: Don Ward <don@kay-dee.demon.co.uk>
Message-ID: <BRHhZGAcA6n0Ewx1@kay-dee.demon.co.uk>
Source record: 88116

>> I could use some help with a Gray code disc please. IE How to make one
>> and then to read it into a pc.

Do you want to know how to make one physically, or just the pattern of a
gray code disc? I can help with the latter but not the mechanics of a
complete encoder. Converting from Gray to Binary is is quite simple and
Binary to Gray even more so. What resolution do you need? 8 bits will
give 1.4 degrees, is that sufficiently accurate?
73
--
Don Ward G0MDO

# 5538. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <349fccbc.6806062@news.crosslink.net>
Source record: 88117

On 14 Dec 1997 04:18:34 GMT, "Bert Douglas"
<G_Herbert_Douglas@msn.com> wrote:

>Would someone please explain the Smith Chart to me?
>
>I went thru three years of EE and tons of Calculus so
>I should be able to understand it, but right now I
>have no clue.

Hello Bert,

I am happy to report that my Smith Chart program is about to be
upgraded to include a screen plot of the impedance points ( and to
printer). I hope to have it finished today, but in any case keep
checking for SC release 2 on my Web site. The current version does all
the necessary calculations but doesn't present the results
graphically. It's all freeware and is a Windows program.

http://www.qsl.net/w9dmk
ftp://qsl.net/pub/w9dmk

73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 5539. Re: Improve the Sony ICF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <349FC8A1.2534@pop.valley.net>
Source record: 88118

ktchan wrote:
>
> Hi
>
> Does any one have any way to improve the Sony ICF 2001 by any way?
> I have a Sony ICF2001 happy with it, but I think the receiver can be
> addon to some external conntroller and control by computer.
<snip>

Hello--
I dimly recall seeing such a modification some years ago. It used bidirectional CMOS switch ICs (such as the CD4016) controlled by a computer interface. Each switch section connected across a contact on the keypad. By activating the proper sequence of switches, you could enter frequencies, alter the scanning limits and thus remotely control the radio.

The article may have appeared in Elektor magazine (a European publication that was once available in the U.S.) in the late 1980s. The project looked relatively complex, and given the risks inherent in tearing into the ICF2001's crowded circuitry, you would do well to purchase a service manual for the 2001 first.

Along the same thread, I recently purchased a Packard-Bell FM radio card at a computer show. My intent is to modify the front-end tuned circuits and reprogram the frequency range. This inexpensive card uses a TEA5712T synthesizer IC (I think)-- has anyone experimented with mods for thi IC?

73,
Brad AA1IP

# 5540. Re: Curtis 8044

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: jlcmas <jlcmas@phoenix.net.nospam>
Message-ID: <01bd0fb7$73b95700$6f79f1cd@default>
Source record: 88119

MFJ now has rights to the chip, apparently purchasing from Curtis Electro.
According to their eMail, they will sell the 8044. Try www.mfj.com and
leave eMail request for more info.

GEnnis <gennis@enter.net> wrote in article
<01bd0c1b$f37dcc40$a110aacc@ennis>...
> Does anyone know a source for the Curtis Keyer 8044 chip?
>

# 5541. Re: Wanted : Schematic for Morse keyer with dash-dot memory

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-23 00:00:00 UTC
From: jlcmas <jlcmas@phoenix.net.nospam>
Message-ID: <01bd0fb8$03b47880$6f79f1cd@default>
Source record: 88120

prajna <prajna@hit.co.kr> wrote in article
<67nchh$q9m$1@hiline.shinbiro.com>...
> I Need schematic and/or Instructions for Morse keyer with
dash-dot/dot-dash
> memory.
> Recently I've built a keyer using cmos IC but it is a bit inconvenient
> because it has no
> dot-dash memory.
> Any helpful information( including schmatics, WEB links, ... E.T.C.)
would
> be appreciated.
> Thanks,
>
> Lee, DS5IPL
> mailto : ds5ipl@qsl.net.NO_SPAM
> prajna@hit.co.kr.NO_SPAM
> P.S. PSE remove '.NO_SPAM' to e-mail reply.
>
>
>
Your best bet for simplicity would be the 8044 keyer chip. The latest
ARRL handbook has a good schematic. Do a search on YAHOO or Alta Vista for
8044. There are about 50 links as I recall.

# 5542. Re: Improve the Sony ICF?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: ktchan <ktchan@hk.gin.net>
Message-ID: <349FE61A.1A3C8D13@hk.gin.net>
Source record: 88031

Hi Brad

I will try to contact the Elektor magazine to see what i can get.
Otherwise the www. winradio.com ad. for a PC card radio which they have a
scanner software will be good for me. But have to sell the Sony first.

Thanks

K.T.Chan

Brad Thompson wrote:

> ktchan wrote:
> >
> > Hi
> >
> > Does any one have any way to improve the Sony ICF 2001 by any way?
> > I have a Sony ICF2001 happy with it, but I think the receiver can be
> > addon to some external conntroller and control by computer.
> <snip>
>
> Hello--
> I dimly recall seeing such a modification some years ago. It used
> bidirectional CMOS switch ICs (such as the CD4016) controlled by a
> computer interface. Each switch section connected across a contact on
> the keypad. By activating the proper sequence of switches, you could
> enter frequencies, alter the scanning limits and thus remotely control
> the radio.
>
> The article may have appeared in Elektor magazine (a European
> publication that was once available in the U.S.) in the late 1980s.
> The project looked relatively complex, and given the risks inherent
> in tearing into the ICF2001's crowded circuitry, you would do well
> to purchase a service manual for the 2001 first.
>
> Along the same thread, I recently purchased a Packard-Bell FM radio card
> at a computer show. My intent is to modify the front-end tuned circuits
> and reprogram the frequency range. This inexpensive card uses a TEA5712T
> synthesizer IC (I think)-- has anyone experimented with mods for thi IC?
>
> 73,
> Brad AA1IP

# 5543. F.S "BIRD" dual directional coupler 4230-053

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <67pl06$irj$1@newsfeed.smartt.com>
Source record: 88032

Hi! I do have for sale (2) "DUAL DIRECTIONAL COUPLER"
from "BIRD".They are brand new,they sell new for $212.00 U.S.
each.I will sell them for $100.00 U.S. each.
If interested contact me by email or PH/FAX:(250)868-1182
THANKS...

Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5544. Re: Heath SB220 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: skipp@dilbert.ucdavis.edu
Message-ID: <67pq93$h0r$1@mark.ucdavis.edu>
Source record: 88033

The Author is Rich Measures, AG6K and he has a great web page with all the stuff and more.

Try http://www.vcnet.com/measures

good luck
skip wv6f
nospam4me@juno.com

Harry Brown (123@voicenet.com) wrote:
: Can someone direct me to a list of modifications to the Heath SB220
: Anplifier?
:
: I believe that around 5 years ago, QST had an article on modifications
: (mainly mods to "beef" it up) but I cannot locate it.
:
: Any help would be appreciated.
:
: 73, Harry, W3IIT
:

# 5545. WTT: Drake R-7 for JRC 515 + NDH-518

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: Ben Wallace <bwallace@sd.cts.com>
Message-ID: <01bd101f$a0fce200$3506a3cd@bwallace.cts.com>
Source record: 88034

Want to trade Drake R-7 for NRD-515 + NDH-518.

Drake R-7 Receiver in excellent condx. Includes NB, AM, SSB and CW Filters
and copy of service manual for JRC NRD-515 and NDH-518 Memory Unit, both in
excellent condx.

Thanks,

Ben Wallace
WB8HUR -- San Diego

# 5546. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971224115401.GAA20880@ladder02.news.aol.com>
Source record: 88035

>
>I got the impression it's the former from the HP tutorial. Perhaps
>reactive components of transistors are nearly negligible in the HF
>region?
>
>Regards,
>
>Nick, WA5BDU

OH would that it were so!

W4ZCB

# 5547. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: davidn3213@aol.com
Message-ID: <19971224122300.HAA21945@ladder02.news.aol.com>
Source record: 88036

Nicholas R Kennedy <nkenned@entergy.com> wrote:

>Is S-Parameter analysis primarily used and UHF/microwave frequencies?
>Or is it also useful in the 1.8 to 30 Mhz region?

S-parameter analysis *is* primarily used at VHF/UHF/microwave--mainly because that's where most of the military/commercial action is nowadays. S-parameter analysis is quite useful in the MF/HF range as well.

>I got the impression it's the former from the HP tutorial. Perhaps
>reactive components of transistors are nearly negligible in the HF
>region?

It's not so much that the reactive components of transistors are nearly negligible at HF (I'd say that they can be less important at HF), its that Y- and Z-parameter modeling and parameter extraction techniques can work acceptably well at HF. Further, although it may seem paradoxical, S parameters can be tougher to measure accurately and usefully for real networks at MF/HF because directional couplers with the very high directivity necessary for making the measurements aren't as practical to build for MF/HF. This, combined with the fact that most of the military/commercial design action occurs at VHF and above, means that you'll rarely see manufacturer-supplied device S parameters for frequencies below 50 or 100 MHz.

One approach to obtaining valid MF/HF S parameters for a device characterized at VHF+ works as follows. The required ingredients are S (or Y or Z) parameters for the device and an RF CAD program that (a) allows you characterize a two-port "black box" element with your S (or Y or Z) parameters, (b) does optimization, and (c) includes a generic, realistic model for the device type in question (say, a bipolar junction transistor). By "generic," I mean that the model lets you fill in values for its various Rs, Ls, Cs, gain, etc--if only the manufacturer's data sheet gave them!

Operating in the program, you set up one circuit that characterizes a two-port black-box element with your S (or Y or Z) parameters, and you set up another circuit containing only the generic device model. You make the device model's parameters appropriately optimizable. You set up the program's optimization facility to carry out this order: "Program, adjust the parameters of this model to make the its S parameters equal those of that two-port as closely as possible." And then you tell the optimizer to go.

The result, if you've set up everything properly, is a device model with realistic Rs, Ls and Cs (and beta and F/T\ and so on)--a model the electrical behavior of which mirrors the S-parameter performance of the two-port black-box at the frequencies represented in the S-parameter dataset. The neat thing is that you can then validly use the optimized device model at frequencies outside

those represented in the dataset that characterized the black box--especially at frequencies *lower* than those represented in the dataset. If you the device's S (or Y or Z) parameters at those frequencies, you just set it up as a two-port, analyze it, and tell the program to report the parameters you want.

The "Exploring RF" columns available in PDF form via the ARRL Radio Designer home page (http://www.arrl.org/ard/) include a discussion of this technique.

Regards,

David Newkirk, W9VES

# 5548. WTB: 38 Special QRP Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: ssouva@killspam.dreamscape.com
Message-ID: <34a0ffa3.1443264@news.dreamscape.com>
Source record: 88037

I'm looking for the 38 Special QRP rig/kit. Does anyone have a spare
kit that they picked up at a Ham Fest and never built? Maybe you
would like to give it a good home.

Scott Souva
KG2GT
ssouva@killspam.dreamscape.com

(remove the killspam, not the operator)

## 5549. help.... collins filters info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: k8rajerry@aol.com
Message-ID: <19971224153701.KAA07416@ladder01.news.aol.com>
Source record: 88038

Help.... I purchased a Collins Mechanical Filter for my 75A4. I thought I was buying a 500 cycle filter with a 455 khz if. When I plugged it in, the filter had about 7 or 8 s-units of attenuation. It is clearly not usable. At first I thought I had a bad filter. But after another look at the number of the filter I noted the number may be the key. It is .... F455.7J-05 ... This looks like it for a 455.7 IF. I have never heard of this. Can anyone give me an insight as to what is going on here?

de Jerry K8RA PittengJ@Battelle.org

# 5550. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <67s41h$jfi$2@news1.teleport.com>
Source record: 88039

In article <19971224122300.HAA21945@ladder02.news.aol.com>, davidn3213@aol.com (DavidN3213) wrote:
>. . . This, combined
>with the fact that most of the military/commercial design action occurs at VHF
>and above, means that you'll rarely see manufacturer-supplied device S
>parameters for frequencies below 50 or 100 MHz.
>
>One approach to obtaining valid MF/HF S parameters for a device characterized
>at VHF+ works as follows. . .
>. . .

SPICE models are frequently available for components. It's possible and practical to set up a SPICE analysis which will extract the S-parameters at any set of small-signal operating conditions and any frequency range desired. I used this method for a transistor used in a recent consulting job, operating at about 6 GHz. Using S-parameters extracted from the manufacturer's SPICE model gave results much closer to measured circuit performance than the manufacturer's S-parameter values did. (The two disagreed significantly.) I'd generally expect the S-parameter values to be much better than the SPICE model at this frequency, but it certainly wasn't so in this case.

Roy Lewallen, W7EL

## 5551. diodes help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: Alex <alexndrb@ibm.net>
Message-ID: <34a1b9c0.0@news2.ibm.net>
Source record: 88040

Hi all,
I have a problem with soldering diodes in a demodulator.
Diodes in diagram are marked: --|>|--
on the diodes there is a marked side --(________||_)--
how do I interpret it ? which side is which ??
TIA,
Alex

# 5552. Re: Three 5v 200a Supplies - Verify Info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-24 00:00:00 UTC
From: The Ronney's <pronney@sprynet.com>
Message-ID: <67s7aa$ah3$1@juliana.sprynet.com>
Source record: 88041

Hi
-----Original Message-----

>I have acquired three 5V 200A power supplies (amazingly small, about
>12"deep x 5"wide x 8"high, though very solid and heavy). (They came with a
>bunch of other stuff)
>
>They are JETA Power Systems, Inc. Model G1001-1
>Label says Input: 3 phase 208v 3.5a 47-400hz
> or 230v 9.6a 47-60hz
> Output: 5v 200a
>
>Each unit has its own built in fan, massive plated connection posts, etc.
>
>Do I assume correctly that I can run standard 220-230v into one of these
>little beasts (at the properly labeled terminals)and get 5v at 200a out?

Nope... Three phase is three phase. Your shack has single phase. Won't work. Usually three phase AC is only available in industrial areas. Three phase AC has three 'hot' wires, each 120 degrees phase shifted. The voltage between ANY two is 208 volts. While running it with single phase 220 v might get some output, it surely won't have anywhere near full output capacity.

>So if I tie the outputs of two in series and crank the voltage up to 6 or
>6 1/2v (there's a voltage adjustment slot), I could end up with usable
>12-13v at 200a?
I've heard of people doing this. It can work.

>What's the potential downside as a shack supply?
They are switching supplies, with all the usual upsides and downsides to them. Mostly, the downside is that since they switch, they will likely generate RFI.

Hope this is helpful.

73's
Martin, WB6YMI

# 5553. Need Schematic RCA TV- CTC185A Chasis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: thom@newshost.li.net
Message-ID: <67s9ah$ba5$2@news01.li.net>
Source record: 88042

Hi and thanks in advance for your help,
I have an RCA TV with a CTC185A Chasis that will not power up. I
suspect the problem is with the voltage regulator. If anyone has a
scgematic, or knows where I can get one, for this set, I'd appreciate you
help in locating the VR.

Thanks and have a happy holiday
Tom
WB2QDG
thom@li.net

--

---

Friend of Bill W's

Be patient, God isn't finished with me yet.

---

# 5554. Re: diodes help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: MR DXER <sbdesign@worldnet.att.net>
Message-ID: <67se5j$ffe@bgtnsc02.worldnet.att.net>
Source record: 88043

THE LINE IS THE CATHODE

--
CQ CQ CQ DX CQ DX

Alex <alexndrb@ibm.net> wrote in article <34a1b9c0.0@news2.ibm.net>...
> Hi all,
> I have a problem with soldering diodes in a demodulator.
> Diodes in diagram are marked: --|>|--
> on the diodes there is a marked side --(________||_)--
> how do I interpret it ? which side is which ??
> TIA,
> Alex
>

# 5555. Re: help.... collins filters info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: oak@texas.net
Message-ID: <67st2p$59h$1@news3.texas.net>
Source record: 88044

In article <19971224153701.KAA07416@ladder01.news.aol.com>,
k8rajerry@aol.com says...
>
>Help.... I purchased a Collins Mechanical Filter for my 75A4. I thought
I was
>buying a 500 cycle filter with a 455 khz if. When I plugged it in, the
filter
>had about 7 or 8 s-units of attenuation. It is clearly not usable. At
first
>I thought I had a bad filter. But after another look at the number of
the
>filter I noted the number may be the key. It is .... F455.7J-05
...
>This looks like it for a 455.7 IF. I have never heard of this. Can
anyone
>give me an insight as to what is going on here?
>
>de Jerry K8RA PittengJ@Battelle.org

Seasons Greetings Jerry...

You might find the information you need
at.....http://www.wa3key.com/filters.html

73's and Happy Holidays

de.... K7RMJ... Frank dit..dit

# 5556. Re: diodes help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: Tony Hwang <oolong@netcom.ca>
Message-ID: <34A2143E.4FEF@netcom.ca>
Source record: 88045

MR DXER wrote:
>
> THE LINE IS THE CATHODE
>
> --
> CQ CQ CQ DX CQ DX
>
> Alex <alexndrb@ibm.net> wrote in article <34a1b9c0.0@news2.ibm.net>...
> > Hi all,
> > I have a problem with soldering diodes in a demodulator.
> > Diodes in diagram are marked: --|>|--
> > on the diodes there is a marked side --(________||_)--
> > how do I interpret it ? which side is which ??
> > TIA,
> > Alex
> >
Hi, Alex
What is your DVM/multi-meter doing?
Which way current flows? And electron flows? Current is from Anode to
Cathode which is Arrow to vertical line; Electron flows the other way.
Figure out what polarity your DVM/Multi-meter test leads have and then
you are set. You can figure out diodes, transistors, etc.
GL, 73
Tony

# 5557. Kenwood R-2000 - Make it better?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: I_Magnus@hotmail.com
Message-ID: <MPG.f0bdc872a5ff2bc989680@news.busprod.com>
Source record: 88046

I have an old R-2000 SW reciever that I have hooked up to a long wire antenna stretched between two trees in my backyard. Currently I can only receive the big stations; ie, BBC, Radio Australia, etc. Does anyone have an idea as to how I can DX with this setup?

The antenna is tapped at the end with a 75ohm coax which I have run to my receiver. It is the RS SW antenna kit everyone says is too expensive... I had to buy two. One I used for the receiver antenna, the other is the ground. I sank a 6 foot copper rod in the earth outside my window (yes, I can see the Earth from my window) for the ground and attatched the copper wire to it for a ground line.

Does anyone have any suggestions?
Any help will be appreciated.
Kevin

# 5558. Re: New S-Parameter Thread

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: silvio@joker.irb.hr
Message-ID: <67tioh$o0r@bagan.srce.hr>
Source record: 88047

Nicholas R Kennedy (nkenned@entergy.com) wrote:
: Reading about S-Parameters and wondering what I'm missing ...

: Is S-Parameter analysis primarily used and UHF/microwave frequencies?
: Or is it also useful in the 1.8 to 30 Mhz region?

S parameters were introduced because it was imposible to measure voltages
and currents on very high frequencies. In S parameter analysis one deals
with travelling waves rather than voltages or currents.

My impression is that on low frequencies it is a lot easier to use
traditional Z and Y models and on UHF and microwave freqs to use S
parameter analysis.

: I got the impression it's the former from the HP tutorial. Perhaps
: reactive components of transistors are nearly negligible in the HF
: region?

No, it's just that S parameters are hard to measure on low frequencies.
And it is a lot easyer to use Z and Y models of a transistor. If you really
want to use S parameters you can calculate them from Z,Y and h parameter
matrix.

Silvio

# 5559. MCX100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: silvio@joker.irb.hr
Message-ID: <67tj7u$o0r@bagan.srce.hr>
Source record: 88048

I got an old Motorola UHF rig the MCX100 and i would like to change it's channel frequencies. Problem is that i dont know what PLL synth chip is on the PLL board since it has a nonstandard marking (77M37). There is a 82s131 (512x4 PROM) on board, i have read it's contents but couldn't figure out what the numbers mean (maybe i was reading it the wrong way, i'm not even sure about it's pinout).

Any help regarding synthesizer chip and PROM would be appreciated.

Silvio

# 5560. SGE 711 SSB RADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: jtyrak5ftn@aol.com
Message-ID: <19971225140401.JAA04743@ladder01.news.aol.com>
Source record: 88049

I NEED INFO ON SGE 711 SSB RADIO.

COPY OF MANUAL
HOW DO YOU PUT IT ON LSB?

I WILL PAY!

JOHN TYRA k5FTN

JUNO EMAIL ADDRESS:

JTYRA@JUNO.COM

# 5561. Re: diodes help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <34A27A53.7BB3@one.net>
Source record: 88050

Alex wrote:
>
> Hi all,
> I have a problem with soldering diodes in a demodulator.
> Diodes in diagram are marked: --|>|--
> on the diodes there is a marked side --(________||_)--
> how do I interpret it ? which side is which ??
> TIA,
> Alex

I like to remember it as:

the bar on the diagram is a minus sign, and that end
of the diode is the negative terminal.

ditto for the actual component. the band is a minus sign.
connect that end to minus (unless you intentionally need
it reverse biased).

Rich W2RG

# 5562. RE: NEED INFO ** KEYING CIRCUIT**

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: SuperBrad <SuperBrad@Home.com>
Message-ID: <01bd115a$7cde1560$1b10dfd0@kb0nza>
Source record: 88051
Cross-posted to: es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amat

I am looking for some information on how to build a keying circuit to use the audio output of one radio to key another radio and retransmit the audio. Sort of like a cross band radio does only I am going to use two diffrent radio. Spacifically I am using an HTX-202 for the reciever and an HTX-404 as the transmiter.

Any information you might have would be helpful. Please E-Mail them to brad@dialnet.net

Thank You.

Brad,

KB0NZA

# 5563. NE561B Phase Lock Loop

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: John Hewitt <jwhewitt@worldnet.att.net>
Message-ID: <67u5c2$2o7@bgtnsc02.worldnet.att.net>
Source record: 88052

I am looking for NE561B Signetics Phase Lock Loop.
I am building a receiver from old plans from Matco Electronics.
These plan were written in the 80's

Also I can not find NPN Transistors ECG 316
for the RF Amp.

If any one can help me I would greatly appreciate it.
John
KC8CQN
P.S any know if these plans actually work???
if you know what I am talking about.

# 5564. RE: TLM Beacon...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: Mjacobse@ix.netcom.com
Message-ID: <34A2B86C.CF3@ix.netcom.com>
Source record: 88053

Parallax, Inc (www.parallax.com) has the BASIC stamp that will do all that you are looking for. Even has it already done for you. Their plans us a IR section between a outside unit and the inside unit..They also include plans and ideas for more.

The Basic stamp is a small controller.. Idea for what you are looking for. The possiblities are almost endless. Try them and see what you think..

73

## 5565. Transfer Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: paul.mangen@ci.educ.lu
Message-ID: <883079274.1540227087@dejanews.com>
Source record: 88054

I have a HP TRANSFER OSCILLATOR MODEL 540A
I need a manual.Can anybody help me?

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

# 5566. Ten-Tec Paragon Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: Ed Carpenter <k4gj@scia.net>
Message-ID: <67ugqk$gb$1@news.utelfla.com>
Source record: 88055

I've got a Paragon that's developed a peculiar problem. So far, Ten-Tec
hasn't come up with a fix, but I haven't given up on them yet.
It goes into oscillation when keyed up on 160, sometimes 80, when in SSB
mode. Same thing into a dummy load. All other bands fine.
The ouput is not on the dial freq either, about 40 watts.
Any ideas? Thanks for reading, Happy Holidays de K4GJ
k4gj@scia.net

# 5567. WANT TO BUY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: Craig Lund <clund@bestweb.net>
Message-ID: <01bd117d$b4520420$c96d5ed1@clund.bestweb.net>
Source record: 88056

Want to buy any of the following rigs. If in kit form and complete it should be in working order.

Also looking for QRP kit's in unbuilt condition

Please Email Price and condition

Craig

Clund@bestweb.net

FT-301S

HW-8
HW-9
HW-101

QRP Wattmeter

# 5568. Re: Microwave ATV from a Microwave!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971225223901.RAA03945@ladder02.news.aol.com>
Source record: 88057

In article <europa-ya023580002012971432410001@news.primenet.com>,
europa@primenet.com writes:

>:N9KZA

Perhaps you could make a small aperture for coupling some small
>fraction of
the energy out of the oven and thru a waveguide.

Then you could
>pull the oven frequency by adding a potato, cup of coffee,
or some other food
>to cook. You might make a sked by saying: "meet me at
the large baked
>potato freq" and if I'm not there "try the cornish game hen
wavelength". Of
>course, you might get very fat doing all of this
operating and eating.

Rob.

Just a technical note, guys... the frequency will drift as the potato cooks and
it's dielectric constant changes.

-one who knows-

# 5569. Re: CQ QRP Ops: Why Isn't There More 30 Meter Activity?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971225223900.RAA06555@ladder01.news.aol.com>
Source record: 88058

A lot of the RTTY etc is wideshift RTTY from commercial stations. I have tried QRP on 30. I think there is just too much noise there. Though the Hams are limited to 100W, the commercial stations are not.

Thought of trying 17 meters? Not many stations there, and the band only opens in the afternoon, but if anybody is listening you will be heard over the noise. Also the antenna will be smaller. I would like to see this band used just a little bit more...

73 evrbdy
AB5VH

## 5570. 06/40 vs 06/40 ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: Anders Karlsson <sm7tjc@gislaved.mail.telia.com>
Message-ID: <34A2DEDB.7CD988EB@gislaved.mail.telia.com>
Source record: 88059

I have some valves called QQV06/40 and some QQE06/40.
What is the difference?
I am building a transverter for 6 meters, and they are perfect for this
(I am just allowed to use 50W here in Sweden).
But I can only find data for the QQV06/40, but would like to know what
the difference is.

73 de Anders, SM7TJC

# 5571. Re: Need Schematic RCA TV- CTC185A Chasis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: <>
Message-ID: <nospam-2512972005300001@nash-max151.dynamic.usit.net>
Source record: 88060

In article <67s9ah$ba5$2@news01.li.net>, thom@newshost.li.net (Thom) wrote:

> Hi and thanks in advance for your help,
> I have an RCA TV with a CTC185A Chasis that will not power up. I
> suspect the problem is with the voltage regulator. If anyone has a
> scgematic, or knows where I can get one, for this set, I'd appreciate you
> help in locating the VR.
>
> Thanks and have a happy holiday
> Tom
> WB2QDG
> thom@li.net
>
> --
>
>
>
> ---------------------------------------------------------------------
> Friend of Bill W's
>
> Be patient, God isn't finished with me yet.
>
> ---------------------------------------------------------------------

Call Howard W Sams Inc. at 1-800-428-7267. They sell schematics for a living. I have been getting them since the early '60s. They will mail you what you want for around $25.00 I believe that is correct. Check the highvoltage transformer, that is probaly where you are having problems as it sets us all of the voltages for the set and it fails often.

C.

--
To respond please remove "nospam@" from address

# 5572. Old Hot Wire Ammeters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-25 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <yRLMVCAleio0EwPk@falstaf.demon.co.uk>
Source record: 88061
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear All,
Does anyone know what was used for the thin bit of cord that connected bimetallic strip RF ammeters to the needle. For those who don't know what I'm talking about, early RF ammeters consisted of a bimetalic strip that would deform when a current passed through it. The centre of the strip was then connected to a needle using a cord that wrapped around the shaft of the needle so forming a pulley.

I have one where the cord is broken. What can I use to replace it?.

73 de Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

# 5573. Soundblaster WEFAX/FAX/SSTV/RTTY/CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: "Brian E. Cauchi" <briane@geocities.com>
Message-ID: <6811nr$t0v@news.keyworld.net>
Source record: 87972
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

FTV is a software only package that can be used to receive images from
Weather
Satellites and Terrestrial Facsimile Stations, text transmissions from radio
telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and CW
signals. It can also transmit Amateur Radio FAX and SSTV. No external
hardware, other than a radio, is required, as all the necessary signal
processing is implemented in software.

The main features include:
WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
FAX operation supports APT signal recognition and scheduled reception.
No external decoder or converter box is required.
Signal analysis is provided on all modes.
Many parameters are adjustable while receiving.
Full recovery from wrong mode settings is possible.
Program works in real time (about 1 second 'DSP' time lag)

I have improved documentation considerably and an illustrated user's manual
is now
available. You may get more information or download a copy from my web site,
on http://www.geocities.com/SiliconValley/2504

Cheerio from Brian, 9H1JS

# 5574. AL-80 Amplifier help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: w8pu@aol.com
Message-ID: <19971226201201.PAA25243@ladder02.news.aol.com>
Source record: 87973

I purchased an older Ameritron amplifier a few years ago; the fore runner of the Al-80B made today. The amp uses a single 3-500Z, 160 thru 15 meters and a pi tank circuit consisting of a 250 pf plate tuning capacitor and a three section 1100 pf load capacitor. 400 pf of capacitance is switched parallel to the tuning capacitor and two silver micas which total 2300 pf are switched parallel to the loading for 160 meters only. For 80 meters 700 pf total is paralleled with the load capacitor and for 40 meters 200 pf. The amplifier has never tuned properly on 160 or 40 and barely on 80 meters. There is insufficient loading. Advancing the load control on these bands causes an increase in plate current but loss of RF power. Maximum output occurs with the load capacitor fully meshed. Power output is between 700 and 800 watts depending on drive; 65 to 90 watts. There is approx 2450 volts on the plate under load. I have been over every inch of the amp and went so far as to verify componet values and even swapped out the tank coils. The only solution has been to increase the loading capacitance by installing larger door knob capacitors. Currently the total capacitance is:

160 meters tune 650 pf load 4100 pf
80 meters 250 1800
40 meters 250 1300

I dont know what the load resistance of the 3-500z is so I cant verify these values against the ARRL handbook. 160 meters still wont load properly. Paralelling another 1000 pf will begin to help. How much is too much?
On top of this mess the bandswitch capacitor has damaged contacts due to arcing. The contacts are too close for the 160 meter tuning capacitance switching and the rest of the contacts used for the other bands. I guess it's no wonder Ameritron redesigned this amp. Any suggestions?

# 5575. FS:CRT's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: vintel@aol.com
Message-ID: <19971226203200.PAA29309@ladder01.news.aol.com>
Source record: 87974

CRT's. These appear to be new cathode ray tubes, some boxes still sealed. Don't know what type of equipment these were used in. I'm sure some were for oscilloscope use. Others probably some military application. 3BP1 $5.00ea. 3GP1 $5.00 ea. 3FP7 $5.00ea. 5BP1 $7.00ea. 5FP7 $7.00ea.
Buy now at listed price or wait until 1/7 /98 & bid on them at eBay Auction by going to
http://trig.ebay.com/aw/ & do a search.
Price listed does not include shipping from Baltimore, Md.
Thanks for taking the time to check this out.
John

# 5576. Wanted: Info on Collins HF-8061

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: jmpotter@gte.net
Message-ID: <34a4233a.16164663@news.thuntek.net>
Source record: 87975

This appears to be an antenna tuner. It says: "Filter and Line Flattener" There is a nice vacuum variable and dummy load inside. One compartment we didn't open presumably contains variable inductors??

Any info, such as power level and frequency range would be appreciated.

73 de K9GXC, Jim

# 5577. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: W6RCA <cmoore@sedona.intel.com>
Message-ID: <34A4318E.E05@sedona.intel.com>
Source record: 87976

Bert Douglas wrote:
>
> LNCNLVR <lncnlvr@aol.com> wrote in article
> > A Smith Chart is simply a straight-forward, 180 degree circle.
> > Hope that helps.
>
> Are you sure? How does one draw a "180 degree" circle?

Better yet, how does one draw a straight 18Ø° circle? :-)
I do believe the answer lies in the bilinear transformation.
--
73, Cecil, W6RCA, OOTC (not speaking for my employer)

# 5578. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <34A44CC9.2467F90A@erols.com>
Source record: 87977

The least expensive effective way to go is to use the sound card. The HamCom interface is a very basic system which, while inexpensive, will never compare in performance with a decent TNC. A simple interface is a good way to get introduced to digital modes, but I'd never suggest that better than, or even equivalent to, a good decoder circuit such as is contained in the Hal, SCS, or other TNCs.

RCrusoe wrote:

> In article <3496D10E.A688CF25@erols.com>, Bob Lewis <aa4pb@erols.com> writes:
>
> >
> Gary Coffman wrote:
>
> > On 16 Dec 1997 01:11:04 GMT, n8blk@aol.com (N8BLK)
> >wrote:
> >
> > >In article <#b8JFFPC9GA.159@ntdwwaaw.compuserve.com>, "Al
> >Williams"
> > ><alw@al-williams.com> writes:
> > >
> > >>There is no doubt that
> >Pactor is more popular. There is also little
> > >>doubt that Pactor is
> >"better". The issue is that HAMCOM doesn't do >PACTOR.
> > >>Some of us still
> >like to build what we can.
> > >
> > >This is one of those situations though,
> >where building a Pactor
> > >interface is difficult because Pactor & Pactor II
> >are propietary
> > >techniques, and the implementations are licensed before
> >sale
> > >to the public. You have a good point about AMTOR being cheaper
> >
> >>than Pactor, and at least some Pactor implementations allow
> > >an Amtor
> >station to connect, and then have an Amtor connect.
> > >
> > >>Lord knows I
> >don't want to start a flame war about how awful AMTOR is.
> > >> It is better
> >than RTTY and for HAMCOM users thats your 2 choices.
> > >
> > >In the defense of

> >Cecil, he rarely gets upset about people disagreeing
> > >with him. Pactor,
> >even with the MFJ implementation does have
> > >better features than AMTOR
> >connects, and also can pass let's say
> > >a file better than AMTOR. It is a
> >shame that Pactor is propietary, and
> > >that other modes like Clover & GTor
> >also are, but I guess that's life
> > >in the new HF digital world!
> >
> > All of
> >the HF methods, with the possible exception of PACTOR II, have
> > been
> >sufficiently documented by either the manufacturers or in the
> > amateur
> >literature that you could homebrew a compatible unit. That's
> > allowed under
> >Fair Use, and won't get you into licensing difficulties.
> > Licensing is only
> >required if you're going to manufacture units for resale.
> >
> > I'm not even
> >sure that the PACTOR I protocol requires licensing. I think,
> > but could be
> >wrong, that the protocol (not a particular implementation)
> > was released
> >publicly for amateur use The more advanced PACTOR II,
> > Clover II, and GTOR
> >protocols do require a license, AFAIK. At least HAL
> > has publicly *offered*
> >non-exclusive licenses for Clover II to other
> > manufacturers. I haven't
> >heard of SCS or Kantronics making the same
> > offer for their protocols.
> >
> >
> >All that said, I am very much in favor of an *open* protocol for advanced
> >
> >amateur HF digital. Open standards are very useful in allowing competition
> >
> >to improve products, and to drive a free market to the best price point.
> >
> >TAPR and AMSAT collaborated to give us AX25, and warts and all that
> >
> >standard has done much to make amateur packet widely available and
> >
> >affordable. AMTOR is similarly open, but just isn't good enough. We need
> > to
> >work on a higher performance open HF digital standard that all amateurs,

> >
> >and amateur manufacturers, can adopt and support. I've been beating the
> >
> >drum about this for a while now, but no one has risen to the bait and
> >
> >volunteered any ideas about what this open standard should be, or
> > how we
> >should go about developing it.
> >
> > Gary
> > Gary Coffman KE4ZV | You make it
> >|mail to ke4zv@bellsouth.net
> > 534 Shannon Way | We break it |
> >
> >Lawrenceville, GA | Guaranteed |
>
> There seems to be no reason the HAMCOMM style interface could not be used on
> PACTOR All that is needed is for somebody to write the software for
> "in-the-computer" processing of the data stream. The protocols are published,
> and don't seem to be that much more complicated than AMTOR. Maybe DL5YEC will
> work on a PACTOR upgrade to his HAMCOMM program if all the unregistered
> shareware users out there would register.
> The HAMCOMM circuit is a really clever little device and can easily be built
> into a D-sub hood. Full-featured TNCs are needed for some things, but not for
> informal ragchews. Why spend $400 on a TNC when the HAMCOMM circuit can be
> built for less than $20? or bought for under $50? Phooey on TNC's! By the
> way, the device works with several other SSTV and FAX programs, notably JVFAX.
> As far as AMTOR being "not good enough", the question that comes to my mind is:
> "not good enough for what?" For casual ragchewing, Amtor is great! Throughput
> is still generally faster than I cah type, so why do I need to go faster? I
> don't like to send canned messages except to forward them. During a ragchew, I
> think it is rude to send canned stuff other than a VERY SHORT "brag file".
> Therefore, AMTOR and RTTY are "fast enough" for me. Now, since AMTOR has pretty
> decent error handling, I would tend to favor it over RTTY most of the time.
> Note that HAMCOMM also does a fair job with high-speed CW if the code is sent
> clean and steady with no swing. You can also key your rig with the program if
> you build the keying feature into the interface. This would seem to make
> HAMCOMM/JVFAX/Hamcomm interface the ideal all-around package for the digital
> ragchewer. With Pactor included, We would be looking at a really neat package
> indeed.
> whew! that got a bit long. 73 evrbody
> AB5VH

# 5579. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <uMi0tMnE9GA.346@nih2naab.prod2.compuserve.com>
Source record: 87978

Wow! What a can of worms. I agree that PACTOR should be writable, but I hate to reinvent the wheel and have to write the spectrum functions etc. The HAMCOMM software works really well (and yes I am registered), and I probably would not have time to redo it as well.

Sure a TNC is great, but for what I use it for HAMCOMM is great. Sound card stuff? Fine, but I doubt that is much better than HAMCOMM and I haven't seen any that are as inexpensive as HAMCOMM and do PACTOR. Besides, I get a kick out of using something I built, not just something I cabled to my PC. With good filtering HAMCOMM is a very good performer.

Anyway, I never started this thread to suggest that TNCs are no good or bad or that even HAMCOMM is their equal. On the other hand, I have to wonder if I am the only ham using HAMCOMM! Surely there are those of us who would like to use AMTOR and as you point out for what I do it is perfectly fine and better than RTTY.

73,

Al WD5GNR
http://www.al-williams.com/wd5gnr

## 5580. Does anyone know how to design/build a crystal filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.f0e4379d9cdc601989693@news.infoave.net>
Source record: 87979

Looking for design parameters for a filter to be used in an Icom 706 Mk II. Spent all I had on the radio, now I'm being cheap on the filters. Would like to design/build a 350 Hz CW filter, and 1.9 KHz SSB filter for it. Total budget about $20. Any ideas how to design/build them would be appreciated. A done-deal schematic would be even better. I see them in the ARRL handbook, but no parts values are stated, nor are there instructions on how to determine the values needed. I found some info on the 'net that stated 2k ohm input and output Z. Don't know the IF frequency where these things go- Am I wasting my time? Should I just go ahead and save my pennies until I can buy factory filters? 73, -Web

NOTICE TO SPAMMERS: I am well versed in anti-spam tactics.
Any SPAM mail I receive as a result of this newsgroup
posting will be met with e-mail bombing and you will be
subscribed to as many newsletters as I have the time to
subscribe you to. Your e-mail box will runneth over.
By spamming me, you consent and agree to receive such,
and further agree that it is your wish to receive said
e-mail bombing and e-mail newsletters. Further, you
agree to hold me harmless and not liable for any damages
as a result of e-mail bombing you receive from me.

# 5581. Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: Craig Lund <clund@bestweb.net>
Message-ID: <01bd11bd$77338c40$c96d5ed1@clund.bestweb.net>
Source record: 88062

Hello All,

I am in the market for an Oscilloscope. If you have one you want to part with please Email me and let me know the condition and your asking price.

73, Craig

Clund@bestweb.net

## 5582. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: lncnlvr@aol.com
Message-ID: <19971226055001.AAA11515@ladder01.news.aol.com>
Source record: 88063

A Smith Chart is simply a straight-forward, 180 degree circle.
Hope that helps.

# 5583. Re: Homebrew text?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971226082101.DAA17817@ladder02.news.aol.com>
Source record: 88064

In article <34972A5C.46B081B1@epix.net>, "Charles J. Shaw" <cshaw@epix.net>
writes:

>
I've been looking for a good source of homebrew ham radio projects.
>Is
there a text or other source that contains some interesting projects
>or
has the build-it-yourself aspect of the hobby gone by the wayside.
I do
>receive QST and I'm not "really" interested in kits.

Thanks.
Charlie
>Shaw
KB3BTO

My favorites are:

***W1FB QRP Notebook, by the late Doug DeMaw, published by ARRL
If I could reccomend ONE book and one book only to the homebrew-curious, this
would be it. The first "rig" I ever built was a 1 transistor (2N2222)
mighty-mite, which I used with a radio shack SWL reciever. We're talking BASIC
radio here! Many circuits are covered here that allow building of fairly
complex little radios using a modular design pproach.
***QRP CLASSICS published by ARRL
This is a compilation of solid state QRP projects from several years of QST and
the Handbook. A wide range of complete construction projecs is covered here,
from basic 2 transistor transmitter to multiband superhet transcievers. A lot
of station accessories are presented as well.
***Solid State Design For the Radio Amateur published by ARRL
A good primer on basic RF design for those who want to design their rig rather
than use the "cookbook" method. starts simple but is fairly comprehensive as a
whole. Heavy reading at times for the neophyte... take it in small bites
***Radio Receiver Projects You Can Build by Homer L Davidson, published by Tab
Press/McGraw Hill
Very entertaining book. I have had a lot of fun building some of the projects
in this book, especially the vacuum tube recievers. Very basic stuff here...
starts out with crystal sets and goes through TRF, regen, direct conversion,
and VERY simple AM superhets. Mostly oriented toward AM Medium wave broadcast
and shortwave AM recievers, though there is an add-onn BFO project that allows
SSB and CW reception by many of the featured projects. 1920's through 80's
technology presented. Gets into coil winding, building simple tuning
capacitors, using ICs, power requirements and options, varactor tuning, xtal
"pulling", etc Parts called for, even the tubes (1S4, 3S4, and 12AT7) are

cheap and not hard to get. GREAT book for kids. Not really ham-oriented, but radio is radio. My favorite!

Hope this list has been helpful. Have fun. Keep your iron tinned and hot!

73 evrbdy
AB5VH

# 5584. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971226082101.DAA20325@ladder01.news.aol.com>
Source record: 88065

In article <3496D10E.A688CF25@erols.com>, Bob Lewis <aa4pb@erols.com> writes:

>
Gary Coffman wrote:

> On 16 Dec 1997 01:11:04 GMT, n8blk@aol.com (N8BLK)
>wrote:
>
> >In article <#b8JFFPC9GA.159@ntdwwaaw.compuserve.com>, "Al
>Williams"
> ><alw@al-williams.com> writes:
> >
> >>There is no doubt that
>Pactor is more popular. There is also little
> >>doubt that Pactor is
>"better". The issue is that HAMCOM doesn't do >PACTOR.
> >>Some of us still
>like to build what we can.
> >
> >This is one of those situations though,
>where building a Pactor
> >interface is difficult because Pactor & Pactor II
>are propietary
> >techniques, and the implementations are licensed before
>sale
> >to the public. You have a good point about AMTOR being cheaper
>
>>than Pactor, and at least some Pactor implementations allow
> >an Amtor
>station to connect, and then have an Amtor connect.
> >
> >>Lord knows I
>don't want to start a flame war about how awful AMTOR is.
> >> It is better
>than RTTY and for HAMCOM users thats your 2 choices.
> >
> >In the defense of
>Cecil, he rarely gets upset about people disagreeing
> >with him. Pactor,
>even with the MFJ implementation does have
> >better features than AMTOR
>connects, and also can pass let's say
> >a file better than AMTOR. It is a
>shame that Pactor is propietary, and
> >that other modes like Clover & GTor

>also are, but I guess that's life
> >in the new HF digital world!
>
> All of
>the HF methods, with the possible exception of PACTOR II, have
> been
>sufficiently documented by either the manufacturers or in the
> amateur
>literature that you could homebrew a compatible unit. That's
> allowed under
>Fair Use, and won't get you into licensing difficulties.
> Licensing is only
>required if you're going to manufacture units for resale.
>
> I'm not even
>sure that the PACTOR I protocol requires licensing. I think,
> but could be
>wrong, that the protocol (not a particular implementation)
> was released
>publicly for amateur use The more advanced PACTOR II,
> Clover II, and GTOR
>protocols do require a license, AFAIK. At least HAL
> has publicly *offered*
>non-exclusive licenses for Clover II to other
> manufacturers. I haven't
>heard of SCS or Kantronics making the same
> offer for their protocols.
>
>
>All that said, I am very much in favor of an *open* protocol for advanced
>
>amateur HF digital. Open standards are very useful in allowing competition
>
>to improve products, and to drive a free market to the best price point.
>
>TAPR and AMSAT collaborated to give us AX25, and warts and all that
>
>standard has done much to make amateur packet widely available and
>
>affordable. AMTOR is similarly open, but just isn't good enough. We need
> to
>work on a higher performance open HF digital standard that all amateurs,
>
>and amateur manufacturers, can adopt and support. I've been beating the
>
>drum about this for a while now, but no one has risen to the bait and
>
>volunteered any ideas about what this open standard should be, or
> how we
>should go about developing it.

>
> Gary
> Gary Coffman KE4ZV | You make it
>|mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
>
>Lawrenceville, GA | Guaranteed |

There seems to be no reason the HAMCOMM style interface could not be used on PACTOR All that is needed is for somebody to write the software for "in-the-computer" processing of the data stream. The protocols are published, and don't seem to be that much more complicated than AMTOR. Maybe DL5YEC will work on a PACTOR upgrade to his HAMCOMM program if all the unregistered shareware users out there would register.
The HAMCOMM circuit is a really clever little device and can easily be built into a D-sub hood. Full-featured TNCs are needed for some things, but not for informal ragchews. Why spend $400 on a TNC when the HAMCOMM circuit can be built for less than $20? or bought for under $50? Phooey on TNC's! By the way, the device works with several other SSTV and FAX programs, notably JVFAX.
As far as AMTOR being "not good enough", the question that comes to my mind is: "not good enough for what?" For casual ragchewing, Amtor is great! Throughput is still generally faster than I cah type, so why do I need to go faster? I don't like to send canned messages except to forward them. During a ragchew, I think it is rude to send canned stuff other than a VERY SHORT "brag file". Therefore, AMTOR and RTTY are "fast enough" for me. Now, since AMTOR has pretty decent error handling, I would tend to favor it over RTTY most of the time.
Note that HAMCOMM also does a fair job with high-speed CW if the code is sent clean and steady with no swing. You can also key your rig with the program if you build the keying feature into the interface. This would seem to make HAMCOMM/JVFAX/Hamcomm interface the ideal all-around package for the digital ragchewer. With Pactor included, We would be looking at a really neat package indeed.
whew! that got a bit long. 73 evrbody
AB5VH

# 5585. Re: diodes help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: dmturner@primenet.com
Message-ID: <67vosh$6ak@nntp02.primenet.com>
Source record: 88066

Rich Griffiths <richg@one.net> wrote:
>Alex wrote:
>> I have a problem with soldering diodes in a demodulator.
>> Diodes in diagram are marked: --|>|--
>> on the diodes there is a marked side --(________||_)--
>> how do I interpret it ? which side is which ??
>> TIA,
>> Alex

>I like to remember it as:

>the bar on the diagram is a minus sign, and that end
>of the diode is the negative terminal.

>ditto for the actual component. the band is a minus sign.
>connect that end to minus (unless you intentionally need
>it reverse biased).

The above works if you are trying to remember how to forward bias a diode.

I have seen many old diodes marked with a plus on the cathode; I've seen a few new ones also. Selenium rectifiers were marked this way too as are bridge rectifiers.

I believe diodes were marked this way to indicate where the positive voltage would be when the diode was used in a power supply. The cathode end is the positive supply and would be connected to the positive terminal of a filter capacitor.

Dave

# 5586. Re: ARRL CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: Jay Craswell <73016.27@CompuServe.COM>
Message-ID: <#NYKZwhE9GA.93@ntdwwaaw.compuserve.com>
Source record: 88067

Yeow! $13K is a lot of peanuts! May I suggest Circad? It also
has a free demo that lets you build little stuff. The good news
is that a full package is available to Hams (Must be at your
Flying Horse Call book address) at reduced price. $1000.00
normal price for Hams only $295.95!

It does Schematic and PCB but not simulation directly.

Check out the demo on Ci$ GO HAMNET or www.holophase.com
If anyone wants in on the Ham discount get in touch with me
directly. I do the sales / support for it.

--
73, Jay WB0VNE - AAV5TH

# 5587. Re: diodes help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <34A3EF5A.4262@one.net>
Source record: 88068

Dave Turner wrote:
>
> Rich Griffiths <richg@one.net> wrote:<snip>
>
> >the bar on the diagram is a minus sign, and that end
> >of the diode is the negative terminal.
>
> >ditto for the actual component. the band is a minus sign.
> >connect that end to minus (unless you intentionally need
> >it reverse biased).
>
> The above works if you are trying to remember how to forward bias a diode.
>
> I have seen many old diodes marked with a plus on the cathode; I've seen a few
> new ones also. Selenium rectifiers were marked this way too as are bridge
> rectifiers.

Wow! Selenium rectifiers! I've still got a few of those things in the
junk box. Now that was a COMPONENT! With all that space, they had plenty
of room to add labels.

>
> I believe diodes were marked this way to indicate where the positive voltage
> would be when the diode was used in a power supply. The cathode end is
> the positive supply and would be connected to the positive terminal of a
> filter capacitor.
>
> Dave

I always figured the "arrow" pointed in the direction the current was
supposed to flow, and I never really knew why they put the "minus signs"
on diodes. Of course, even the EE courses couldn't get me used to
thinking about current being opposite in direction from the electron
flow, so I invented some of my own ways of remembering these things.

Electrons are real, aren't they? ;-)

I mean, there aren't any positive charges flowing through the wires.
And holes are merely places where the atoms would like to have an
electron, but they're not truly positive charges.

Rich

# 5588. Re: Smith Chart, I don't get it ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: Bert Douglas <bertd@dibbs.net>
Message-ID: <680rcv$fhl$0@198.79.30.94>
Source record: 88069

LNCNLVR <lncnlvr@aol.com> wrote in article
<19971226055001.AAA11515@ladder01.news.aol.com>...
> A Smith Chart is simply a straight-forward, 180 degree circle.
> Hope that helps.

Are you sure?
How does one draw a "180 degree" circle?

Bert

# 5589. Re: Heath SB220 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-26 00:00:00 UTC
From: aldel@ibm.net
Message-ID: <34a41b4b.2838194@165.87.194.238>
Source record: 88070

Harry:
Call AL HARBACH, 407-723-7145.
He is a retired Heath Engineer.
Or search Al Harbach on computer.
He has all info plus parts.

Albert, Wa3fib
aldel@ibm.net

On Mon, 22 Dec 1997 11:09:15 GMT, "Harry Brown" <123@voicenet.com>
wrote:

>Can someone direct me to a list of modifications to the Heath SB220
>Anplifier?
>
>I believe that around 5 years ago, QST had an article on modifications
>(mainly mods to "beef" it up) but I cannot locate it.
>
>Any help would be appreciated.
>
>73, Harry, W3IIT
>

## 5590. Need help with amp, too low drive

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: readthebottom@nospam.mil
Message-ID: <34a49a62.273962723@news.willinet.net>
Source record: 87980
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hello. I recently aquired a THS Electronics amp, model 1-10. It takes 1-3 watts in with 10W out. My problem is my HT only puts out 340mw, and I can do almost .5W with external power. This is not enough power to trip the amp. What do I need to do to lower the input? Thanks for any help.

Ryan

ryan at poboxes dot com

## 5591. Creative Design RC5A-2 Antenna Rotor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Raymond Hansmeier <rhansme@pacifier.com>
Message-ID: <34A4CB29.5C9D1B74@pacifier.com>
Source record: 87981
Cross-posted to:
rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Want:
Any information on this unit. Mine needs repair. Can't find any help.
Will take a dead one . Need parts. Please reply via e-mail.
Thanks...Happy New Year...N7NL

# 5592. Re: Does anyone know how to design/build a crystal filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34a5337d.39460921@news.erols.com>
Source record: 87982

Web: I think you can build a filter yourself. It would be a good project and would make that new ICOM less of an appliance! You'd be one of the very few people who have dared to venture inside one of those radios with a soldering iron. Go for it!

You REALLY need the articles that are reprinted in the ARRL book "W1FB's Design Notebook" :

May 1982 QST " A unified approach to the design of Crystal ladder filters" by Wes Hayward

July 1987 QST "Designing and building simple Crystal filters" also by WH

Jan 1990 QST " A tester for crystal F, Q and R" by Doug DeMaw.

I have a homebrew CW filter in my HB receiver. Works great!

73 and good luck. Bill N2CQR

On Fri, 26 Dec 1997 22:43:38 -0500, kr4wm@sccoast.net (Web Williams) wrote:

>Looking for design parameters for a filter to be used in an Icom 706 Mk
>II. Spent all I had on the radio, now I'm being cheap on the filters.
>Would like to design/build a 350 Hz CW filter, and 1.9 KHz SSB filter for
>it. Total budget about $20. Any ideas how to design/build them would be
>appreciated. A done-deal schematic would be even better. I see them in
>the ARRL handbook, but no parts values are stated, nor are there
>instructions on how to determine the values needed. I found some info on
>the 'net that stated 2k ohm input and output Z. Don't know the IF
>frequency where these things go- Am I wasting my time? Should I just go
>ahead and save my pennies until I can buy factory filters? 73, -Web
>
>NOTICE TO SPAMMERS: I am well versed in anti-spam tactics.
>Any SPAM mail I receive as a result of this newsgroup
>posting will be met with e-mail bombing and you will be
>subscribed to as many newsletters as I have the time to
>subscribe you to. Your e-mail box will runneth over.
>By spamming me, you consent and agree to receive such,
>and further agree that it is your wish to receive said
>e-mail bombing and e-mail newsletters. Further, you
>agree to hold me harmless and not liable for any damages
>as a result of e-mail bombing you receive from me.

# 5593. Re: Old Hot Wire Ammeters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34a5321e.39110279@news.erols.com>
Source record: 87983
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin: I'm not sure if you will find your answer here, but the February 1994 QST has a very good article entitled "Revisiting the RF Ammeter. Check it out! 73 Bill N2CQR

On Thu, 25 Dec 1997 09:30:13 +0000, Robin Birch <robin@falstaf.demon.co.uk> wrote:

>Dear All,
>Does anyone know what was used for the thin bit of cord that connected
>bimetallic strip RF ammeters to the needle. For those who don't know
>what I'm talking about, early RF ammeters consisted of a bimetalic strip
>that would deform when a current passed through it. The centre of the
>strip was then connected to a needle using a cord that wrapped around
>the shaft of the needle so forming a pulley.
>
>I have one where the cord is broken. What can I use to replace it?.
>
>73 de Robin
>Robin Birch robin@falstaf.demon.co.uk
>
>M1ASU Old computers and radios always welcome

## 5594. Want to build classic CW transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: truelies40@aol.com
Message-ID: <19971227123001.HAA09664@ladder02.news.aol.com>
Source record: 87984

My name is Kip and I live in Ohio. I have long ago sold all my classic gear and now I want to build another station. I have lots of old tubes and parts but dont have any good plans. I would like to find some schematics for 807's , 6L6G, Ect.. If you know of some old QST or other mags as well as the issue #s I could sure use your help drop me a line.

# 5595. Re: Need help with amp, too low drive

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: jdc@cci.com
Message-ID: <6838ia$i8e@bmerhc5e.bnr.ca>
Source record: 87985
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <34a49a62.273962723@news.willinet.net>,
Ryan <readthebottom@nospam.mil> wrote:
>Hello. I recently aquired a THS Electronics amp, model
>1-10. It takes 1-3 watts in with 10W out. My problem is my
>HT only puts out 340mw, and I can do almost .5W with
>external power. This is not enough power to trip the amp.
>What do I need to do to lower the input? Thanks for any
>help.
>
>Ryan
>
>ryan at poboxes dot com

RF sensing T/R switches usually use a small capacitor in series with
a resistor to tap off a small amount of the RF signal. The signal is
detected with a diode and used to run a transistor which runs the relay.

To change sensitivity, make the series capacitor a little larger or
the series resistor a little smaller. Just remember that the amp has
about 10 db of gain, so you will get 3-4 watts out.

73..Jim N2VNO
--
James D. Cronin, Sr. Software Engineer
Directory and Operator Services, Northern Telecom
jdc@cci.com
jdcronin@nt.com

# 5596. FS NOS GE 25AV5GA, 35L6GT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: anttriode@aol.com
Message-ID: <19971227161701.LAA26089@ladder01.news.aol.com>
Source record: 87986

Hi:
Have for sale:

25AV5GA NOS GE Quantity 100 @ $3 each
35L6GT NOS GE Quantity 40 @ $3 each

Thanks,
Ron

# 5597. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971227174401.MAA01796@ladder02.news.aol.com>
Source record: 87987

I'm gonna build myself a new Hamcomm interface sometime this week... I think I got everything I need. Later this coming week I intend to homestead up on 17 meters and I will be running mostly Amtor though I will reply to other modes. All Hamcomm/Amtor ops are welcome. Maybe we can get a nice FEC round-table going on this under-utilized band. If the band does not open up I guess I'll slug it out on 14078 or thereabouts. I might try 30 meters in the evening.
I wouldn't mind using my sound card for AMTOR or even pactor if the software was out there and as cheap as hamcomm or the other shareware programs. It certainly has potential, and I have sound in my Toshiba notebook which is more or less Soundblaster compatible. Of course a lot of hams are still using 286 machines and can't or don't want to mess with a sound card.
How bout audio DSP filtering with a sound card? What a great CW filter you would have for that old reciever! Not to mention speech processing for SSB. Now that's something the Hamcomm circuit can't do!

# 5598. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <34A55D4D.A52C8076@erols.com>
Source record: 87988

There are several sound card CW filter/decoders available in addition to RTTY, Amtor, Pactor, and FAX. Most (if not all) require a true SoundBlaster card.

RCrusoe wrote:

> I'm gonna build myself a new Hamcomm interface sometime this week... I think I
> got everything I need. Later this coming week I intend to homestead up on 17
> meters and I will be running mostly Amtor though I will reply to other modes.
> All Hamcomm/Amtor ops are welcome. Maybe we can get a nice FEC round-table
> going on this under-utilized band. If the band does not open up I guess I'll
> slug it out on 14078 or thereabouts. I might try 30 meters in the evening.
> I wouldn't mind using my sound card for AMTOR or even pactor if the software
> was out there and as cheap as hamcomm or the other shareware programs. It
> certainly has potential, and I have sound in my Toshiba notebook which is more
> or less Soundblaster compatible. Of course a lot of hams are still using 286
> machines and can't or don't want to mess with a sound card.
> How bout audio DSP filtering with a sound card? What a great CW filter you
> would have for that old reciever! Not to mention speech processing for SSB.
> Now that's something the Hamcomm circuit can't do!

## 5599. interface help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Eugene Joseph <efjoseph@asacomp.com>
Message-ID: <34A560DE.33E3@asacomp.com>
Source record: 87989

HELP!!!!
could someone show me what the discription of parts would look like
in schematic form "three components make the hardware:

comparator, PLL and XOR gate. take the discriminator's output from the
scanner tuned on freq and feed it to the op amp, tune the PLL for 10khz
and
run its output and the incoming datastream thrugh the xor. dats it,
after
you do this you should have a bunch of info. "

# 5600. FS: CRT's- UPDATE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: vintel@aol.com
Message-ID: <19971227202700.PAA20363@ladder01.news.aol.com>
Source record: 87990

CRT's. These appear to be new cathode ray tubes, some boxes still sealed. Don't know what type of equipment these were used in. I'm sure some were for oscilloscope use. Others probably some military application. 3BP1 $5.00ea. 3GP1 $5.00 ea. 3FP7 $5.00ea. 5BP1 $7.00ea. 5FP7 $7.00ea.
Buy now at listed price or wait until 1/7 /98 & bid on it at eBay Auction by going to
http://trig.ebay.com/aw/ & do a search. Price listed does not include shipping from Baltimore, Md.
Thanks for taking the time to check this out.
John
UPDATE
Here's what I have left (I sold so many that I probably won't bother listing the remaining ones with eBay) 4-3BP1@$5.00EA, 3-5FP7@ $7.00EA, 4-5BP1 @$7.00EA.
Here are some additional ones that I found as I started digging into the pile. 1 ea of the following: 5CP1 @$7.00, 3JP1@$5.00, 5AXP4 @ $30.00, 7BP7 @$30.00 & 12DP7 @$35.00

## 5601. Need GSHPC.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Andre Antunes <andre.antunes@mail.eunet.pt>
Message-ID: <683p9i$q6s@news.EUnet.pt>
Source record: 87991
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Hello everybody,
Can anybody send me by attachment a licensed copy of GSHPC?
Thans to all.
(With my apologies to DL4SAW).

--
Andre Antunes
andre.antunes@mail.eunet.pt

# 5602. Re: Does anyone know how to design/build a crystal filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: k4gf@worldnet.att.net
Message-ID: <683p6q$buq@bgtnsc03.worldnet.att.net>
Source record: 87992

kr4wm@sccoast.net (Web Williams) writes: > Looking for design parameters for a filter to be used in an Icom 706 Mk
> II. Spent all I had on the radio, now I'm being cheap on the filters.
> Would like to design/build a 350 Hz CW filter, and 1.9 KHz SSB filter for
> it. Total budget about $20. Any ideas how to design/build them would be
> appreciated. A done-deal schematic would be even better. I see them in
> the ARRL handbook, but no parts values are stated, nor are there
> instructions on how to determine the values needed. I found some info on
> the 'net that stated 2k ohm input and output Z. Don't know the IF
> frequency where these things go- Am I wasting my time? Should I just go
> ahead and save my pennies until I can buy factory filters? 73, -Web
>
> NOTICE TO SPAMMERS: I am well versed in anti-spam tactics.
> Any SPAM mail I receive as a result of this newsgroup
> posting will be met with e-mail bombing and you will be
> subscribed to as many newsletters as I have the time to
> subscribe you to. Your e-mail box will runneth over.
> By spamming me, you consent and agree to receive such,
> and further agree that it is your wish to receive said
> e-mail bombing and e-mail newsletters. Further, you
> agree to hold me harmless and not liable for any damages
> as a result of e-mail bombing you receive from me.

# 5603. Wanted schematics and/or printlayouts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Erik BOSMANS <on5ai@innet.be>
Message-ID: <34A56CC5.105E@innet.be>
Source record: 87993

Hello all,

I'm looking for schematics and/or printlayouts for following projects :

A solid state amplifier for use in 160 m band, input max 10W output 150W. It's of no use for me to build a KW amplifier, because legal limits are 150W.

A system to switch antenna's when transmitting for the use with a separate receiving antenna for low bands.

All tips or comments are welcome. If possible reply direct to email adress.

73 and tnx in advance.

Erik
ON5AI

# 5604. Re: Soundblaster WEFAX/FAX/SSTV/RTTY/CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Torbj&#65533;rn Morka <troll47@hotmail.com>
Message-ID: <01bd1301$7a993d40$LocalHost@nfwdmaxa>
Source record: 87994
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

Runs under win95 ?
Autodetect soundcard ?
Autotune ?
Automatic mode-setting ?

Brian E. Cauchi <briane@geocities.com> skrev i artikkelen
<6811nr$t0v@news.keyworld.net>...
> FTV is a software only package that can be used to receive images from
> Weather
> Satellites and Terrestrial Facsimile Stations, text transmissions from
radio
> telex services, Morse code, as well as Amateur Radio FAX, SSTV, RTTY and
CW
> signals. It can also transmit Amateur Radio FAX and SSTV. No external
> hardware, other than a radio, is required, as all the necessary signal
> processing is implemented in software.
>
> The main features include:
> WEFAX, FAX, SSTV, colour SSTV, RTTY and CW operation.
> Transmits 6 FAX modes, 8 monochrome SSTV modes, 10 colour SSTV modes.
> FAX operation supports APT signal recognition and scheduled
reception.
> No external decoder or converter box is required.
> Signal analysis is provided on all modes.
> Many parameters are adjustable while receiving.
> Full recovery from wrong mode settings is possible.
> Program works in real time (about 1 second 'DSP' time lag)
>
> I have improved documentation considerably and an illustrated user's
manual
> is now
> available. You may get more information or download a copy from my web
site,
> on http://www.geocities.com/SiliconValley/2504
>
> Cheerio from Brian, 9H1JS
>
>
>
>
>

## 5605. AA Ni-Cad source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: lordell@aol.com
Message-ID: <19971227213201.QAA24499@ladder02.news.aol.com>
Source record: 87995

Looking for a source of reasonably priced AA size Ni-Cads to rebuild battery pacs for my HT's. Tabs would be nice but not necessary. Joe--W1PNH

# 5606. Re: 06/40 vs 06/40 ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: LA8AK@la8ak.nospam
Message-ID: <34a55fa1.3301651@news.online.no>
Source record: 87996

On Thu, 25 Dec 1997 23:31:56 +0100, Anders Karlsson
<sm7tjc@gislaved.mail.telia.com> wrote:

>I have some valves called QQV06/40 and some QQE06/40.
>What is the difference?
>I am building a transverter for 6 meters, and they are perfect for this
>(I am just allowed to use 50W here in Sweden).
>But I can only find data for the QQV06/40, but would like to know what
>the difference is.
>
>73 de Anders, SM7TJC
>
>
QQV are made by Mullard and QQE are made by Philips
With 06/40=5894 you may easily have 150W PEP RF from a class AB2
Linear amplifier on 2m with 1-2W drive.
73 / hei (og god jul)
73 Jan-Martin
---
O.S.R.: Eschew Obfuscation; Espouse Metrication (when sending overseas) ***
email: la8ak at online dot no WALA: K (County: Vest-Agder) QTH: Kristiansand

# 5607. TNC Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: mikea@efn.org
Message-ID: <683ua4$ssi$1@haus.efn.org>
Source record: 87997

I want to get a TNC but i do not know any thing about them. What is a good brand? Let me Know what brand you have and what you like about. This will help me to know whit one to get Reply here or mikea@efn.org
or kc7zfp@juno.com
Thank you

```
___ __ ___ __ __ __ __ __
/===/// ///=\\\ |__/ / ' ' / ' / |_ |__)146.580
/// `"` /// __ | \ \__ / /_. | | 147.080+
/// \\\ /__' KC7ZFP@juno.com or mikea@efn.org
/// \\\=/// .__/ Mike Abrams in Eugene.Ore USA
```

# 5608. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971227231801.SAA05802@ladder02.news.aol.com>
Source record: 87998
Body handling: Inline uuencoded payload not displayed: poorman.gif

[Inline uuencoded payload not displayed: poorman.gif]

# 5609. HTX 202 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Jeff Haynes <haynes@connix.com>
Message-ID: <684237$1ps@beast.connix.com>
Source record: 87999

Hi,
just got a new talkie for xmas. Was in CAP for a long time, and would still like to hear what they are up to. The radio only receives up to 148.00, need 148.15mhz . Anyone know of a mod to do this?

Thanks,

Jeff
N1GIV

# 5610. Re: Microwave ATV from a Microwave!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: John Marlow <John@equine.demon.co.uk>
Message-ID: <567660302wnr@equine.demon.co.uk>
Source record: 88000

Hi,
I`m sure the circuit was in "CQTV" some years ago.

--
John Marlow G1ORP

# 5611. WIN RADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Don Crozier <ka9qjg@tsrcom.com>
Message-ID: <34A5A6D7.2113@tsrcom.com>
Source record: 88001

Can anyone please tell me the difference with the Win Radio Mod #
WR-3000i at almost Two Thousand Dollars, and the Mod # WR-1000i at Five
Hundred Dollars, Both have spectrum display, Is the difference only
Software or Hardware?
THANKS , DON KA9QJG

# 5612. Re: Need GSHPC.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <34A5B8B9.71C@one.net>
Source record: 88002
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,uk.radio.amateur

Andre Antunes wrote:
>
> Hello everybody,
> Can anybody send me by attachment a licensed copy of GSHPC?

I hope not. It's a nice package, and DL4SAW is entitled to
the modest sum he's asking.

Rich W2RG

# 5613. Re: HTX 202 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Mjacobse@ix.netcom.com
Message-ID: <34A5B69D.219@ix.netcom.com>
Source record: 88003

Tandy Corp. and Radio Shack has long been known for some good and some bad things. And the HTX 202 is no different.

The 202 HT is a robust unit. Able to withstand some pretty nasty abuse.

But to this day, I have not seen or heard of any type of modifcations to the unit. Tandy and Radio Shack do everything in their technical abilities to re engineer their products so they can not be modified for out of band transmit or receive.

Where you should see about 7 watts out on high with external power, and great rejection of unwanted signals, if you wished to have a wider receive and transmit, you may have wanted a Yueasu, Kenwood or Icom. Even Standard has a good radio.

I sold my unit and for about the same price got the TH 79-ad from Kenwood. Which is a dual band radio.

73 de Gene

# 5614. Re: Does anyone know how to design/build a crystal filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.971227221657.17510B-100000@Stratus.CAM.ORG>
Source record: 88004

Those are the articles I would point someone to. But one problem I see here is getting something compatible with an already existing piece of equipment. If we're building something, we can start with whatever crystals are available in large quantities (which is the way these articles suggest you start; sort through the crystals until you find a set that are close enough in frequency) and then design the rest of the rig around that.

If you want to build a filter that fits in a commercial rig, the chances of finding a large number of crystals on the rig's IF frequency is dependent on the IF frequency. If it's nice and round, say 12 MHz, then it might be relatively easy. Some rigs have fairly odd IF's, and that might be harder. Has anyone made ladder filters with custom ground crystals, ordering the handful that you need at a higher price so they fit the specs needed? I would think that if it's feasible, the cost of the crystals would be more than $20.

Also, given the IF frequency, can you build the width of filter that you want?

Another consideration is the design of the rig. If it uses multiple conversions and narrow filters at those different IF's, there is an even greater need to get the filter right on frequency than if it's a single conversion rig (or a rig where the narrow filter is in only one IF).

Finally, you'll need to get the BFO to be in the right place on the slope of the filter. That means either getting the filter on exactly the right frequency, or having some means of adjusting the BFO.

The easiest way to take care of these problems (and that of matching the impedance of the filter to the rig) would probably be to add two mixers and an oscillator, thus adding to more conversions to the rig. Shift the existing IF to the frequency of your homemade filter, and then shift the output of the filter back to the existing IF.

The problem with this is that the circuitry is not likely to fit into the space provided for a filter, and the extra conversions add problems of their own.

A lot of what we've seen on ladder filters deal with lower performance filters. Even with all the above concerns addressed, I'm not sure someone can throw together a filter that would be better than what already exists in the rig. Thought now that I mention it, I recall that there was an article in Communications Quarterly (I don't recall the issue) that dealt with higher performance ladder filters. That is

probably another place to look before pursuing this project.

This sounds rather pessimistic. I think that is realistic. But maybe it
will provoke some discussion about this topic.

Mcihael VE2BVW

On Sat, 27 Dec 1997, Bill Meara wrote:

> Web: I think you can build a filter yourself. It would be a good
> project and would make that new ICOM less of an appliance! You'd be
> one of the very few people who have dared to venture inside one of
> those radios with a soldering iron. Go for it!
>
> You REALLY need the articles that are reprinted in the ARRL book
> "W1FB's Design Notebook" :
>
> May 1982 QST " A unified approach to the design of Crystal ladder
> filters" by Wes Hayward
>
> July 1987 QST "Designing and building simple Crystal filters" also
> by WH
>
> Jan 1990 QST " A tester for crystal F, Q and R" by Doug DeMaw.
>
> I have a homebrew CW filter in my HB receiver. Works great!
>
> 73 and good luck. Bill N2CQR
>
>
>
>
>
>
> On Fri, 26 Dec 1997 22:43:38 -0500, kr4wm@sccoast.net (Web Williams)
> wrote:
>
> >Looking for design parameters for a filter to be used in an Icom 706 Mk
> >II. Spent all I had on the radio, now I'm being cheap on the filters.
> >Would like to design/build a 350 Hz CW filter, and 1.9 KHz SSB filter for
> >it. Total budget about $20. Any ideas how to design/build them would be
> >appreciated. A done-deal schematic would be even better. I see them in
> >the ARRL handbook, but no parts values are stated, nor are there
> >instructions on how to determine the values needed. I found some info on
> >the 'net that stated 2k ohm input and output Z. Don't know the IF
> >frequency where these things go- Am I wasting my time? Should I just go
> >ahead and save my pennies until I can buy factory filters? 73, -Web
> >
> >NOTICE TO SPAMMERS: I am well versed in anti-spam tactics.
> >Any SPAM mail I receive as a result of this newsgroup
> >posting will be met with e-mail bombing and you will be

> >subscribed to as many newsletters as I have the time to
> >subscribe you to. Your e-mail box will runneth over.
> >By spamming me, you consent and agree to receive such,
> >and further agree that it is your wish to receive said
> >e-mail bombing and e-mail newsletters. Further, you
> >agree to hold me harmless and not liable for any damages
> >as a result of e-mail bombing you receive from me.
>
>
>

## 5615. small loop ant

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-27 00:00:00 UTC
From: joewalsh <joewalsh@shore.intercom.net>
Message-ID: <34A5C0B8.3869@shore.intercom.net>
Source record: 88005

Is there any drawback to putting the preamp for a small loop receiving antenna inside the minibox with the tuning cap? I'm building a desktop frame loop so access to the preamp controls isn't a problem. Thanks for the help.
Joe

This article was posted from <A HREF="http://www.slurp.net/">Slurp Net</A>.

# 5616. Re: Center Frequency of Crystal IF Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19971228181900.NAA07451@ladder01.news.aol.com>
Source record: 87922

Hello Ron,

The offset depends on the type of filter. To generalize, ladder filters typically use the parallel resonant mode, so the offset should not be too bad, but lattice filters use the series resonant mode, and the offset may be several kHz. Add to this the fact that the marked xtal frequency may be for a load capacitance that is very different from the capacitance found in the filter.

I'd suggest thinking about a slightly more complex counter design that would work regardless of the offset. Here are some ideas:

1) Depending on the mixing scheme used, you could have a "multi-interval" counter that would count both the LO and the BFO, then display the total. For example, if the mixing scheme is 14 MHz (signal) - 5 MHz (LO) = 9 MHz (IF), you could set up a counter that first counts the LO, then (without resetting) counts the BFO, and then displays the result. The error will only be the receive offset - the display will show the zero beat frequency. If it's set up to read the transmitter carrier oscillator on transmit, there will be no error at all on transmit. If the mixing scheme is subtractive, you need a counter with up/down capability, but they are fairly common.

2) If you just want to count the tunable LO, you can use a presettable counter to take out the error. An example is the TTL 74192 and its cousins. This is a presettable up/down counter that works up to at least 20 MHz. I've found selected units that easily work at 35 MHz. The preset can be set with dipswitches, and all you do is tune in a known signal and play with the dipswitch settings until the dial reads correctly.

Also, you can combine the above ideas to make a truly universal digital dial/general purpose counter. There were several articles in QST on these ideas back in the '70s - I can look them up if needed.

Hope this helps.

73 de N2EY

# 5617. Re: HTX 202 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Laura Halliday <ve7ldh@direct.ca>
Message-ID: <34A6AF2B.3A5A3808@direct.ca>
Source record: 87923

Doug, N0LKK wrote:

> All in all you where pretty fair to Tandy and RS. I'm sure
> that the Tandy could re-engineer their products to operate out
> of the amateur bands. For some reasons they chose not to...

It's an engineering decision - which do you want, a well-behaved intermod-proof receiver, or wideband receive capability that crumbles within a kilometer of every paging transmitter? The HTX-202's tight front end makes it the former receiver; it does exactly what it's supposed to do, and there is no point in criticising it because it doesn't do things it was never designed to do.

Since the tight front end precludes out-of-band operation (you *did* look at the schematic in the manual, didn't you?), what else do you want your HTX-202 to do?

If you really want out-of-band capability, buy a scanner. They're cheap.

...laura

# 5618. Re: Hamcomm and AMTOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971228211101.QAA23985@ladder02.news.aol.com>
Source record: 87924

OOPS! Sorry guys... I drew the diagram for "poorman.gif", which is a schematic for a Hamcomm-type interface, from memory... and my memory was faulty. There is one glaring error in the schematic. The PTT keying circuit ties into the RTS line, not the DTR line as drawn. The error will cause the PTT to key on SPACE and release on MARK. Hardly the desired effect! Connect the anode of the diode to the RTS line and not the DTR line. Also, as you might suspect from his little tidbit of information, direct FSK keying is possible using this pin, for radios that can utilize direct FSK

Another thing I forgot... very important... If you go for broke and build an interface with all features including CW keying, you must make provision for disconnecting the PTT line from the interface to your rig during a CW QSO, or lose QSK. Furthermore, you should also disconnect the CW KEY line from the rig during a RTTY or AMTOR QSO, or else you will be treated to your sidetone keying on and off with the SPACE bits, if your sidetone can still be keyed in SSB mode. I accomplish this with mini inline jacks and plugs, but you could use a miniature DPST switch on the pc board, I guess.

I have corrected the graphic file..... on my computer. Frankly, I am rather embarrassed about the error, and I have not posted the corrected version. If anybody tells me they are interested in it I will post... otherwise, I'll just keep skulking about in my utter shame like a thoroughly whipped puppy.

By the way, if anybody downloaded it, could you please e-mail me and tell me how it came out? That is the first graphics file I have posted. It seemed OK when I downloaded it, but I want to be sure that everybody else could get at it.

I hope nobody built that dern thing last night and incorporated my error into the device, only to find out it don't work. Did anybody etch a PC board by any chance? Double shame on me.

sri agn, 73 evrbdy
-AB5VH-

# 5619. WTB resistor assortment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Jason G Skalski <jskalski@acsu.buffalo.edu>
Message-ID: <34A6DBD4.D026B1C7@acsu.buffalo.edu>
Source record: 87925

I am looking for a 1/4 watt resistor assortment.
All or as many of the 161 standard values as possible. Up to 200 units
per value.

Digikey has such a kit. Does anyone know of another source?

Jim N2GO

# 5620. Re: WTB resistor assortment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34A6E2CF.4C63@pop.removethistomailme.net>
Source record: 87926

Jason G Skalski wrote:
>
> I am looking for a 1/4 watt resistor assortment.
> All or as many of the 161 standard values as possible. Up to 200 units
> per value.
>
> Digikey has such a kit. Does anyone know of another source?
>
> Jim N2GO

Radio Shack has an excellent 1/4-watt assortment these days. I think
you get 200 or 300 or so for $4.99, something like that anyway.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

## 5621. 900 Mhz mod or transverter????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: w r taylor <richardtaylor@worldnet.att.net>
Message-ID: <687boi$3tt@bgtnsc03.worldnet.att.net>
Source record: 87927

I am looking for a radio mod or transverter information to operate on the
902-928 MHz ham band.

Is there commercial radios that can be modified to operate on 900Mhz?

Where is a source for information on this equipment?

Richard Taylor
KC5FED

# 5622. Index Labs QRP+ Info - Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Scott Gray <comm5@pacbell.net>
Message-ID: <34A7438B.1FFD7B25@pacbell.net>
Source record: 87928
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I just purchased a Index Labs QRP+ CW/SSB transceiver - this is a NICE little rig!

I've got a bunch of questions; EPROM version; what the last version released? The rig powers up and shows it's serial # 0512. Inside the RF PCB is labeled 1050. U9 PROM has 4C 512 labeled on it, while U8 has 1050 marked on it.

The boards reflect the QST review from 9/96 QST (no AF SSB level pot).

Do I have (or even need) the "latest" EPROM version? Does SGC provide any product support? I would sure like a technical shop manual for this rig..

I've read rumblings of a QRP"++"......And a prior version; Index Labs QRP (sans the "+"). Differences?

Meanwhile, I'm going back to the rig, put on some phone's, and get used to this neat little rig.

Wish list??; 2.4 KHz ~~IF~~ bandwidth to be sharper, backlighting (LED's should do fine), RTTY, Packet and PACTOR operation?.SSB "reverse" above 7.3MHz?...."extended" transmit" aka "MARS/CAP" mod??.

Plans? I've got a few 0.4 watt VHF (145.9) GE MASTER II exciter boards for RS-15 (mode "A" etc.) uplinks (clean CW). Ten-Tec 6 Meter X-verter...

Any constructive help from QRP+ owners is greatly appreciated!

72 es 73

Scott KD6CQ
Rescue, Ca.
comm5@pacbell.net

Yeah, and a "Time-Machine".... 24 hours?? Not enough..... Currently attempting the "Yost" method of sleep deprivation with mixed results..

# 5623. Re: Microwave ATV from a Microwave!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Steve Carlisle <carlisle@capescott.net>
Message-ID: <01bd13b5$af115940$dd9d11d1@default>
Source record: 87929

And in 73 magazine a few years back, Steve Carlisle

John Marlow <John@equine.demon.co.uk> wrote in article
<567660302wnr@equine.demon.co.uk>...
> Hi,
> I`m sure the circuit was in "CQTV" some years ago.
>
>
> --
> John Marlow G1ORP
>
>
>

## 5624. Help--Motorola RF application reports

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: tnom@muck.net
Message-ID: <34a8a095.4223171@news.tir.com>
Source record: 87930

I need help locating a source for this publication.
I can not find it at Motorola's site. The publication
number is something like hb-215/d.
Any help would be appreciated. Post info here.

# 5625. Re: Need help with amp, too low drive

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <34a5a9fa.255381043@news.atl.bellsouth.net>
Source record: 88006
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On 27 Dec 1997 15:58:02 GMT, jdc@cci.com (James D. Cronin) wrote:
>In article <34a49a62.273962723@news.willinet.net>,
>Ryan <readthebottom@nospam.mil> wrote:
>>Hello. I recently aquired a THS Electronics amp, model
>>1-10. It takes 1-3 watts in with 10W out. My problem is my
>>HT only puts out 340mw, and I can do almost .5W with
>>external power. This is not enough power to trip the amp.
>>What do I need to do to lower the input? Thanks for any
>>help.
>
>RF sensing T/R switches usually use a small capacitor in series with
>a resistor to tap off a small amount of the RF signal. The signal is
>detected with a diode and used to run a transistor which runs the relay.
>
>To change sensitivity, make the series capacitor a little larger or
>the series resistor a little smaller. Just remember that the amp has
>about 10 db of gain, so you will get 3-4 watts out.

But maybe you won't even get that if the amp is biased Class C.
Many amps have a manual keying input you can use. If yours does,
try that and see if you get any useful power out. If you don't, you'll
need to bias the amp for linear operation to get any useful output.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

# 5626. Skywalker Amplifier Kits; Comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: tony giroux <agiroux@mail.cvn.net>
Message-ID: <34A6580A.71D9A866@mail.cvn.net>
Source record: 88007

Does anyone have experience with the Skywalker Solid State Amplifier
Kits
from RF Elelctronics?

Good?
Bad?
Fair?
Partly Cloudy?

# 5627. Re: TNC Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd133e$685bf900$0d8a92d0@bitnet.bit-net.com>
Source record: 88008
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

What do you intend to do with it?
HF modes, VHF modes?
CW, RTTY, PACKET, PACTOR, AMTOR, SSTV, WEFAX, FAX, ... ?

Lots of options, lots of TNCS & TNC alternatives.

Please, give us some details and watch the suggestions flow.

BTW: This post would probably be better posted on
rec.radio.amateur.digital.misc where I have copied it to.

73, DavidC AA1FA

Mike L Abrams <mikea@efn.org> wrote in article
<683ua4$ssi$1@haus.efn.org>...
> I want to get a TNC but i do not know any thing about them. What is a
good
> brand? Let me Know what brand you have and what you like about. This will

> help me to know whit one to get Reply here or mikea@efn.org
> or kc7zfp@juno.com
> Thank you
> ___ __ ___ __ __ __ __ __
> /===/// ///=\\\ |__/ / ' ' / ' / |_ |__)146.580
> /// `"` /// __ | \ __ / /_. | | 147.080+
> /// \\\ /__' KC7ZFP@juno.com or mikea@efn.org
> /// \\\=/// .__/ Mike Abrams in Eugene.Ore USA
>
>

# 5628. Six Meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: talbot@kmrmail.kmr.ll.mit.EDU
Message-ID: <3.0.16.19971228044629.2a671b8c@kmrmail>
Source record: 88009

Hei! Anders and Jan-Martin,

>On Thu, 25 Dec 1997 23:31:56 +0100, Anders Karlsson
><sm7tjc@gislaved.mail.telia.com> wrote:
>
>>I have some valves called QQV06/40 and some QQE06/40.
>>What is the difference?

Ahh Yes, Flemming Valves...I remember them well. Went to Electronics school
and was taught by a Mr. Flemming! Sorry Anders, but I know not the QQV06
and the QQE06. I used to work for a man named Anders-son! Bob Anderson Jr.

>>I am building a transverter for 6 meters, and they are perfect for this
>>(I am just allowed to use 50W here in Sweden).

I too am going to build a six metre transverter. I have chosen to build the
Ten Tec 6 to 20 metre version. There is a review in the November 1997 CQ
(the American Version) by Doug DeMaw W1FB. It puts out 8 watts PEP.

>>But I can only find data for the QQV06/40, but would like to know what
>>the difference is.
>>
>>73 de Anders, SM7TJC
>>

I am planning a trip to northwestern Europe next summer about late June or
mid July. I am planning to visit Sweden and Finland for about maybe a week
each. Might there be any Ham Feats about this time?

>>
>QQV are made by Mullard and QQE are made by Philips
>With 06/40=5894 you may easily have 150W PEP RF from a class AB2
>Linear amplifier on 2m with 1-2W drive.
>73 / hei (og god jul)
>73 Jan-Martin
>---
>O.S.R.: Eschew Obfuscation; Espouse Metrication (when sending overseas) ***
>email: la8ak at online dot no WALA: K (County: Vest-Agder) QTH: Kristiansand
>

Terve,

George V73GT

# 5629. TAIT 2010 SOFTWARE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: ahd@wr.com.au
Message-ID: <34a5f340.0@nachos.wr.com.au>
Source record: 88010
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur,alt.radio.uk,rec.radio.amateur.miscalt.radio.scanner

I am looking for the setup software for the
Tait 2010 radio.
I already have the interface cable and the
software Ver 1.08 but the radio is a software
version STD 0102 and database version 0101
Can you help?

Thanks
Alex Dampier
Sydney
Australia

## 5630. an93 modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: koystravas dimitris <pileadim@mail.otenet.gr>
Message-ID: <01bd1354$a3630c80$467ca7c3@ote.otenet.gr>
Source record: 88011

hello from greece if there is someone know something about an93 modem
please leave an answer..i want to use the hb9jnx program for rtty
,pactor..etc
and i need this modem to work
73...sv2dsu(dimitris)

## 5631. an93 modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: koystravas dimitris <pileadim@mail.otenet.gr>
Message-ID: <01bd1355$e376bf00$467ca7c3@ote.otenet.gr>
Source record: 88012

```
if someone know something about an93 modem please leave an answer..
thank's
73 sv2dsu(dimitris)
```

# 5632. Webpage UPDATE !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Albert AERTS <albertaerts@innet.be>
Message-ID: <34A63179.7EE7747D@innet.be>
Source record: 88013
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy

```
The " ON6TS Fact Sheet " which is accessible through the
" Aerts Family Homepage " has been UPDATED.

http://www.club.innet.be/~pub01234

73's de Albert ON6TS

--
Amateur Radio Callsign: ON6TS
HF Pactor: 14076.5, 18106.5 or 21076.5 mark carrier
Email: albertaerts@innet.be
URL: http://www.club.innet.be/~pub01234
```

# 5633. Re: Three 5v 200a Supplies - Verify Info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Nick <Nick@no.spam.for.me.ta>
Message-ID: <685d4j$cd1$1@heliodor.xara.net>
Source record: 88014

The Ronney's wrote in message <67s7aa$ah3$1@juliana.sprynet.com>...
>>Do I assume correctly that I can run standard 220-230v into one of these
>>little beasts (at the properly labeled terminals)and get 5v at 200a out?
>
>Nope... Three phase is three phase. Your shack has single phase. Won't
>work. Usually three phase AC is only available in industrial areas. Three
>phase AC has three 'hot' wires, each 120 degrees phase shifted. The
voltage
>between ANY two is 208 volts. While running it with single phase 220 v
>might get some output, it surely won't have anywhere near full output
>capacity.

No.. Read the message again..

>Label says Input: 3 phase 208v 3.5a 47-400hz
> or 230v 9.6a 47-60hz

208v is the three-phase value of a 120v (single phase) supply.

In the UK, the inter-phase voltage is (was) 415v, it's probably changed now we've officially dropped from 240v to 230v. It's equal to a single phase-to-neutral voltage multiplied by the square root of 3 (1.732).

I would guess the 3-phase implementation is to keep the current down for U.S. operation.

The 1st thing that normally happens (I'm assuming it's a switch-mode PSU) is the incoming AC is rectified before being chopped. Therefore the only front-end difference should be the rectifier arrangement. Looking at the label it looks like you should be able to run from a domestic UK 230v supply, though you may have to change some links to reconfigure the input.

The comment about minimum load is a valid one, especially for 'biggies' like those.

(to the original poster)
Don't forget, what you read here is only supposition, based on your original posted text. It's up to you at the end of the day to look & decide whether to plug it in & cringe! I would suggest you try to borrow a variac & wind it up monitoring the input current. Don't forget an o/p load - I'd suggest a 10% load e.g. 20A. Oh, and check the house insurance ;o))

- Nick g7ufg

# 5634. Re: Three 5v 200a Supplies - Verify Info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Mike <bad@email.adr>
Message-ID: <34A66476.40DD@email.adr>
Source record: 88015

Nick wrote:

[...]

> Don't forget, what you read here is only supposition, based on your original
> posted text. It's up to you at the end of the day to look & decide whether
> to plug it in & cringe! I would suggest you try to borrow a variac & wind it
> up monitoring the input current. Don't forget an o/p load - I'd suggest a
> 10% load e.g. 20A. Oh, and check the house insurance ;o))
>
> - Nick g7ufg

Before ramping up the input voltage, you might want to take a look at

http://www.cyberg8t.com/smpstech/lowin000.htm

There is a lot more useful info on switching power supplies on his home
page. Also optimizing GIF and JPG - check "What's New"

Good Luck!

Best Regards,

Mike
CEO, Analog & Digital Design
Automated Production Test
http://www.csolve.net/~add/home.htm

Hosting Jonathan Ramsey's Pascal TCP/IP for DOS:
http://www.csolve.net/~add/zips/tcp.htm

# 5635. Wtd: HP 10590A or doc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Harke.Smits@net.HCC.nl
Message-ID: <685o3n$8hi$1@news.Eindhoven.NL.net>
Source record: 88016

Hello folks,

I need a HP 10590A adapter for my HP 5345A counter and old plug-in.
Has anyone left such an adapter doing nothing? I am interested to buy
one. Alternatively some doc of the unit would be terrific: I have two
connectors and if I know how to connect them I will be able to measure
up to 3 GHz. Can you help me?

best 73 de Harke Smits (PA0HRK)
harke.smits@net.hcc.nl

# 5636. Re: AA Ni-Cad source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: rangersf5@aol.com
Message-ID: <19971228144301.JAA13957@ladder02.news.aol.com>
Source record: 88017

Radio Shack Has AA batteries rated at 850 mils.I picked up 6 for just under
$12.00 for the ht.The orgional ones were 600 mils.
They have no tabs
Bob Wa2HOQ

## 5637. WTB: 3CX2500A7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: Dennis Griffin <w4dg@ibm.net>
Message-ID: <34a67dd9.0@news1.ibm.net>
Source record: 88018

Must be New, NOS, or will consider used, if guaranteed. State condition
and Price via e-mail.

TNX & 73.....Dennis W4DG

w4dg@ibm.net

## 5638. Jan Axing, SM5GNN ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <34a68164.6768906@news1.mnsinc.com>
Source record: 88019
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Has ANYONE Heard from

Jan Axing, SM5GNN ??
Haven''t seen him on Usenet
for several weeks now.

Wondering if he is OK????

Bry, AF4K /. G3XLQ

# 5639. Re: HTX 202 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: "Doug, N0LKK" <dougy@ruraltel.net>
Message-ID: <34A60B60.54B8@ruraltel.net>
Source record: 88020

Gene,

All in all you where pretty fair to Tandy and RS. I'm sure that the Tandy could re-engineer their products to operate out of the amateur bands. For some reasons they chose not to. In regards to out of band transmit capability, I could agree with the policy. I admit I occasionally miss the Ability of my old Alinco HT's ability to receive the local public safety repeaters, but it's receiver was very poor compared to the htx 202. All in this in IMHO!, it's not my intent to open an old debate!
--
73, Doug Younker, N0LKK
near Plainville, KS
dougy@ruraltel.net
==========
Mjacobse@ix.netcom.com wrote:
>
> Tandy Corp. and Radio Shack has long been known for some good and some
> bad things. And the HTX 202 is no different.
>
> The 202 HT is a robust unit. Able to withstand some pretty nasty abuse.
>
> But to this day, I have not seen or heard of any type of modifcations to
> the unit. Tandy and Radio Shack do everything in their technical
> abilities to re engineer their products so they can not be modified for
> out of band transmit or receive.
>
> Where you should see about 7 watts out on high with external power, and
> great rejection of unwanted signals, if you wished to have a wider
> receive and transmit, you may have wanted a Yueasu, Kenwood or Icom.
> Even Standard has a good radio.
>
> I sold my unit and for about the same price got the TH 79-ad from
> Kenwood. Which is a dual band radio.
>
> 73 de Gene

# 5640. Center Frequency of Crystal IF Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-28 00:00:00 UTC
From: astone@erols.com
Message-ID: <34A6B51D.1A29@erols.com>
Source record: 88021

Hi -- How far off will the actual center frequency of a typical 3-4 crystal Cohn or lattice type IF crystal filter be from the exact nominal value of the crystal -- i.e., 4.0 MHz, 12.0 MHz, etc. -- in a typical NE602 type QRP rig (e.g., SST, 38S, NN1G, etc.). The reason I'm asking is because I am thinking about building a very simple frequency counter to partly serve as an e-dial but it won't have offset capability. Of course, one could mentally peform the offset but it would be nicer to largely avoid this. Would appreciate any insights/data that you might have.

73,

Ron (KA3J)

# 5641. FS: about 15 years of QSTs, Ham Radio mags, about 90% complete

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseELxEEH.Ht0@netcom.com>
Source record: 87931
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

have about 15 years worth of QSTs, and lots of "Ham Radio" mags I'd
like to sell off the whole enchallida to someone local to northeast NJ,
I'm near exit 165 on the Garden State Parkway. Almost complete years from
about 1976 to 1993. Pickup only, you gotta take all of 'em! Say $30

# 5642. Crystal Filters...Spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: talbot@kmrmail.kmr.ll.mit.EDU
Message-ID: <3.0.16.19971229035351.08c77e06@kmrmail>
Source record: 87932

Web,

A Big Yokwe! From the Marshall Islands;

kr4wm@sccoast.net (Web Williams) writes: > Looking for design parameters for a filter to be used in an Icom 706 Mk
> II. Spent all I had on the radio, now I'm being cheap on the filters.
> Would like to design/build a 350 Hz CW filter, and 1.9 KHz SSB filter for
> it. Total budget about $20.

You will Spend a lot, a very lot of time on building these filters. Twenty dollars may get you something that is 'cheep and cheerfull'. I have just built three QRP SSB (White Mountain) rigs that use an 'novel' approach for their filters. They use four series tuned crystals that are very lightly coupled with 100pf caps to yield about 2.7 KHz bandwidth. The review of that Rig is in a recent QST.

Any ideas how to design/build them would be
> appreciated. A done-deal schematic would be even better. I see them in
> the ARRL handbook, but no parts values are stated, nor are there
> instructions on how to determine the values needed. I found some info on
> the 'net that stated 2k ohm input and output Z. Don't know the IF
> frequency where these things go- Am I wasting my time? Should I just go
> ahead and save my pennies until I can buy factory filters? 73, -Web
>
Get Yourself a Digi-key Catalog or go to http://www.digikey.com and do a parts search for 'crystals' (you will be at http://www.digikey.com/DigiKeySearch.html and if you are using Eudora® you can just double click on the URL). What you want are the microprocessor crystals, as they are very cheap, about one US dollar and change each. See if you can find some on your _EXACT_ IF frequency. If you can you are in luck! Order your $20 worth. You should get about 18, and you will need them all for frequency matching.

You will then have to match them by frequency using a procedure that is explained in detail on the Nor-Cal QRP page (sorry I have not a URL) or a link from there and this kind of filter is used in their Nor-Cal Sierra or 40 rigs. Try http://www.dogpile.com for a search, they are my favorite search engine and send out your request to about twenty plus other search engines. You will then cascade and lightly couple about six of these matched frequency crystals to get your selectivity. More Crystals, More Selectivity. The downside of that is More Selectivity, More Loss. If your rig does not have a provision to compensate for the added loss (or match the loss between the various bandwidth filters as my Paragon does with resistive pads) you will have to add more gain or live with less gain (I.E.

turn up the receive gain/volume when you switch in the narrow filter). Have fun! Let me know how it goes. If all of your $20 worth of crystals are on the same frequency and they are cascaded you will do good to get less that one kilo Hertz selectivity. My Paragon Has, I think eight, crystals in the 250 Hertz filter and has no pad in 'front' of it. The 2.4 KHZ filter has, I think four, crystals in it and is preceded by a 't' pad consisting of 68 ohm input and out put resistors and a 270 ohm resistor to AC ground. This makes for about 6 dB voltage loss assuming 2 K ohm input impedance. The Ten Tec Crystal filters us Parallel resonate crystals. Your results may vary.

> NOTICE TO SPAMMERS: I am well versed in anti-spam tactics.
> Any SPAM mail I receive as a result of this newsgroup
> posting will be met with e-mail bombing and you will be
> subscribed to as many newsletters as I have the time to
> subscribe you to. Your e-mail box will runneth over.
> By spamming me, you consent and agree to receive such,
> and further agree that it is your wish to receive said
> e-mail bombing and e-mail newsletters. Further, you
> agree to hold me harmless and not liable for any damages
> as a result of e-mail bombing you receive from me.

***** S P A M *****

Buy Spam , the ALL AMERICAN MEAT!

*****end spam*****

NOTICE TO SPAMMERS: Those who Spam me will receive a five kilo gift box of 'SPAM THE ALL AMERICAN MEAT', containing one dozen cans of this wonderful, livid, meat. If this meat is not consumed within 10 days of delivery the cans will begin to EXPLODE by a process of natural fermentation. These EXPLOSIONS have been measured at greater than ONE MICRO TON, and may be dangerous to humans in the area of the EXPLOSION. Due to delivery variation the EXPLOSIONS may happen earlier. All deliveries will be made by United States mail (or fe-mail) as they are our only avenue of Parcel Post delivery. No e-mail SPAM BOMBS will be sent. Have a NICE SPAM DAY!

73,

George V73GT the Grand Turismo!
United States Zip Code 96977
Republic of the Marshall Islands

(You try and figure it out)

PS. (LEGAL RUMORS) An 'anti-class action' suit is being mounted by the Spam company's parent corporation and judgment is sought in the amount of one US dollar per instance for the use of the word Spam in a derogatory sense to describe unwanted electronic mail. This suit if successful should could bring in billions to the parent company. Think about it the next time you buy Spam or complain about unwanted electronic mail (UEM). Best say,

"UEM" or "junk e-mail" and NOT "SPAM"!

I've said my $3 worth.

# 5643. Re: AA Ni-Cad source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: nlav8r@aol.com
Message-ID: <19971229052500.AAA24937@ladder02.news.aol.com>
Source record: 87933

Hi Joe , I don't know whether you currently use loose AA batteries or use a purpose built NICAD Battery pack .

If you can replace separate AA batteries I would suggest you get Nickel Metal Hydride batteries ;these have a capacity of 1100 to 1200 mA*HRS
What ever you do ,make sure your Nicad or NiMH pack is provided with a fuse which will blow when short circuiting the pack . The fuse can be made by squeezing a small piece of thin double sided printed circuit board bridged by a wire which will instantly break /melt at a current of approx 5 amps In this way you can avoid the nasty consequences of a fire due to the shorted batteries . All sealed packs with rechargeable batteries have a fuse .
73 Frank KN6WH nlav8r@aol.com

# 5644. tank circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: ll2925@aol.com
Message-ID: <19971229053400.AAA28490@ladder01.news.aol.com>
Source record: 87934

Constructing a single ended amplifier for 10 meter use. The amplifier will be using
a single 811-A with around 1000 plate volts and be class B. Wondering on a tank circuit configuration for this combination. Load and tune capacitor values and coil dimentions. Any help appriciated since I am currently using books from the 1930-40's era for reference.
thanks

# 5645. Re: AA Ni-Cad source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Glenn Schultz <n0vyk@goldengate.net>
Message-ID: <01bd141e$d7321540$a30808ce@default>
Source record: 87935

You can also try Batteries Plus <www.batteriesplus.com>. They have an enormous supply of all sizes of ni-cads. And most stores can put the tabs on for you at no cost. They will even do a custom pack for you very reasonably. their web-site has a store locator, so you can find the one closest to you.
--
Glenn
N0VYK
10X #68391
n0vyk@goldengate.net

Check out the N0VYK Antique and Amateur Radio Homepage:
http://www.goldengate.net/~n0vyk

RangerSF5 <rangersf5@aol.com> wrote in article
<19971228144301.JAA13957@ladder02.news.aol.com>...
> Radio Shack Has AA batteries rated at 850 mils.I picked up 6 for just
under
> $12.00 for the ht.The orgional ones were 600 mils.
> They have no tabs
> Bob Wa2HOQ
>
>
>

# 5646. Help : Collins mechanical filter information

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: prajna <prajna@hit.co.kr>
Message-ID: <687m85$6to$1@hiline.shinbiro.com>
Source record: 87936

Hi Everybody,
I have 4 Collins mechanical filters which I bought 18 years ago from junk,
and
followings are written on each filters;

```
TYPE SER P/N
---------- ------ ------------
F455 N 20 11 S 2 526 9163 009
F455 N 40 11 S 2 526 9160 009
F455 N 80 10 S 2 526 9161 009
F455 N 160 12 S 2 526 9162 009
```

I have no idea what kind of filters are these, and couldn't find any
information
from http://www.wa3key.com/filters.html.
Can anyone tell me the detailed specification and usage advices of each
filters ?
Can I use one of these as a CW filter with my TS-450S ?
Any help would be appreciated.

Happy New Year 1998!

<direct e-mail to : prajna@hit.co.kr.NO_SPAM or ds5ipl@qsl.net.NO_SPAM>
Please remove ".NO_SPAM" for direct reply.

Thanks.
de DS5IPL, Y.H. Lee.

## 5647. Looking for SSB circut!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: chia@news.utk.edu
Message-ID: <687p6h$ir7$1@gaia.ns.utk.edu>
Source record: 87937

I would like to know if there is a circut that can be built to
RECIEVE only SSB signals via. my HT radio? If there is would someone
please post it, or send it to me via. E-Mail thanks...

73 de KF4UAE
chia@korrnet.org
John

# 5648. Re: Want to build classic CW transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <687vdh$33t$4@news1.teleport.com>
Source record: 87938

In article <19971227123001.HAA09664@ladder02.news.aol.com>, truelies40@aol.com (TrueLies40) wrote:
>My name is Kip and I live in Ohio. I have long ago sold all my classic gear and
>now I want to build another station. I have lots of old tubes and parts but
>dont have any good plans. I would like to find some schematics for 807's ,
>6L6G, Ect.. If you know of some old QST or other mags as well as the issue #s I
>could sure use your help drop me a line.

I'd look for ARRL Handbooks from the late 40's to early 60's. They're
pretty common at flea markets, and have lots of projects along this line.

Roy Lewallen, W7EL

# 5649. Re: Crystal Filters...Spam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34a7ce26.167169839@news.erols.com>
Source record: 87939

George: Yokwe back at you OM! Glad to hear that Homebrewing is taking place on the Marashall islands. Thanks for the FB info on your filter production. N2EY and I have been discussing HB filters. I will make sure he sees your valuable message!

73 Bill N2CQR

On 29 Dec 97 11:39:15 GMT, talbot@kmrmail.kmr.ll.mit.EDU (George Arthur Talbot) wrote:

>Web,
>
>A Big Yokwe! From the Marshall Islands;
>
>
>kr4wm@sccoast.net (Web Williams) writes: > Looking for design parameters
>for a filter to be used in an Icom 706 Mk
>> II. Spent all I had on the radio, now I'm being cheap on the filters.
>> Would like to design/build a 350 Hz CW filter, and 1.9 KHz SSB filter for
>> it. Total budget about $20.
>
>You will Spend a lot, a very lot of time on building these filters. Twenty
>dollars may get you something that is 'cheep and cheerfull'. I have just
>built three QRP SSB (White Mountain) rigs that use an 'novel' approach for
>their filters. They use four series tuned crystals that are very lightly
>coupled with 100pf caps to yield about 2.7 KHz bandwidth. The review of
>that Rig is in a recent QST.
>
>Any ideas how to design/build them would be
>> appreciated. A done-deal schematic would be even better. I see them in
>> the ARRL handbook, but no parts values are stated, nor are there
>> instructions on how to determine the values needed. I found some info on
>> the 'net that stated 2k ohm input and output Z. Don't know the IF
>> frequency where these things go- Am I wasting my time? Should I just go
>> ahead and save my pennies until I can buy factory filters? 73, -Web
>>
>Get Yourself a Digi-key Catalog or go to http://www.digikey.com and do a
>parts search for 'crystals' (you will be at
>http://www.digikey.com/DigiKeySearch.html and if you are using Eudora® you
>can just double click on the URL). What you want are the microprocessor
>crystals, as they are very cheap, about one US dollar and change each. See
>if you can find some on your _EXACT_ IF frequency. If you can you are in
>luck! Order your $20 worth. You should get about 18, and you will need them
>all for frequency matching.

>
>You will then have to match them by frequency using a procedure that is
>explained in detail on the Nor-Cal QRP page (sorry I have not a URL) or a
>link from there and this kind of filter is used in their Nor-Cal Sierra or
>40 rigs. Try http://www.dogpile.com for a search, they are my favorite
>search engine and send out your request to about twenty plus other search
>engines. You will then cascade and lightly couple about six of these
>matched frequency crystals to get your selectivity. More Crystals, More
>Selectivity. The downside of that is More Selectivity, More Loss. If your
>rig does not have a provision to compensate for the added loss (or match
>the loss between the various bandwidth filters as my Paragon does with
>resistive pads) you will have to add more gain or live with less gain (I.E.
>turn up the receive gain/volume when you switch in the narrow filter). Have
>fun! Let me know how it goes. If all of your $20 worth of crystals are on
>the same frequency and they are cascaded you will do good to get less that
>one kilo Hertz selectivity. My Paragon Has, I think eight, crystals in the
>250 Hertz filter and has no pad in 'front' of it. The 2.4 KHZ filter has, I
>think four, crystals in it and is preceded by a 't' pad consisting of 68
>ohm input and out put resistors and a 270 ohm resistor to AC ground. This
>makes for about 6 dB voltage loss assuming 2 K ohm input impedance. The Ten
>Tec Crystal filters us Parallel resonate crystals. Your results may vary.
>
>
>> NOTICE TO SPAMMERS: I am well versed in anti-spam tactics.
>> Any SPAM mail I receive as a result of this newsgroup
>> posting will be met with e-mail bombing and you will be
>> subscribed to as many newsletters as I have the time to
>> subscribe you to. Your e-mail box will runneth over.
>> By spamming me, you consent and agree to receive such,
>> and further agree that it is your wish to receive said
>> e-mail bombing and e-mail newsletters. Further, you
>> agree to hold me harmless and not liable for any damages
>> as a result of e-mail bombing you receive from me.
>
>***** S P A M *****
>
>Buy Spam , the ALL AMERICAN MEAT!
>
>*****end spam*****
>
>NOTICE TO SPAMMERS: Those who Spam me will receive a five kilo
>gift box of 'SPAM THE ALL AMERICAN MEAT', containing one dozen
>cans of this wonderful, livid, meat. If this meat is not
>consumed within 10 days of delivery the cans will begin to
>EXPLODE by a process of natural fermentation. These EXPLOSIONS
>have been measured at greater than ONE MICRO TON, and may be
>dangerous to humans in the area of the EXPLOSION. Due to delivery
>variation the EXPLOSIONS may happen earlier. All deliveries
>will be made by United States mail (or fe-mail) as they are our

>only avenue of Parcel Post delivery. No e-mail SPAM BOMBS will
>be sent. Have a NICE SPAM DAY!
>
>73,
>
>George V73GT the Grand Turismo!
>United States Zip Code 96977
>Republic of the Marshall Islands
>
>(You try and figure it out)
>
>PS. (LEGAL RUMORS) An 'anti-class action' suit is being mounted by the
>Spam company's parent corporation and judgment is sought in the amount of
>one US dollar per instance for the use of the word Spam in a derogatory
>sense to describe unwanted electronic mail. This suit if successful should
>could bring in billions to the parent company. Think about it the next time
>you buy Spam or complain about unwanted electronic mail (UEM). Best say,
>"UEM" or "junk e-mail" and NOT "SPAM"!
>
>
>I've said my $3 worth.
>
>

## 5650. RF front end device

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: John Mackesy <mack@melbpc.org.au>
Message-ID: <01bd144e$12c755a0$1f9e0ccb@default>
Source record: 87940
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.equipment

I'm looking for an IC device to act as part of a preselector (with AGC) in front of an HP 312A Selective Voltmeter (wonderful xcvr, no AGC, prone to overload). The device should have the following characteristics:

Operation to 30 Mhz
Single-ended input (L-C circuit)
Positive-going AGC input
50 or 75 ohms output impedance
"Affordable"!

Suggestions really appreciated

John Mackesy VK3XAO

mack@melbpc.org.au

# 5651. Re: small loop ant

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <34A7B6B3.4375@emily.net>
Source record: 87941

joewalsh wrote:
>
> Is there any drawback to putting the preamp for a small loop receiving
> antenna inside the minibox with the tuning cap? I'm building a desktop
> frame loop so access to the preamp controls isn't a problem.

Normally, you *want* the preamp and tuning capacitor to be inside a shielded box, with the lead length between the preamp circuit and tuning capacitor as short as possible. The preamp box should also be located right at the loop, so that you do not have to use long leads. Long leads can affect the pattern of the loop, and will also reduce the tuning range because of added capacitance.

73

Lyle, K0LR

## 5652. Filament Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Russ Ellsworth <russcwv@cyberhighway.net>
Message-ID: <34A7720B.4B99@cyberhighway.net>
Source record: 87942

WTB 15 volt CT Filament transformer, 120/240 input with at least 21 Amps capacity for pair of 4-1000As. Any sitting around out there??
Tnx
Russ Ellsworth, WA6CWV, Boise Idaho

# 5653. Re: RF front end device

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19971229163001.LAA07808@ladder01.news.aol.com>
Source record: 87943

>
>I'm looking for an IC device to act as part of a preselector (with AGC) in
>front of an HP 312A Selective Voltmeter (wonderful xcvr, no AGC, prone to
>overload). The device should have the following characteristics:
>
>Operation to 30 Mhz
>Single-ended input (L-C circuit)
>Positive-going AGC input
>50 or 75 ohms output impedance
>"Affordable"!
>
>Suggestions really appreciated
>
>John Mackesy VK3XAO

Good grief! The thing is a piece of test equipment and you completely destroy
it's intended function with AGC!
The IF is fixed gain (within the range of the attenuators) and expecting 120 dB
of AGC just by controlling feedback to a preselector is expecting a whole lot.
If you just want a receiver, go buy a lousy little continuous coverage radio
and save the 312 for the shop. (If you can run across the companion 313
tracking generator, you REALLY have a piece of test gear!)

W4ZCB

# 5654. Re: RF front end device

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: oak@texas.net
Message-ID: <688jj7$c84$1@news3.texas.net>
Source record: 87944
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.equipment

Seasons Greetings Mack...

I am holding my ignorance up for all to see here, and I am not familiar
with the HP312...however... would a device with agc in front of a
selective voltmeter skew any voltage readings??

Regards....

DE K7RMJ Frank dit..dit

In article <01bd144e$12c755a0$1f9e0ccb@default>, mack@melbpc.org.au
says...
>
>I'm looking for an IC device to act as part of a preselector (with AGC)
in
>front of an HP 312A Selective Voltmeter (wonderful xcvr, no AGC, prone
to
>overload). The device should have the following characteristics:
>
>Operation to 30 Mhz
>Single-ended input (L-C circuit)
>Positive-going AGC input
>50 or 75 ohms output impedance
>"Affordable"!
>
>Suggestions really appreciated
>
>John Mackesy VK3XAO
>
>mack@melbpc.org.au

# 5655. RE: How to build a crystal filter for an Icom 706 Mk II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.f11a3c2659c002989697@news.infoave.net>
Source record: 87945

OK, now I know MUCH more than I did to start with. I now see that it would take some substantial engineering to learn:

The IF frequency (which I believe to be 9.016 MHz)
The filter input impedance (which I have found to be 2000 ohms)
The filter output impedance (which I have found to be 2000 ohms)
A supplier of crystals on that frequency.
How to match the input and output impedances.
Make sure the components are small enough to fit in the space alloted.
Find some way to calculate the loss using the available components.
Make sure the frequency of the filter "fits" into the passband desired.
Make sure the crystals are close-tolerance?
Lots of other mumbo-jumbo that I don't understand nor care to learn.

In other words, it's going to be better for me to simply accept that unless I'm building up a receiver from scratch (thereby being able to casually experiment with filter components) and considering the cost of this radio is fairly high. Further considering that the space inside this Icom 706 Mk II would require a filter of miniature proportions, I'm better off to let Icom do the engineering for me, and just buy what they sell.

I appreciate all the input I have received from you and many others.

73, and Happy Holidays! -Web in Myrtle Beach, SC

NOTICE TO SPAMMERS: I am well versed in anti-spam tactics.
Any SPAM mail I receive as a result of this newsgroup
posting will be met with e-mail bombing and you will be
subscribed to as many newsletters as I have the time to
subscribe you to. Your e-mail box will runneth over.
By spamming me, you consent and agree to receive such,
and further agree that it is your wish to receive said
e-mail bombing and e-mail newsletters. Further, you
agree to hold me harmless and not liable for any damages
as a result of e-mail bombing you receive from me.

# 5656. KW TS440 PC Interface Details ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: PD <paul.dumbacher@_nospam.msfc.nasa.gov>
Message-ID: <01bd1480$3377caa0$02bb9e80@dumbapr.msfc.nasa.gov>
Source record: 87946
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for details on the pinout and data structure for interfacing a Kenwood TS440 with a PC. I have found many programs for logging and contesting, but have no information on how to homebrew the IF232 interface. I have a leftover homebrew interface for a Yeasu rig and am trying to determine if it will function with the KW.
Any info would be greatly appreciated.
73 KC4YOB
Paul
--
Please remove "_nospam" for replies.
Thank you

# 5657. Re: WTB resistor assortment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Steve Robertson <stephen.h.robertson@cpmx.saic.com.xxx>
Message-ID: <34A7DECA.7D31@cpmx.saic.com.xxx>
Source record: 87947

John Miles wrote:
>
> Jason G Skalski wrote:
> >
> > I am looking for a 1/4 watt resistor assortment.
> > All or as many of the 161 standard values as possible. Up to 200 units
> > per value.
> >
> > Digikey has such a kit. Does anyone know of another source?
> >
> > Jim N2GO
>
> Radio Shack has an excellent 1/4-watt assortment these days. I think
> you get 200 or 300 or so for $4.99, something like that anyway.
>
> -- jm
>

Actually, it's $7.99. I bought one yesterday. Pretty good deal, I thought. They are all 5% carbon film units. They have other assortments for less, but don't have as much variety.

73 de Steve, KE4OH

--
To get my real e-mail address, remove the characters ".xxx" at the end of my address.

# 5658. Re: Looking for SSB circut!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <34a7ea23.0@newshost.pcug.org.au>
Source record: 87948

chia@news.utk.edu (John R Alley) wrote:
> I would like to know if there is a circut that can be built to
>RECIEVE only SSB signals via. my HT radio? If there is would someone
>please post it, or send it to me via. E-Mail thanks...
>

Yes, it is possible, but whether it is practical is another story.

Such a device could consist of a direct conversion receiver hokked up to a small FM transmitter. It would be easier to use an FM broadcast receiver instead of a HT as you'd be able to use an FM bug kit for the transmitter. Otherwise you'd have to build a low power 2m transmitter (though in this case a single xtal osc on a submultiple of 2m would be OK) and that's more expensive due to the need for an xtal or synthesiser.

Overall, you'd be better off making an audio amp for your DC receiver than feeding low level audio into a VHF transmitter that you'd have to build.

73,

Peter VK1PK

--

Peter Parker

E-mail: parkerp@pcug.org.au
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online, the Australian QRP Home Page and the STWG Web Site.

# 5659. ## Is anyone using the RadioShack "ProbeScope" and willing to share his experience? ##

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: tinkerman97@usa.net
Message-ID: <ELyx24.K0I@news2.new-york.net>
Source record: 87949
Cross-posted to: alt.comp.hardware.homebuilt,alt.comp.hardware.pc-homebuilt,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.equipment

Hello friends,

I'm looking for a lowcost, portable and small osciloscope for simple debuging applications. Although very basic in functionality, the RadioShack "ProbeScope" seems like the ideal tool for what I'm looking for, because:

1. It has a mini display for portable operation.

2. Can be interfaced to a PC for a larger display.

3. Sample rate (20MHz) is about right. The low vertical resultion (6 bits), limited input range and even the tiny 128 buffer depth all seem to be bearable.

It's almost a toy compared to the professionals, but for what I need and considering it's size and cost, I find no better alternative.

Since Radio Shack are not responding to my technical questions in a reasonable time. I need other users help. What I'd like to know is:

1. Is the PC display mode good enough to be useful in the lab for simple tasks (the LCD defenitely isn't, it's too tiny)? Has anyone got a screen capture that he can send via email?

2. Is there any s/w out there that can provide longer sampling intervals or improved functionality?

3. Can the bundled DOS s/w run on an XT class machine (I want to run it on my palmtop!)? Although RS state a minimal CPU requirement of a 386, the other requirements can be met by a simple PC (DOS 3.3, 600K RAM, etc. If not, is there any 3rd party DOS s/w that can do it?

4. Is it still sold at RS and if so, at what price?

5. Most important: are there any QUIRKS I should be aware of about this product?...:-)

Thanks in advance for any help offered.

## Note: when Replying, please email me directly in addition to posting here, so no responses are missed. Don't forget to remove the "97" from my email address inserted as an anti-spam counter measure...:-)

Thanks and best regards,
Tinkerman

# 5660. Re: RF front end device

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <2FA5XFAvkAq0Ew+H@lfheller.demon.co.uk>
Source record: 87950
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.equipment

In article <01bd144e$12c755a0$1f9e0ccb@default>, John Mackesy
<mack@melbpc.org.au> writes
>I'm looking for an IC device to act as part of a preselector (with AGC) in
>front of an HP 312A Selective Voltmeter (wonderful xcvr, no AGC, prone to
>overload). The device should have the following characteristics:
>
>Operation to 30 Mhz
>Single-ended input (L-C circuit)
>Positive-going AGC input
>50 or 75 ohms output impedance
>"Affordable"!
>
>Suggestions really appreciated
>
>John Mackesy VK3XAO
>
>mack@melbpc.org.au

I can't really see why you want to do this, but have a look at the
AD603.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/dds.htm for details of my AD9850
DDS system - schematic and software.

# 5661. Re: ## Anyone know where to get ceramic filters for radio receivers in small quantities? ##

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: micahw@axonn.com
Message-ID: <MPG.f11d7a0c2ff54a2989681@news.sstar.com>
Source record: 87951

[This followup was posted to rec.radio.amateur.homebrew and a copy was
sent to the cited author.]

In article <ELq5CK.4qF@news2.new-york.net>, tinkerman97@usa.net says...
> Hi,
>
> I'm looking for a mailorder company to get G.D.T ( Flat Group Delay)
> 15-20KHz bandwidth, 455KHz IF ceramic filters, as used in digital data
> receivers and packet radio. I know such filters are made for example
> by Murata and Kyocera. The problem is getting small quantities for
> prototyping. I'm also interested in regular 15-20KHz filters as a
> second option. Can anyone help?
> Thank's for any help offered.
>
>
> ## Note: when Replying, please email me directly in addition
> to posting here, so no responses are missed. Don't forget to
> remove the "97" from my email address inserted as an anti-spam
> counter measure...:-)
>
> Thanks and best regards,
> Tinkerman
>
>
try digikey www.digikey.com or 1800-digikey (18003444539)

## 5662. SB-200 mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: LA8AK@la8ak.nospam
Message-ID: <34a6e5b8.72610@news.online.no>
Source record: 87952

Thanks for the mod.info about SB-220. SM3BIU/Basse requests particular
modification references for SB-200. Some of those for SB-220 might
apply for SB-200?

73 Jan-Martin
---
O.S.R.: Eschew Obfuscation; Espouse Metrication (when sending overseas) ***
email: la8ak at online dot no WALA: K (County: Vest-Agder) QTH: Kristiansand

## 5663. (((Cable Descrambler)))

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Steven Baker <pacman@bcl.net>
Message-ID: <34A7CD18.AF1C2C29@bcl.net>
Source record: 87953

Build your own cable descrambler. Very simple to build. I have a program
on 3 1/2 floppy disk that will give you the parts list schematics and
step by step instructions.
E-mail me today to order your copy.

Cost of disk
US $1.00
Outside US $2.00

# 5664. Re: Three 5v 200a Supplies - Verify Info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd140c$878a6900$0c8a92d0@bitnet.bit-net.com>
Source record: 87954

Bloody dry English humor! Kills me ... guess that's why it's called
"bloody"? :-)

I have a 230VAC line meter coming in the mail soon, and am going to run a
#10
4-wire line from the breaker panel box to the shack (keep the neutral
floating).

I will see if I can borrow a variac from a friend across town.

I guess I can use a couple of car headlights as the initial test load.
(Wonder if
my neighbor will mind if I borrow them from his new truck ... no, never
mind.)

Actually, if the devices provide for either type input (3 phase or straight
230), I
should be OK ... but just in case I'll test when the wife and kiddies are
out!

The homeowners and life insurance are paid up and a fire extinguisher
(required
equipment for every 'real' ham ... read: 'tinkerer') is at hand and fully
charged!

And yes, I know, translating your initial sentence "...your mileage may
vary..."

:-) 73, DavidC AA1FA

> (to the original poster)
> Don't forget, what you read here is only supposition, based on your
original
> posted text. It's up to you at the end of the day to look & decide
whether
> to plug it in & cringe! I would suggest you try to borrow a variac & wind
it
> up monitoring the input current. Don't forget an o/p load - I'd suggest a
> 10% load e.g. 20A. Oh, and check the house insurance ;o))
> - Nick g7ufg

# 5665. fs: Variable Air Inductor Assembly

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd14ab$0615d860$0d8a92d0@bitnet.bit-net.com>
Source record: 87955

I just dug out an inductor I forgot I had! It is a combo tapped and partially variable inductor for high power, and of a neat design - could find use in a remote or a base ant. tuner setup.

32 turns of silver #10-12 (guess) coil 3" x 5" long attached on the outside to four 7" phenolic bars. On one end the coil enlarges a bit and there is a rotating coil inside of it to provide some variability.

This rotating coil is connected to a drive system that was once driven by a motor (the switch is on the assembly), but may also be shaft driven.

The multiple taps on the coil go to a high power capacity ceramic switch with 5 positions.

A bonus of 8 doorknob capacitors of varying value are also on the assembly ( I noted the following color codes, grn-blk-blk-wht, and grn-blk-purple-blue). I'm told the doorknobs sell for $4. each.

The whole assembly is neat just to look at, but would make more sense in a functional application. Asking $45. shipped CONUS.

Will consider trade or trade plus cash. Looking for a Soundblaster board to use with digital modes (needs to be the model that has dsp), also looking for a high quality coax switch (good to full power +), and may be needing a complete Collinns R-390A manual set (if a deal to buy one happens). Other offers considered.

73, DavidC AA1FA

# 5666. WTB:6.3 VCT 20AMP Xformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Steve Carter <sjcarte@tconl.com>
Message-ID: <34A8432A.4F5C@tconl.com>
Source record: 87956
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

```
-- Looking for 6.3 vct @ 20 Amp Xformer Price ,cond

http://www.tconl.com/~sjcarte/ OPS Engine Info
http://members.aol.com/mutineers/Index.htm
http://members.aol.com/apba17/
Thanks Steve Carter
```

# 5667. FS: transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Joe Schreiber <jschreiber@netcarrier.com>
Message-ID: <689m9o$1gn$1@usenet47.supernews.com>
Source record: 87957
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have the following transformers for sale:

1. Paeco #4026

Primary: 115/230 V 50-1000 Hz
Secondaries: 920 V center tapped at 100 mA
6.3 V at 8 A
6.3 V at 8 A
6.3 V at 8 A
6.3 V at 8 A
6.3 V at 6 A
5 V at 2 A

2. Paeco

Primary: 115/230 V 50-1000 Hz
Secondary: 960 V center tapped at 500 mA

Both transformers were removed from HP test equipment. They have heavy duty solder terminal strips and schematics with pinouts.

I'm located in southeast Pennsylvania. Please make offer, if interested.

# 5668. Re: helical resonator appl sc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-29 00:00:00 UTC
From: Dave Eckhardt <dave_eckhardt@hp.com>
Message-ID: <34A828AB.7658@hp.com>
Source record: 87958

aziz@turnet.net.tr wrote:
>
> hi there :
>
> I need circuit of hamtronics R144 FM Receiver or helical resonator
> amplifier .
>
> I need info , how to built helical resonators (3 pole) ?.
> I have 2m receiver and I want to make adapt helical resonator .
> 73,s de TA2AD Sua
>
> ----------====Posted via Deja News====----------
> http://www.dejanews.com/ Search, Read, Post to Usenet

**********

Sua:

The most "usable" reference I could give you is "Reference Data for Radio Engineers" published by Howard Sams - somewhat commonly referred to as "The Blue Brain" when it was blue. It contains, along with a wealth of other useful information, a relatively easy-to-use design technique for helical resonators. There is also a book published by, I believe, Aertech, whose title and author I forget, which is devoted to helical resonators. It is good, but undoubtedly more detail than you need.

I can give you a few pointers that will get you on your way. The length of the spiral "winding" is roughly 1/4 wavelengths (in free space) shortened by roughly 5 to 10 % to give room for tuning. They are actually 1/4-wavelength resonators. The length to diameter ratio of the "winding" should be ROUGHLY 2:1. Conductor spacing should be ROUGHLY one to two wire diameters and the enclosure diameter (assuming a cylindrical enclosure) should be ROUGHLY twice the "winding" diameter. The "winding" is centered in the enclosure with the bottom "grounded" to the enclosure. The top is tuned with a SMALL variable capacitor. Now to the hard part: matching and coupling. I have had best luck by coupling the resonators with a piece of insulated heavy conductor, like that used to "wind" the resonator. Coupling is controlled by spacing between this conductor and the tops of the individual resonators. I have NOT had good luck with aperature coupling in designing large resonators (using 3" to 6" copper pipe as the enclosures). I have had best luck input/output coupling from/to 50+/-j0 ohms by tapping up 1/4 to 1/2 turn from the cold ("grounded") end to a BNC connector soldered to the side of the resonator enclosure. I have not used probe coupling

with much success. CAUTION: to do a good and responsible job of coupling and matching helical resonators really does require use of a vector network analyzer. However, good results can be had with care in measurement. I have always used the vector net. an. to optimize my designs. Even the book published by Aertech admits that is the best method. Design of helical resonators is largely emperical. However, don't let that scare you off. The helical resonator is a much underrated and underutilized (and maligned) filter.

Dave Eckhardt - W6LEV

Home email: DaveArea51@aol.com

Work email: dave_eckhardt@hp.com

# 5669. Re: TNC Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: mikea@efn.org
Message-ID: <68c1oe$294$1@haus.efn.org>
Source record: 87872
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

In article <01bd133e$685bf900$0d8a92d0@bitnet.bit-net.com>,
davidc@bit-net.com says...
>
>What do you intend to do with it?
>HF modes, VHF modes?
>CW, RTTY, PACKET, PACTOR, AMTOR, SSTV, WEFAX, FAX, ... ?

All of the above am going to upgrade. just look to see what every
one thanks of what is out there I hear that the is not much going
on in HF packet so maybe a tnc for vhf will work for what i want??

>Lots of options, lots of TNCS & TNC alternatives.
>
>Please, give us some details and watch the suggestions flow.
>
>BTW: This post would probably be better posted on
>rec.radio.amateur.digital.misc where I have copied it to.
>
>73, DavidC AA1FA
>
>
>Mike L Abrams <mikea@efn.org> wrote in article
><683ua4$ssi$1@haus.efn.org>...
>> I want to get a TNC but i do not know any thing about them. What is a
>good
>> brand? Let me Know what brand you have and what you like about. This will
>
>> help me to know whit one to get Reply here or mikea@efn.org
>> or kc7zfp@juno.com
>> Thank you
>> ___ __ ___ __ __ __ __ __
>> /===/// ///=\\\ |__/ / ' ' / ' / |_ |__)146.580
>> /// `"` /// __ | \ __ / /_. | | 147.080+
>> /// \\\ /__' KC7ZFP@juno.com or mikea@efn.org
>> /// \\\=/// .__/ Mike Abrams in Eugene.Ore USA
>>
>>

# 5670. Re: Help--Motorola RF application reports

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: marty <marty@fia.net>
Message-ID: <34A9C277.36BC@fia.net>
Source record: 87873

try 1-800-rfparts

## 5671. A few questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Zack Miller <zack@mail.bcpl.lib.md.us>
Message-ID: <34A9C346.A23E0364@mail.bcpl.lib.md.us>
Source record: 87874

I need to build a audio amp that is clean and puts out around ~50 to 200 mw Anyone have any schematics, Also need to build a wide band preamp just for reciving, prferably aroun 5-1200 Mhz with adjustible gain.

Thanks for any info

Zack

# 5672. Re: Help with my crystal 2M rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: J&J Mac <jmacd@cds1.net>
Message-ID: <34A9D1A7.2C8D67EF@cds1.net>
Source record: 87875
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi Ryan, I saw that another person replied as to the whys... I am wondering if you have the formula for your xtal selections.. something like [ f - (if)] /12 for RX or f/9 TX etc..

If the formula for selecting your frequency is a comon one, I should have the crystal you need for the cost of postage. Possibly others as well.

Jim, KB6ZOP

Ryan wrote:

> Hello. I'm in need of a bit of assistance. I have an old crystal rig
> that I need to use, on the frequency of 146.52MHz. The rig transmits
> fine on this frequency, I alligned it with the trimmer capacitor next
> to the crystal. But the receive is off. It receives at about 146.48MHz
> There is no adjustment for the receive crystals. Should there be?
> What could be wrong? When a crystal goes bad, it doesnt go off
> frequency, does it? If so, does anyone have a 146.52 crystal they want
> to get rid off?
>
> Speaking of crystals, what is the difference between a TX crystal and
> a RX crystal? Impediance? The crystals in my rig are labeled with a R
> and T for TX and RX. Thanks a lot for any help. Please reply to
>
> ryan a t poboxes d o t com

# 5673. Re: 4CX600 Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <59v+jHAY$Xq0EwtA@pacsat.demon.co.uk>
Source record: 87876

In article <34ae5c9d.5347739@news.gate.net>, jdaggett@gate.net writes
>Does any body have pinout for a 4CX600J. It has the same base as a
>4CX250 series. Need to know which pins are the filament, grid, and
>screen grid. Also want to know fialment voltage and current.
>
>Thinking of using one in 6 meter amp.
>
>Regards
>
>James
>
>WA4BZJ

check out svetlanas site they are on the web

73 Simon

+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 5674. Ham Radio update

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: n3tlj@paonline.COM
Message-ID: <l03110702b0ce025ddc89@[207.44.25.125]>
Source record: 87877

Thank you for reading this de N3TLJ, Curt...

Thanks to Ken, VE3PU, of the Radio Amateurs of Canada (RAC), a new hot-spot map of the radio districts of Canada is available at http://www.paonline.com/csanders/ve-land.htm

RAC is also using the map for it's beginners page at http://www.rac.ca/arast.htm

For European visitors to N3TLJ's website, the European map has been fixed and features new updates of European hams with web sites is: http://www.paonline.com/csanders/europe.htm

73

# 5675. Re: RF front end device

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: jimm@teleport.com
Message-ID: <34a85528.26002263@news.teleport.com>
Source record: 87959
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.equipment

On 29 Dec 1997 16:36:55 GMT, oak@texas.net (Oak) wrote:

>Seasons Greetings Mack...
>
>I am holding my ignorance up for all to see here, and I am not familiar
>with the HP312...however... would a device with agc in front of a
>selective voltmeter skew any voltage readings??
>
>Regards....
>
>DE K7RMJ Frank dit..dit
>
For some a selective VM, for others a nice VLF receiver..
A 3n209 mosfet with bias on g2 will give 20db gain, and
20db agc range at 30mhz, for a few dollars.

Jim McVein
jimm@teleport.com

# 5676. Re: SSB with DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Micah Wilson <micahw1@bellsouth.net>
Message-ID: <34A86A83.6D0C@bellsouth.net>
Source record: 87960

K.R.Burtchaell wrote:
>
> Looking for hardware solutions utilizing DSP to generate and detect SSB
> transmissions. 73 Ken W6GHV
K.R.
My name is micah

I'm looking to also to do a single side band DSP based receiver.
A couple of books that might help are
"Digital Signal Processing in Communication Systems" by Marvin Frerking
ISBN 0-442-01616-6
"Single sideband systems and circuits" edited by William E. Sabin
(this second title may be slightly incorrect, but Sabin did edit this
book) this second book also includes some of Frerkings info from the
Frerking book.

To do this I intend on using Analog Devices DSP processors. I intend on
using 200 Ksamples/second (subsampling a higher IF) A/D converter,
connected to two ADSP processors, linked serially. I am doing it for a
class in college.
Frerkings book has block diagrams and probably sufficient information to
make at least a good attempt at it.

The frequencies I was going to try was going to be below 1 MHz, but I
can't find enough information out there about where any active
frequencies, so I am thinking about targeting w1aw for use as a test
signal for reception.
Unfortunately I don't know if it is SSB or AM.

If you have more information on signals that are transmitted on a
regular basis that are SSB, I'd appreciate it if you would let me know.

If you would like to work together on this, drop me a line.

NOTE: make sure the Email address is "micahw@bellsouth.net", I'm not
sure the reply address is setup properly in my mail program.

# 5677. RTTY Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Scott Z <szastoup@prairie.nodak.edu>
Message-ID: <34A89A89.717D@prairie.nodak.edu>
Source record: 87961

Does someone know were I could find plans to make a simple RTTY modem.
Pse let me know. Tnx in advance.

73's

Scott
A.R.S. KBï¿½KFX

# 5678. Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <34a916ab.251269901@news.erols.com>
Source record: 87962

We've been talking about crystal filters...

I have here about ten "mystery filters" that might prove useful in Homebrew projects.

I picked them up at the (soon to be defunct) EEB store in Vienna Virginia.

They come packaged in very sturdy little 1 inch by 2 inch metal boxes.

Four crystals in the inside, Looks like some form of latice arrangement.

Three terminals: In, Out, Ground.

I put a scope and a signal generator on the and found the resonant frequency to be around 2.250 Mhz. I don't have the gear to do an accurate measurement of bandwith.

They are marked "Hermes Crystal filter" and were made by Itek Electro-Products of Cambridge Mass.

Anyone know about these devices? Anyone want to do some tests on one of them? Anyone need one?

73 Bill N2CQR

# 5679. Icom U12 conversion help????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: miker <&miker@ethergate.com>
Message-ID: <34A8E7EB.5BD8@ethergate.com>
Source record: 87963
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.homebrew

I acquired a small pile of high-band Icom U12 handheld transceivers and decided
to convert two of them into a portable repeater.
Got the frequency conversion to 449MHz. done, but can only get 1.7W at 11 Volts.
Spec sez 3W at 10.8V. No, I don't have an unconverted one that works left to try.

The manual shows same parts in the high and low band versions.
None of the tuning caps are maxed out. Poked around the coils with a tuning stick. Could make it worse, but not better. Even took out the T/R
switch. Gained a little.

Exact same output on two units, although the DC current drain was 600ma on one
vs 900ma on the other.

Hard to believe the 1mhz difference (449 vs 450) is costing me that much power.
Any ideas on getting the power up to 3W. I need all I can get. Yeah, I'll put
a bigger heat sink on the final.

Advice?
thanks, miker
Please remove & from return address before replying.

# 5680. Help with my crystal 2M rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: ryan@REMOVETHISpoboxes.com
Message-ID: <34a91768.59855297@news>
Source record: 87964
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hello. I'm in need of a bit of assistance. I have an old crystal rig that I need to use, on the frequency of 146.52MHz. The rig transmits fine on this frequency, I alligned it with the trimmer capacitor next to the crystal. But the receive is off. It receives at about 146.48MHz There is no adjustment for the receive crystals. Should there be? What could be wrong? When a crystal goes bad, it doesnt go off frequency, does it? If so, does anyone have a 146.52 crystal they want to get rid off?

Speaking of crystals, what is the difference between a TX crystal and a RX crystal? Impediance? The crystals in my rig are labeled with a R and T for TX and RX. Thanks a lot for any help. Please reply to

ryan a t poboxes d o t com

## 5681. Azden PCS-4000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Ed <checkpilot@earthlink.net>
Message-ID: <68b5e0$dua@argentina.earthlink.net>
Source record: 87965

Anyone have any mods for this rig
PCS-4000??
checkpilot@earthlink.net

# 5682. Re: fs: Variable Air Inductor Assembly

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Dennis Huff <dhuff@san.rr.com>
Message-ID: <34A93A3E.4063@san.rr.com>
Source record: 87966

DavidC wrote:
>
> I just dug out an inductor I forgot I had! It is a combo tapped and
> partially variable inductor for high power, and of a neat design - could
> find use in a remote or a base ant. tuner setup.
>
> 32 turns of silver #10-12 (guess) coil 3" x 5" long attached on the
> outside to four 7" phenolic bars. On one end the coil enlarges a bit and
> there is a rotating coil inside of it to provide some variability.
>
> This rotating coil is connected to a drive system that was once driven
> by a motor (the switch is on the assembly), but may also be shaft driven.
>
> The multiple taps on the coil go to a high power capacity ceramic switch
> with 5 positions.
>
> A bonus of 8 doorknob capacitors of varying value are also on the
> assembly ( I noted the following color codes, grn-blk-blk-wht, and
> grn-blk-purple-blue). I'm told the doorknobs sell for $4. each.
>
> The whole assembly is neat just to look at, but would make more sense
> in a functional application. Asking $45. shipped CONUS.
>
> Will consider trade or trade plus cash. Looking for a Soundblaster
> board to use with digital modes (needs to be the model that has dsp), also
> looking for a high quality coax switch (good to full power +), and may be
> needing a complete Collinns R-390A manual set (if a deal to buy one
> happens). Other offers considered.
>
> 73, DavidC AA1FA

HI David OM,

Your inductor/capacitor/switch assembly comes from a WW II military
surplus antenna tuner. I have one identical to it.
The rotating link provides for variable coupling to the inductor. Handy
for making a single-ended (coax) antenna tuner.

73,
Don, W6JL

# 5683. Re: RTTY Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Dennis Huff <dhuff@san.rr.com>
Message-ID: <34A93982.7D76@san.rr.com>
Source record: 87967

Scott Z wrote:
>
> Does someone know were I could find plans to make a simple RTTY modem.
> Pse let me know. Tnx in advance.
>
> 73's
>
> Scott
> A.R.S. KBï¿½KFX

Hi Mark OM,

Have you looked in any ARRL handbook? Simple limiter-discriminator demodulators have been described in many books and magazines over the past few decades. They work well, and are basically identical architecture to those in the PK232, KAM, etc. I would not recommend using a simple phase-locked loop type of demodulator on HF; very poor performance.

Use your local library to find ARRL handbooks; don't buy one just to find a single piece of information. For the cost of one handbook you can build yourself an RTTY modem.

GL and 73,
Don, W6JL
w6jl@e-z.net

# 5684. Re: Help with my crystal 2M rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <aUM2qCAVqUq0Ew67@southwestuk.demon.co.uk>
Source record: 87968
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <34a91768.59855297@news>, Ryan <ryan@REMOVETHISpoboxes.com>
writes
>Hello. I'm in need of a bit of assistance. I have an old crystal rig
>that I need to use, on the frequency of 146.52MHz. The rig transmits
>fine on this frequency, I alligned it with the trimmer capacitor next
>to the crystal. But the receive is off. It receives at about 146.48MHz
>There is no adjustment for the receive crystals. Should there be?
>What could be wrong? When a crystal goes bad, it doesnt go off
>frequency, does it? If so, does anyone have a 146.52 crystal they want
>to get rid off?
>
>Speaking of crystals, what is the difference between a TX crystal and
>a RX crystal? Impediance? The crystals in my rig are labeled with a R
>and T for TX and RX. Thanks a lot for any help. Please reply to
>
>ryan a t poboxes d o t com
Hi Ryan,
It is unusual but not unknown to not have a rx adjustment for your
crystal. Yes, crystals do drift due to ageing. Bearing in mind that the
actual crystal frequency will be considerably lower than 146.48, a small
change here will be proportionately larger at the operating frequency.

The reason you have different Tx and Rx crystals is because they employ
a different mixing/multiplication chain to reach the final frequency.
As I said earlier, your rx crystal will not be at 146 MHz but something
much lower in frequency, possibly around 15 MHz or thereabouts.

If you quote the equipment model along with the wanted final frequency
to most reputable crystal manufacturers, they will more than likely
know what crystal to provide. The cost is cheap (in the UK around 7
UKP) it is not worth trying to find one here.
gl Trev ...-.-
--
Trevor Day G3ZYY

# 5685. 4CX600 Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: jdaggett@gate.net
Message-ID: <34ae5c9d.5347739@news.gate.net>
Source record: 87969

Does any body have pinout for a 4CX600J. It has the same base as a 4CX250 series. Need to know which pins are the filament, grid, and screen grid. Also want to know fialment voltage and current.

Thinking of using one in 6 meter amp.

Regards

James

WA4BZJ

# 5686. Re: RTTY Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd156a$e99ae0c0$0c8a92d0@bitnet.bit-net.com>
Source record: 87970

You can use software and a Soundblaster card.

> > Does someone know were I could find plans to make a simple RTTY modem.
> > Scott

# 5687. WTD: KVG Xtal Filter Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-30 00:00:00 UTC
From: "James C. Garland" <4CX250B@MIAVX1.MUOHIO.EDU>
Message-ID: <34A971CC.1683@MIAVX1.MUOHIO.EDU>
Source record: 87971

In the mid-seventies, I homebrewed a ham-band receiver using KVG 9 MHz crystal filters for ssb (model XF9-B) and cw (XF9-M). At the time,I could have cared less about AM. Now that AM is springing back from the grave, however, I'd like to add the KVG AM filter to my receiver. Does anybody know whether (a) KVG is still in business, (b) whether they make an AM filter, and (c) what the model number is? If anybody has a filter to sell, I'd be enormously grateful. I'd also be enormously amazed. Thanks.

73,

Jim W8ZR

## 5688. am7910 or am7911 wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: mdowning@amberjack.rdatasys.com
Message-ID: <68c3lo$jlm$4@herring.rdatasys.com>
Source record: 87878

I need an AMD am7910 or am7911, or a source for them. Please email
me: wm7d@wm7d.net

Thanks
--Mark

# 5689. Metal Chassis and rack panelsFS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <34a98fbc.188864081@news.teleplex.net>
Source record: 87879

I have the following metal chassis for sale. All are in very good
(many are in the original wrapper) condition. Make a fair offer on
what you need. you pay the freight.

2 2 piece alum minibox 7 x 4 x 12 new

4 7 x 17 x 2 alum chassis new

1 black wrinkle 17 x13 x2

3 7 x 7 x 2 cadmium steel

2 aluminum 3 x 4 x 5 3 piece mini box

2 10 x 10 x 2 bud AC415 new

1 7 x 15 x 3 bud AC415 new

4 7 x 5 x 2 al chassis

1 6 x 17 x 3 al chassis

1 8 3/4" x 19 x 1/8 al bud surface shield rack panel

in wrapper

1 5 1/4 x 19 x 1/8 grey rack panel BUD al new

bottom plates

1 8x10
1 8x12
2 8x17 all are alum bud

Pat Bunn
N4LTA

## 5690. Crystal Filters FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <34a99280.189571771@news.teleplex.net>
Source record: 87880

I have ten new surplus crystal filters with the following specs:

8 pole, 10.7 Mhz center frequency, 2.4kHz bandwidth made by Crystal Devices, Glendale ,AZ p/n A6690

They are nice hermetically sealed filters with two studs and three pins to connect in, out and common. I have used them in receivers with good success and they look great on a network analyzer with a nice symetrical bandpass

$60 for the lot including postage

Pat Bunn
N4LTA

# 5691. Re: RF front end device

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: LA8AK@no.dial.tone
Message-ID: <34a99195.4053135@news.online.no>
Source record: 87881
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.equipment

On Tue, 30 Dec 1997 02:02:01 GMT, jimm@teleport.com (Jim McVein)
wrote:

>On 29 Dec 1997 16:36:55 GMT, oak@texas.net (Oak) wrote:
>
>>Seasons Greetings Mack...
>>
>>I am holding my ignorance up for all to see here, and I am not familiar
>>with the HP312...however... would a device with agc in front of a
>>selective voltmeter skew any voltage readings??
>>
>>Regards....
>>
>>DE K7RMJ Frank dit..dit
>>
> For some a selective VM, for others a nice VLF receiver..
>A 3n209 mosfet with bias on g2 will give 20db gain, and
>20db agc range at 30mhz, for a few dollars.
>
>Jim McVein
>jimm@teleport.com

I used some Siemens, Wandel&Goltermann and HP selective voltmeters at
work - normally within 0.5kHz-10MHz. I believe the main problem is
lack of front-end selectivity. You usually use them to adjust single
tone levels or look for spurious signals, so overload is no problem
when used as specified and 20dB dynamic range.
An easy way to improve them is to build a simple PRE-SELECTOR
circuit consisting of at least one, or better two tuned circuits.

A similar problem is with Collins 51-S when used below 2MHz

73 Jan-Martin
---
O.S.R.: Eschew Obfuscation; Espouse Metrication
email: la8ak at online dot no Kristiansand

# 5692. What Test Leads Do I Need For Heath IO-4540 Scope?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd159a$97a287c0$0c8a92d0@bitnet.bit-net.com>
Source record: 87882
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

What test leads do I need for my Heath IO-4540 Scope, please?

I have acquired this scope and hope to learn with it. I have most of the manual, but no info about what test leads are appropriate.

Anyone familiar with this thing and can offer advice?

BTW: I do have a bnc inline "Neg DC Out, Telonic Berkeley, Crystal Detector, Model 8551, .1 - 1500 mHz 3v max." device. Is this somehow useful with the scope? (I'm guessing it would rectify RF so it could be viewed?)

--
Thanks for any and all help! 73, DavidC AA1FA
"Now may the God of hope fill you with all joy and peace in believing, that you may abound in hope by the power of the Holy Spirit." Romans 15:13

## 5693. C.I.C 10X

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: "Ralph C. Noll" <rcnoll@ix.netcom.com>
Message-ID: <68cpij$c78@dfw-ixnews9.ix.netcom.com>
Source record: 87883

Swing your antenna toward Oxnard ,Ca to the CHANNEL ISLANDS CHAPTER 10X INTERMATIONAL NET. Net is on 28:340 MHz, Every Wednesday. UTC time is 18:00-20:00 again at 02:00-04:00. For information e-mail rcnoll@ix.netcom.com. Nonmembers are most welcome to join the fun and start collecting your 10X numbers.

# 5694. Re: KW TS440 PC Interface Details ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Mark Daniell <MaDaniell@worldnet.att.net>
Message-ID: <68crr6$rnt@bgtnsc02.worldnet.att.net>
Source record: 87884
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

PD wrote:
>
> I am looking for details on the pinout and data structure for interfacing a
> Kenwood TS440 with a PC. I have found many programs for logging and
> contesting, but have no information on how to homebrew the IF232 interface.
> I have a leftover homebrew interface for a Yeasu rig and am trying to
> determine if it will function with the KW.
> Any info would be greatly appreciated.
> 73 KC4YOB
> Paul

Paul,
Check out the following website, they have LOTS of pinouts, etc..
http://www.sedan.org/

# 5695. Re: KW TS440 PC Interface Details ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Mark Daniell <MaDaniell@worldnet.att.net>
Message-ID: <68crrn$rnt@bgtnsc02.worldnet.att.net>
Source record: 87885
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

PD wrote:
>
> I am looking for details on the pinout and data structure for interfacing a
> Kenwood TS440 with a PC. I have found many programs for logging and
> contesting, but have no information on how to homebrew the IF232 interface.
> I have a leftover homebrew interface for a Yeasu rig and am trying to
> determine if it will function with the KW.
> Any info would be greatly appreciated.
> 73 KC4YOB
> Paul

Paul,
Check out the following website, they have LOTS of pinouts, etc..
http://www.sedan.org/

# 5696. Re: A few questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <aKECUoA+Dfq0Ewre@lfheller.demon.co.uk>
Source record: 87886

In article <34A9C346.A23E0364@mail.bcpl.lib.md.us>, Zack Miller
<zack@mail.bcpl.lib.md.us> writes
>I need to build a audio amp that is clean and puts out around ~50 to 200
>mw

I like the Philips TDA7052, it doesn't need any external components.

Leon
--
Leon Heller: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See http://www.lfheller.demon.co.uk/dds.htm for details of my AD9850
DDS system - schematic and software.

# 5697. PRC/77 Part and schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: elecwiz924@aol.com
Message-ID: <19971231110000.GAA19695@ladder01.news.aol.com>
Source record: 87887

I have all the modules and the hard to find transistors chokes and coils. I have schematics on every module and the radio itself. If you are intrested in a parts list or have any question please feel free to E-mail me at elecwiz924@aol.com

# 5698. Re: KW TS440 PC Interface Details ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <uFGdxsfF9GA.78@ntdwwaaw.compuserve.com>
Source record: 87888
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The '97 ARRL handbook has this info in it. There is an article called "A Trio of Transceiver/Computer Interfaces". It has a Kenwood IF box and 2 others (Yaesu and Icom). Would make great comparison.

The Yaesu and Icom boxes are nearly identical. The Yaesu interface is just a 3 wire (TX, RX, GND) RS232 level converter using a MAX232 and some buffering (7417).

The Kenwood uses RTS/CTS handshaking and the polarity is backwards. This makes it easy to optoisolate the thing and that's what the handbook's plan calls for. Other than that, the circuit is just a MAX232 level converter, but you have to convert RTS/CTS also.

Hope that helps. You can find a brief description of the handbook and all that at http://ourworld.compuserve.com/homepages/Al_Williams/book.htm

73,

Al WD5GNR

PD wrote in message <01bd1480$3377caa0$02bb9e80@dumbapr.msfc.nasa.gov>...
>I am looking for details on the pinout and data structure for interfacing a
>Kenwood TS440 with a PC. I have found many programs for logging and
>contesting, but have no information on how to homebrew the IF232 interface.
> I have a leftover homebrew interface for a Yeasu rig and am trying to
>determine if it will function with the KW.
>Any info would be greatly appreciated.
>73 KC4YOB
>Paul
>--
>Please remove "_nospam" for replies.
>Thank you

# 5699. Re: RTTY Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <#3BjTnfF9GA.242@ntdwwaaw.compuserve.com>
Source record: 87889

Scott,

A great way to get started is to use a simple HAMCOMM interface and a PC. HAMCOMM is a program writtend by DL5YEC and it is shareware, so you can try it before you buy it. The interface you need is just an op-amp from Radio Shack and a few bucks worth of parts (ordinary diodes, capacitors, and resistors). Everything you need you could pick up at Radio Shack. I built my first one on a prototype board in 10 minutes with junk I had laying around. The construction is not critical and there is no complicated tune up required.

The interface works with several packages, but HAMCOMM is probably the best of them. It does RTTY, ASCII, and AMTOR. If you buy the registered copy (I did) it does PACTOR receive too. The tuning indicators are great and the software is really flexible. You can also use it with JVFAX to do SSTV (send and rec).

You can also buy HAMCOMM interfaces built already, but they are so simple, there isn't a great reason for doing so unless you want a nice case and are a mechanical klutz like I am.

The circuit is just a zero-crossing detector that connects to the serial port and generates interrupts. The software counts the interrupts and analyzes the frequency information that way.

There is a great page about HAMCOMM run by an American ham, but I can't remember the URL. However, if you go to my page, you'll find plenty of references to HAMCOMM and every one of them will link to his page. He has an improved schematic (takes only a few extra parts), and sells finished units. He also has the software for free download (remember, it is shareware). I don't sell anything related to HAMCOMM, I just think it is great fun!

My page: http://www.al-williams.com/wd5gnr

One warning: HAMCOMM needs sharp filtering. I had built an outboard filter when I had an older rig. Now I use a Kenwood TS570D and its DSP does the job very, very well. Terry's improved version (on the Web site I mentioned) has some passive filtering built in and I don't know how that works because I haven't built one yet.

Another note: HAMCOMM technically copies CW, but that doesn't work well enough to really use for anything serious (at least, not for me). To tell the truth, I have tried writing CW copying software before and it is tough. HAMCOMM does about as well as you'd expect on CW, but that isn't very good.

Now, to abate flames:
1) Yes, HAMCOMM is not as good as your $300 TNC.

2) No, I am not saying that your TNC is not wonderful.
3) Everyone knows that PACTOR is so much better than AMTOR.

All I am saying is that for $10 HAMCOMM is a great way to get into RTTY/TOR and is simple enough that most anyone can have the satisfaction of building some of their own gear and even experimenting with it. Most of us won't cut into a $300 TNC.

Regards,

Al Williams
AWC
*Solderless Basic Stamp Prototypes at http://www.al-williams.com/awce.htm

Scott Z wrote in message <34A89A89.717D@prairie.nodak.edu>...
>Does someone know were I could find plans to make a simple RTTY modem.
>Pse let me know. Tnx in advance.
>
>73's
>
>Scott
>A.R.S. KB KFX

# 5700. Re: KW TS440 PC Interface Details ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: nobody@crosslink.net
Message-ID: <34aa6e68.13572832@news.crosslink.net>
Source record: 87890
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Wed, 31 Dec 1997 03:26:11 -0800, Mark Daniell
<MaDaniell@worldnet.att.net> wrote:

>PD wrote:
>>
>> I am looking for details on the pinout and data structure for interfacing a
>> Kenwood TS440 with a PC. I have found many programs for logging and
>> contesting, but have no information on how to homebrew the IF232 interface.
>> I have a leftover homebrew interface for a Yeasu rig and am trying to
>> determine if it will function with the KW.
>> Any info would be greatly appreciated.
>> 73 KC4YOB
>> Paul
Hello Paul
Sorry I lost your original post so I will post this as a response to
Mark's post.
The following is a slightly modified version of an article that I
posted recently for a similar request.
-------------------------
I have the TS-450 rather than the TS-850, but I would be very
surprised if there were any differences in the 6 pin connector ACC-1.

In fact, the User's Data for the IF-232C, itself, says that it is
designed for transceivers capable of computer control, such as the
TS-940S and the TS-811/711 series.

I have used the Kenwood IF-232C External Control Interface with it,
and it works fine.

Here's the pinout per my data sheets:

1 Signal Ground
2 Transmit Data (Output) (TXD)
3 Receive Data (Input) (RXD)
4 Transmit Enable (Input) (CTS)
5 Receive enable (Output) (RTS)
6 N/C
Note that the meaning of "Transmit" and "Output" refer to signals from
the transceiver to the PC.

The data sheet also indicates that whereas the PC's serial port is
RS-232C (-12v to + 12v), the Transceiver uses TTL (0 to +5). I guess
that explains why it is you can't just connect the two ports directly
together - Hi.

One other point of interest. As is the case with almost all RS-232 devices, remember that the connection between the Transceiver and the PC MUST connect Transmit Data to Receive Data and vice versa. Likewise the CTS/RTS lines are also cross connected. Well, that's consistent, isn't it?

Don't forget which pins are which on the PC side. Depending on whether you have a 9 pin or 25 pin connector, as follows:

Signal 9pin 25pin

TXD 3 2
RXD 2 3
CTS 8 5
RTS 7 4
GND 5 7

I should point out that the IF-232C unit uses a 4 circuit Opto-isolator chip, a power regulator chip, and two chips for line driver/conversion functions. It does a great job with a cable length of 100 feet, so I'm satisfied that it is noise free. I can't remember for sure what software I used but there were two shareware programs that work fine, and I got them from the QRZ CD-ROM.

If there's anything else you need, don't be bashful.
---
P.S. I have used two different shareware programs with this interface over a 100' cable and it works fine.

73 de Bob, W9DMK
[Change "nobody" to "w9dmk" for direct replies]

# 5701. F.S. 394A,6JA5.6JG6A,6JT6A,6939-TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <68dpfg$hck$2@newsfeed.smartt.com>
Source record: 87891

FOLLOWING TUBES FOR SALE:

-(1) 6939 new for $20.00 U.S.
-(1) 394A NEW for $14.00 U.S.
-(5) 6JA5 NOS for $10.00 U.S.each
-(3) 6JG6A NOS for $25.00 U.S. each
-(5) 6JT6A NOS for $20.00 U.S. each

For info or order,please contact me. THANKS
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5702. F.S.TUBES.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: epirtyak@bcinternet.com
Message-ID: <68dpfe$hck$1@newsfeed.smartt.com>
Source record: 87892

The following tubes for sale:

- (7) 6JR6 new for $20.00 U.S. each
- (5) 6LQ6 used(test like new) for $15.00 U.S. each.
- (2) 6LX6 used(like new) for $10.00 U.S. each.
- (1) 6A3 NOS for $25.00 U.S.

For any info. Contact me. THANKS
Eric Pirtyak in Kelowna BC Canada

Net-Tamer V 1.10.1 - Test Drive

# 5703. Re: 4CX600 Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <osUluEAFAlq0Ewv6@ifwtech.demon.co.uk>
Source record: 87893

WA4BZJ wrote:

>Does any body have pinout for a 4CX600J. It has the same base as a
>4CX250 series. Need to know which pins are the filament, grid, and
>screen grid.

Unfortunately it isn't exactly the same base as the 4CX250 series. The
4CX600J uses the SK607 which includes a contact for pin 5, missing from
other SK600-series bases.

Also the pinout is different - the center pin is a heater contact and
the grid pin is somewhere around the edge!

> Also want to know fialment voltage and current.
>
6.0V, 5.4A

>Thinking of using one in 6 meter amp.

Think twice! They don't have a good reliability record, and where would
you get a replacement? The new price is much higher than a 3CX800 or
4CX800.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

# 5704. Re: Kenwood R-2000 - Make it better?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <34ad7aa3.2765215@eskinews.eskimo.com>
Source record: 87894

I_Magnus@hotmail.com (Magnus) wrote:

>I have an old R-2000 SW reciever that I have hooked up to a long wire
>antenna stretched between two trees in my backyard. Currently I can only
>receive the big stations; ie, BBC, Radio Australia, etc. Does anyone
>have an idea as to how I can DX with this setup?
>
>The antenna is tapped at the end with a 75ohm coax which I have run to my
>receiver. It is the RS SW antenna kit everyone says is too expensive...
>I had to buy two. One I used for the receiver antenna, the other is the
>ground. I sank a 6 foot copper rod in the earth outside my window (yes,
>I can see the Earth from my window) for the ground and attatched the
>copper wire to it for a ground line.
>
>Does anyone have any suggestions?
>Any help will be appreciated.
>Kevin

---

Assuming you have the RF ATT knob set to 0, the R2000 should be pretty sensitive. I have an old one I bought new back in the early '80s and it's been a real workhorse. I have it on a nightstand next to my bed and it puts me to sleep every night. :-)

There is one problem with the R2000 however: The digital circuitry radiates a bunch of hash which will be picked up if your antenna is just a bare wire connected to the terminal in back. Perhaps this is what is covering up the weak signals. A much better approach is to use an ordinary dipole fed with coax. The coax does two things: It shields the input in the immediate area of the radio and it gets the actual receiving wire (the dipole) away from the radio. A double benefit.

This hash problem is the only serious fault the radio has, other than a tendency toward intermod if you are near any strong local stations. That can be overcome with a tuner if it's a problem. Like I say, I've had mine for about 15 years now and it's one of the most-used pieces of equipment I have. Incidentally, the battery for the memory was only supposed to last a few years but mine's still going strong. Good luck.

73, Bill W7TI

# 5705. TS-50S computer control

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: rcrusoe@aol.com
Message-ID: <19971231182100.NAA21796@ladder02.news.aol.com>
Source record: 87895

Anybody know anything about homebrewing a computer control interface for the TS-50S? I like this little rig and I use it for SWL as well as hamming. It would be really nice to be able to peck out a frequency on the keyboard instead of twirling the knob, ur using the up/down buttons on the mic which Is usually lost somewhere in my junk closet.

Also, any info on writing a control program in VB 3.0 would be appreciated. I have written several nice programs in VB and I am familiar with most of the built-in resources, but I have never written anything that sends/recieves data via the serial port. I would really like to write a program that would have the features I want with no dead weight. Ideally I would combine logging, callbook,SWL scheduling, control, CW/RTTY/FAX, and QSL printing in a single program that can run in the background, and that would still display all the important stuff in a reduced window. Most of the features would just be front-ends for other existing programs, since speed is not of the essence here, but the port I/O I would have to write the code for, I think.

I know there is a factory built device for this rig, but I want to build.

I know there is a factory supplied program for this rig, but I want to write.

Thanks in advance to a great group for answers to either question.

73 EVRBDY
AB5VH

# 5706. Re: 4CX600 Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Simon Lewis <pacsat@pacsat.demon.co.uk>
Message-ID: <YizGkAAqfoq0EwYJ@pacsat.demon.co.uk>
Source record: 87896

In article <osUluEAFAlq0Ewv6@ifwtech.demon.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> writes
>
>Think twice! They don't have a good reliability record, and where would
>you get a replacement? The new price is much higher than a 3CX800 or
>4CX800.

Down east microwave are doing chassis and kits for a 6m amp using 2 x
4CX400 - reasonable priced I believe, their at www.downeastmicrowave.com

73 Simon GM4PLM
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+

# 5707. Re: Kenwood R-2000 - Make it better?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <34AA809C.2585@pop.removethistomailme.net>
Source record: 87897

Bill Turner wrote:
>
> I_Magnus@hotmail.com (Magnus) wrote:
>
> >I have an old R-2000 SW reciever that I have hooked up to a long wire
> >antenna stretched between two trees in my backyard. Currently I can only
> >receive the big stations; ie, BBC, Radio Australia, etc. Does anyone
> >have an idea as to how I can DX with this setup?
> >
> >The antenna is tapped at the end with a 75ohm coax which I have run to my
> >receiver. It is the RS SW antenna kit everyone says is too expensive...
> >I had to buy two. One I used for the receiver antenna, the other is the
> >ground. I sank a 6 foot copper rod in the earth outside my window (yes,
> >I can see the Earth from my window) for the ground and attatched the
> >copper wire to it for a ground line.
> >
> >Does anyone have any suggestions?
> >Any help will be appreciated.
> >Kevin

How 'long' is the long wire? A "short" long wire fed with a "long"
piece of coax is not a Good Thing.

-- jm

---
Note: My E-mail address has been altered to avoid spam
---

## 5708. Where Is Hambrew Magazine's Website?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: cliffkot@interaccess.com
Message-ID: <cliffkot.243.000D7955@interaccess.com>
Source record: 87898

I am having trouble locating Hambrew magazines Website. They seem to be listed in the various directory, but when I click on the URL I get a dialog box telling me "URL NOT FOUND." What gives?

Cliff

# 5709. Re: RTTY Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <34AAA4BD.A0FE3AF4@erols.com>
Source record: 87899

You hit the nail on the head, Al. Great writeup.

Al Williams wrote:

> Scott,
>
> A great way to get started is to use a simple HAMCOMM interface and a PC.
> HAMCOMM is a program writtend by DL5YEC and it is shareware, so you can try
> it before you buy it. The interface you need is just an op-amp from Radio
> Shack and a few bucks worth of parts (ordinary diodes, capacitors, and
> resistors). Everything you need you could pick up at Radio Shack. I built my
> first one on a prototype board in 10 minutes with junk I had laying around.
> The construction is not critical and there is no complicated tune up
> required.
>
> The interface works with several packages, but HAMCOMM is probably the best
> of them. It does RTTY, ASCII, and AMTOR. If you buy the registered copy (I
> did) it does PACTOR receive too. The tuning indicators are great and the
> software is really flexible. You can also use it with JVFAX to do SSTV (send
> and rec).
>
> You can also buy HAMCOMM interfaces built already, but they are so simple,
> there isn't a great reason for doing so unless you want a nice case and are
> a mechanical klutz like I am.
>
> The circuit is just a zero-crossing detector that connects to the serial
> port and generates interrupts. The software counts the interrupts and
> analyzes the frequency information that way.
>
> There is a great page about HAMCOMM run by an American ham, but I can't
> remember the URL. However, if you go to my page, you'll find plenty of
> references to HAMCOMM and every one of them will link to his page. He has an
> improved schematic (takes only a few extra parts), and sells finished units.
> He also has the software for free download (remember, it is shareware). I
> don't sell anything related to HAMCOMM, I just think it is great fun!
>
> My page: http://www.al-williams.com/wd5gnr
>
> One warning: HAMCOMM needs sharp filtering. I had built an outboard filter
> when I had an older rig. Now I use a Kenwood TS570D and its DSP does the job
> very, very well. Terry's improved version (on the Web site I mentioned) has
> some passive filtering built in and I don't know how that works because I
> haven't built one yet.
>
> Another note: HAMCOMM technically copies CW, but that doesn't work well

> enough to really use for anything serious (at least, not for me). To tell
> the truth, I have tried writing CW copying software before and it is tough.
> HAMCOMM does about as well as you'd expect on CW, but that isn't very good.
>
> Now, to abate flames:
> 1) Yes, HAMCOMM is not as good as your $300 TNC.
> 2) No, I am not saying that your TNC is not wonderful.
> 3) Everyone knows that PACTOR is so much better than AMTOR.
>
> All I am saying is that for $10 HAMCOMM is a great way to get into RTTY/TOR
> and is simple enough that most anyone can have the satisfaction of building
> some of their own gear and even experimenting with it. Most of us won't cut
> into a $300 TNC.
>
> Regards,
>
> Al Williams
> AWC
> *Solderless Basic Stamp Prototypes at http://www.al-williams.com/awce.htm
>
> Scott Z wrote in message <34A89A89.717D@prairie.nodak.edu>...
> >Does someone know were I could find plans to make a simple RTTY modem.
> >Pse let me know. Tnx in advance.
> >
> >73's
> >
> >Scott
> >A.R.S. KBï¿½KFX

# 5710. Re: RTTY Modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd1630$d17e5280$0d8a92d0@bitnet.bit-net.com>
Source record: 87900

Al:

Have you tried the soundblaster options for these modes, including
pactor?

73, DavidC AA1FA

> > Now, to abate flames:
> > 1) Yes, HAMCOMM is not as good as your $300 TNC.
> > 2) No, I am not saying that your TNC is not wonderful.
> > 3) Everyone knows that PACTOR is so much better than AMTOR.
> > All I am saying is that for $10 HAMCOMM is a great way to get into
RTTY/TOR
> > and is simple enough that most anyone can have the satisfaction of
building
> > some of their own gear and even experimenting with it. Most of us won't
cut
> > into a $300 TNC.
> > Regards, Al Williams

# 5711. Re: Where Is Hambrew Magazine's Website?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <199712312113.WAA25903@basement.replay.com>
Source record: 87901

On Wed, 31 Dec 1997 14:35:00 -0600, cliffkot@interaccess.com (Cliff Kotchka) wrote:

> I am having trouble locating Hambrew magazines Website. They seem to be listed
> in the various directory, but when I click on the URL I get a dialog box
> telling me "URL NOT FOUND." What gives?
>
> Cliff
>
>
>

HAMBREW magazine went "belly-up" a few months ago.

----This message sent with SPAMHATER, to avoid the mindless drivel received from spammers.
Posted with Spam Hater - see http://www.compulink.co.uk/~net-services/spam/

---
John L Sielke N4JS
jsielke@pobox.com
http://www.pobox.com/~njbirdman
ICQ #3789653

# 5712. Re: 4CX600 Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01bd1631$10bef300$0d8a92d0@bitnet.bit-net.com>
Source record: 87902

And, if you know someone in the medical industry, the 3CX800A7's can be had for free ... or near to it! 73, DavidC AA1FA

> >Thinking of using one in 6 meter amp.
> Think twice! They don't have a good reliability record, and where would
> you get a replacement? The new price is much higher than a 3CX800 or
> 4CX800.
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'

# 5713. Davis WeatherLink Cable Pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Lenny Story <storys@ma.ultranet.com>
Message-ID: <34AACB33.1986166C@ma.ultranet.com>
Source record: 87903
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.digital,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Greetings,

Does anyone have the Pinout of the Davis Weatherlink Cable ?? Its an
RJ11 --->DB9.

Happy New Year !!!

Thanks In Advance,
Lenny
Storys@ma.ultranet.com

# 5714. Part needed- where to find?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Dan Post <dwpost@email.msn.com>
Message-ID: <umcAMsjF9GA.328@upnetnews04>
Source record: 87904

Hello- I am not a Ham, but I figured if anyone can tell me where to locate an esoteric part, you guys could.
The problem? I have an old Sansui Receiver/Amp model 2000 ( last made in 1969!) and the stereo volume control has a 250K linear taper dual gang pot with loudness taps, 3/8" mounting and 1/4 " shaft about 1 inch long. One of the wipers is bad, and I am having the devil of a time finding a component that'll fit.
If any of you guys know of a book, magazine or journal that advertises hard to find parts that you homebrew folks use, please let me know.
Thanx and hope to hear from one of you soon!
Happy New year too!
Dan'l

dwpost@msn.com

# 5715. Re: ## Anyone know where to get ceramic filters for radio receivers in small quantities? ##

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: fflynn@together.net
Message-ID: <34aad082.0@news.together.net>
Source record: 87905

In article <ELq5CK.4qF@news2.new-york.net>, tinkerman97@usa.net wrote:
>Hi,
>
>I'm looking for a mailorder company to get G.D.T ( Flat Group Delay)
>15-20KHz bandwidth, 455KHz IF ceramic filters, as used in digital data
>receivers and packet radio. I know such filters are made for example
>by Murata and Kyocera. The problem is getting small quantities for
>prototyping. I'm also interested in regular 15-20KHz filters as a
>second option. Can anyone help?
>Thank's for any help offered.

I'm posting this here for the benifit of others who may perhaps be
looking for the same thing. Try "Dan's small parts", here's the URL;

http://www.fix.net/~jparker/dans.html

He not only has lots of good parts, but keeps a very good stock and is very
prompt at filling orders.

(no affilliation, just a very satisfied customer)

# 5716. Re: 6 m repeaters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <34AB0189.32DB@earthlink.net>
Source record: 87906

Dennis Erwin Thurlow wrote:
>
> I seem to have misplaced my repeater book. I assume there
> _are_ 6m fm repeaters. Can anyone give me a couple of
> frequencies in/near Indianapolis?
> Thanks.
> --
> geosynq@trader.com
> Elder - Westminster Presbyterian
> TRA #2693
> N9VEM

Check between 53.01 and 53.99 outputs.....Inputs are -1MHz...
I know there is ONE Indy machine...used to work it from near
Houston a few years ago.....Dont recall the actual freq though.
check in the ARRL RPTR Directory...

73
Chris
WB5ITT

# 5717. Re: TS-50S computer control

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-12-31 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <34AADD03.7C0A@icss.net>
Source record: 87907

RCrusoe wrote:
>
> Anybody know anything about homebrewing a computer control interface for the
> TS-50S? I like this little rig and I use it for SWL as well as hamming. It
> would be really nice to be able to peck out a frequency on the keyboard instead
> of twirling the knob, ur using the up/down buttons on the mic which Is usually
> lost somewhere in my junk closet.
>
> Also, any info on writing a control program in VB 3.0 would be appreciated. I
> have written several nice programs in VB and I am familiar with most of the
> built-in resources, but I have never written anything that sends/recieves data
> via the serial port. I would really like to write a program that would have
> the features I want with no dead weight. Ideally I would combine logging,
> callbook,SWL scheduling, control, CW/RTTY/FAX, and QSL printing in a single
> program that can run in the background, and that would still display all the
> important stuff in a reduced window. Most of the features would just be
> front-ends for other existing programs, since speed is not of the essence here,
> but the port I/O I would have to write the code for, I think.
>
> I know there is a factory built device for this rig, but I want to build.
>
> I know there is a factory supplied program for this rig, but I want to write.
>
> Thanks in advance to a great group for answers to either question.
>
> 73 EVRBDY
> AB5VH

Robin, try John's website at http://www.apci.net/~jbi/
John offers an interface kit that was very positively reviewed in 73
magazine. He includes a disk with rig control and logging software.
73, Brian/N0iMD